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HYMENOPTERA OF
AMERICA NORTH OF MEXICO
SYNOPTIC CATALOG

Prepared cooperatively by
specialists on the various groups of Hymenoptera
under the direction of
C. F. W. MUESEBECK and KARL V. KROMBEIN
U. S. Bureau of Entomology and Plant Quarantine
Agricultural Research Administration

and

HENRY K. TOWNES
North Carolina State College



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Faunal Zones of America North of Mexico



FAUNA	ZONE	REGION
[White box]	Arctic	Boreal
[Light gray box]	Hudsonian	
[Dark gray box]	Canadian	
[Diagonal lines /]	Transition	Transition
[Diagonal lines \]	Alleghanian	
[Cross-hatch]	Upper Sonoran	Upper Austral
[Dotted]	Carolinian	
[Vertical lines]	Lower Sonoran	Lower Austral
[Horizontal lines]	Austroriparian	
[Dark gray box]	Tropical	Tropical

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HYMENOPTERA OF AMERICA NORTH OF MEXICO—SYNOPTIC CATALOG

By C. F. W. Muesebeck and Karl V. Krombein, *entomologists*,
U. S. Bureau of Entomology and Plant Quarantine, Agricultural Research Administration,
 and Henry K. Townes, *entomologist*, *North Carolina State College*, and others

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INTRODUCTION

As knowledge in any field grows, the tools that are to aid in making effective use of that knowledge and that are to stimulate further advances must be modernized. Among the most useful tools in the field of entomology are up-to-date catalogs of the various major groups of insects. They unlock the door to the vast store of published information pertaining to any particular species or form, and they clarify the relationships that species bear to one another. Such a modern catalog of the North American insects of the order Hymenoptera, which includes the sawflies, wood wasps, parasites of other insects that are used in biological control undertakings, bees, wasps, ants, gall wasps and related forms, has long been needed. The last regional catalog of this type was that by Cresson, published in 1887, although the North American species were included in the catalog of the known Hymenoptera of the world, by Dalla Torre, which was published in Germany in 10 volumes, between 1892 and 1902.

During the past 50 years several thousand new North American species have been described and named. Many more have been assigned to genera different from those in which they were originally described; numerous others have been found to be synonyms of previously described species; and still others have had to be renamed because of prior use of the same names for different species. Moreover, many species and genera, the names of which had been wrongly applied, have had to be redefined to correct misidentifications. New genera, too, have been established, and the classification not only of genera and species, but also of tribes, subfamilies, and families, has been appreciably altered. All this is the result of continued research which has grown increasingly critical and is continually adopting new approaches and applying new techniques.

The present contribution represents an attempt to bring together

that information in readily usable form. It had its inception in 1946 when three specialists in the Division of Insect Identification, U. S. Bureau of Entomology and Plant Quarantine, undertook to organize a cooperative effort in which participation by the foremost workers in the various groups of Hymenoptera was enlisted, and which had as its objective the preparation of a sound and authoritative synoptic catalog of the known insects belonging to this order that occur in America north of Mexico. At the outset it seemed doubtful that the efforts of more than 20 different and widely scattered taxonomists, all busily engaged with the work and problems of their respective positions, could be coordinated so as to insure completion of the projected catalog within a reasonable period. The cooperation on this undertaking, however, has been extraordinary; and when funds for publication became available, all individual contributions could be rather promptly completed and assembled and could be put into required form with a minimum of effort.

The specialists who participated in the development of this catalog and who are recorded as authors of the sections for which they were responsible are the following: W. G. Bodenstern, G. E. Bohart, R. M. Bohart, B. D. Burks, Howard E. Evans, Paul D. Hurd, Karl V. Krombein, E. Gorton Linsley, William R. M. Mason, C. D. Michener, W. W. Middlekauff, C. F. W. Muesebeck and Luella M. Walkley (joint contributions), W. D. Murray, Oswald Peck, D. T. Ries, Hugo G. Rodek, H. H. Ross, H. A. Scullen, M. R. Smith, L. J. Stannard, Henry K. and Marjorie Townes, and L. H. Weld. In addition invaluable assistance was given by a number of other specialists in Hymenoptera, notably A. B. Gahan and P. H. Timberlake.

ARRANGEMENT

SUPERSPECIFIC CLASSIFICATION

An attempt has been made to record all the forms, with their synonyms, described from, or known to occur in, the political divisions of the United States, Canada, Alaska, and Greenland. The arrangement is systematic for subgenera and higher groups in so far as our present knowledge and the limitations of a linear arrangement permit. The generic and subgeneric concepts represented in this arrangement rest upon what are believed to be correct genotype designations. In each instance the genotype is cited together with the authority for the selection. Where genotype designations have been found to be invalid under the International Rules of Zoological Nomenclature, new genotype designations, believed to be valid, are given in the catalog. Generic synonymy is included under the generic headings except where subgenera are recognized, in which cases such synonymy is given under the subgeneric names, and references to revisional papers are listed under the appropriate generic, tribal, subfamily, or family headings.

TRIVIAL NAMES

Within the genera and subgenera the arrangement of species is alphabetical. Where subspecies are recognized the subspecific names are placed in alphabetical order under the species to which they belong; and varieties are listed under the species in which they occur except that varieties of subspecies are placed under the particular subspecies in

which they were described. In each case the specific, or other trivial, name is followed by an indication of the known distribution, and by brief statements showing hosts or prey or preferred habitats, where such information is available and significant. Much of the information on synonymy, distribution, hosts or prey preferences and habitats has hitherto been unpublished. The type localities are recorded for those forms that are known only from the localities where the type specimens were obtained. Otherwise the distribution is usually shown by states and provinces, or by the use of the faunal zones.

MAP OF FAUNAL ZONES

The map of faunal zones (frontispiece) is an adaptation by Arthur D. Cushman of the U. S. Biological Survey's Fourth Provisional Zone Map of North America, 1910, by C. Hart Merriam, Vernon Bailey, E. W. Nelson, and E. A. Preble. The only changes, other than those occasioned by the use of symbols instead of colors for the various zones, have been the addition of a small area of Tropical Zone at the extreme southern tip of Texas and a rezoning of Alaska on advice received from R. I. Sailer. It should be emphasized that with so great a reduction as used in the reproduction of this map, it has been necessary to represent narrow extensions and certain small isolated areas of some of the zones as more extensive than they actually are.

ABBREVIATIONS AND SYMBOLS

The abbreviations and arrangement of titles of journals used in this work are essentially those recommended in United States Department Agriculture Miscellaneous Publication 377, 1939. Certain other abbreviations and symbols used in the catalog are explained as follows:

(!) = *lapsus* or misspelling of a scientific name.

“♂” = ♀ or “♀” = ♂ = incorrect sex determination.

♂ (♀ misdet.) or ♀ (♂ misdet.) = only one of sexes described belongs to the species cataloged.

emend. = emendation.

n. comb. = new combination; used after a specific or infraspecific heading to indicate a new generic assignment.

n. name = new name; used after a specific or infraspecific heading to indicate a new substitute name for a homonym; used after bibliographic citation to indicate a substitute name proposed earlier for a homonym.

n. status = new status; used where a form is here accorded a rank different from that which it had previously.

n. syn. = new synonymy; used after generic or specific bibliographic citations to indicate a new synonym.

preocc. = preoccupied; used after a generic or specific citation to indicate a homonym.

The faunal zones and their divisions are also abbreviated wherever used. The abbreviations are explained as follows:

Bor. = Boreal

Canad. = Canadian

Huds. = Hudsonian

Transit. = Transition

Austr. = Austral
 U. Austr. = Upper Austral
 L. Austr. = Lower Austral
 Austrorip. = Austroriparian
 Carol. = Carolinian
 Sonor. = Sonoran

SCOPE

This catalog has been prepared with much care and it is thought to include all essential material published through 1949. It must be recognized, however, that in the field of taxonomy no contribution can long remain up-to-date. New forms are continually being discovered, and further research is constantly necessitating adjustments in concepts and in classifications. Within such unavoidable limitations it is hoped the catalog will be useful in many different entomological activities, and that it will stimulate young workers possessing an aptitude for taxonomy to take up the study of the fascinating and economically important insects that make up the order Hymenoptera.

Order HYMENOPTERA

- General: Schröder, 1925. *Handb. d. Ent.* 3: 712-825, figs. 593-705.—Handlirsch and Meixner, 1933. *In Krumbach, Handb. d. Zool.*, v. 4, *Insecta* 2, pp. 895-1036.—Comstock, 1940. *An Introduction to Entomology*, pp. 884-1007.—Essig, 1942. *College Entomology*, pp. 619-727.—Imms, 1948. *A General Textbook of Entomology*, ed. 7, pp. 544-615.
- Taxonomy: Cresson, 1887. *Amer. Ent. Soc. Trans.*, Sup. Vol., pp. 1-350 (key to No. Amer. families, genera and catalog of spp.).—Dalla Torre, 1892-1902. *Cat. Hym.*, 10 vols. (world spp.).—Viereck, *et al.*, 1917 (1916). *Conn. State Geol. and Nat. Hist. Survey Bul.* 22: 1-824, 10 pls., 15 text figs. (keys to Conn. spp.).—Brues and Melander, 1932. *Harvard Univ.*, *Mus. Compar. Zool. Bul.* 73: 471-526, figs. 887-971 (keys to families, adults, and larvae).
- Morphology: Snodgrass, 1911. *U. S. Natl. Mus. Proc.* 39: 37-91, 16 pls., 19 text figs. (thorax).—Rohwer and Gahan, 1916. *Ent. Soc. Wash. Proc.* 18: 20-76, 3 pls. (wing venation).—Comstock, 1918. *The Wings of Insects*, pp. 362-381, pl. 10, text figs. 380-405.—Snodgrass, 1935. *Principles of Insect Morphology*, 667 pp., 319 figs.—Ross, 1936. *Ent. Soc. Amer. Ann.* 29: 99-111, 2 pls. (wing venation).—Snodgrass, 1941. *Smithsn. Inst. Misc. Collect.* 99 (14): 1-86, 33 pls., 6 text figs. (male genitalia).
- Biology: Bishoff, 1927. *Biologie der Hymenopteren*, 598 pp., 224 figs.—Wheeler, 1923. *Social Life Among the Insects*, 375 pp., 113 figs.—Wheeler, 1928. *Social Insects*, 378 pp., 79 figs.—Clausen, 1940. *Entomophagous Insects*, 688 pp., 257 figs.

Suborder SYMPHYTA (=CHALASTOGASTRA)¹

- Revisions: Norton, 1867-1869. *Amer. Ent. Soc. Trans.* 1: 31-84, 193-280; 2: 211-242, 321-368.—Ashmead, 1898. *Canad. Ent.* 30: 141-145, 177-183, 205-213, 225-232, 249-257, 281-287, 305-316.—Rohwer, 1911. *Ent. Soc. Wash. Proc.* 13: 215-224.—MacGillivray, 1916. *Conn. State Geol. and Nat. Hist. Survey Bul.* 22: 25-175.—Ross, 1937. *Ill. Biol. Monog.* 15 (2): 1-173.
- Catalog: Konow, 1905. *In Wytzman, Gen. Ins.*, fasc. 27, pp. 1-27; fasc. 28, pp. 1-14; fasc. 29, pp. 1-176.

The suborder Symphyta comprises the sawflies and horntails. The

¹ By Herbert H. Ross, *Ill. Nat. Hist. Survey*, Urbana, Ill.; except the Siricoidea, the Pamphiliidae, and the genus *Perichista*, for which D. T. Ries, Woodrow W. Middlekauf, and L. J. Stannard, respectively, are responsible.

Superfamily CHALCIDOIDEA¹⁶ 17

The geographical records and host data have been compiled almost entirely from the literature and therefore must include many undetected errors. With few exceptions the host names have been checked by specialists in the Division of Insect Identification, Bureau of Entomology and Plant Quarantine, and to these men I owe much.

- Biology: Gahan, 1922. Ent. Soc. Wash. Proc. 24: 33-58 (phytophagy).—Essig, 1926. Ins. of West. No. Amer., pp. 813-851.—Sweetman, 1936. Biol. Control of Ins., pp. 141-166.—Clausen, 1940. Entomophagous Insects, pp. 98-238.—Thompson, 1943. Cat. of Parasites and Predators.—Fulmek, 1946. Zentbl. Gesamtgeb. Ent. 1: 97-106 (hyperparasitism).
- Morphology: Parker, 1924. Soc. Ent. France Ann. 93: 261-379 (larvae).—Ishii, 1932. Imp. Agr. Sta. Japan Bul. 3: 161-202 (adult).—Vance and Smith, 1933. Ent. Soc. Amer. Ann. 26: 86 (larval head).—Hanna, 1935. Soc. Ent. d'Égypte Bul. 19: 326-364 (adult).—Burks, 1940. U. S. Natl. Mus. Proc. 88: 239-240.—Bucher, 1948. Canad. Jour. Res. 26D: 230-281 (adult).
- Taxonomy: Howard, 1886. Ent. Amer. 1: 197-199, 215-219; 2: 33-38, 97-101 (keys).—Cresson, 1887. Amer. Ent. Soc. Trans., Sup. Vol., pp. 64-80, 233-246 (cat., keys).—Dalla Torre, 1898. Cat. Hym., v. 5, pp. 1-431.—Ashmead, 1904. Carnegie Mus., Mem. 1: 1-393 (keys, genotypes).—Viereck, 1917 (1916). Conn. State Geol. and Nat. Hist. Survey Bul. 22: 443-528 (keys).—Gahan and Fagan, 1923. U. S. Natl. Mus. Bul. 124: 1-173 (genotypes, original generic references).—Essig, 1926. Ins. of West. No. Amer., pp. 813-851.—Mani, 1938. Cat. Indian Ins., pt. 23 (key).—Essig, 1942. College Entomology, pp. 649-662 (key).—Ceballos, 1942-43. Tribus Himen. España, pp. 164-218 (keys, figs.).—Kloet and Hincks, 1945. Check List Brit. Ins., 283-305.

Family MYMARIDAE

The members of this subfamily are internal parasites in the eggs of other insects, particularly of Homoptera.

- Revision: Girault, 1929. No. Amer. Hym. Mymaridae, pp. 6-27 (keys).
Taxonomy: Kryger, 1950. Ent. Meddel. 26: 1-97 (Europe, Keys).

Subfamily GONATOCERINAE

Genus OOCTONUS Haliday

Ooctonus Haliday, 1833. Ent. Mag. 1: 269, 343.

Type: *Ooctonus insignis* Haliday. Desig. by Westwood, 1840.

Sphecomirus Haliday, 1846. In Walker, Ann. Mag. Nat. Hist. 18: errata; also p. 50.

Type: *Ooctonus insignis* Haliday. Present desig.

Revision: Whittaker, 1931. Ent. Soc. Wash. Proc. 33: 189-192.

americanus Girault. D. C.

Ooctonus americanus Girault, 1916. Ent. News 26: 67. ♀.

aphrophorae Milliron. Wis. Host: *Aphrophora saratogensis* (Fitch).

Ooctonus aphrophorae Milliron, 1947. Ent. Soc. Amer. Ann. 40: 217. ♂ ♀.

auripes Whittaker. B. C.

Ooctonus auripes Whittaker, 1931. Ent. Soc. Wash. Proc. 33: 190. ♀.

canadensis Whittaker. B. C.

Ooctonus canadensis Whittaker, 1931. Ent. Soc. Wash. Proc. 33: 191. ♀.

¹⁶ By O. Peck, Canada Department of Agriculture, Ottawa, Canada.

¹⁷ The chalcidoid portion of this catalog has been prepared in its present form through the assistance of A. B. Gahan, who has suggested not only the taxonomic sequence but also largely the new synonymy and specific transfers. I am heavily indebted to Mr. Gahan for these generous contributions from his great fund of knowledge of this group. To my colleague G. S. Walley thanks are due for help in many nomenclatorial problems.

fuscipes Whittaker. Conn., B. C.

Ooctonus fuscipes Whittaker, 1931. Ent. Soc. Wash. Proc. 33: 189. ♀.

occidentalis Whittaker. B. C.

Ooctonus occidentalis Whittaker, 1931. Ent. Soc. Wash. Proc. 33: 191. ♀.

quadricarinatus Girault. N. Y. Host: *Pityogenes hopkinsi* Swaine.

Ooctonus quadricarinatus Girault, 1916. Ent. Soc. Amer. Ann. 9: 301. ♂.

silvensis Girault. D. C.

Ooctonus silvensis Girault, 1916. Ent. News 27: 70. ♀.

Genus COSMOCOMOIDEA Howard

Cosmocomoidea Howard, 1908. Ent. Soc. Wash. Proc. 10: 68.

Type: *Cosmocomoidea morrilli* Howard. Monob.

Revision: Girault, 1929. No. Amer. Hym. Mymaridae, p. 21 (*Ooctonus*, in part).

morrilli Howard. Fla. Hosts: Cicadellid eggs on sugar cane.

Cosmocomoidea morrilli Howard, 1908. Ent. Soc. Wash. Proc. 10: 69. ♂ ♀.

Taxonomy: Girault, 1917. Entomologist 50: 36.

Genus CAMPTOPTERA Foerster

Camptoptera Foerster, 1856. Hym. Stud., v. 2, pp. 116, 119, 144.

Type: *Camptoptera papaveris* Foerster. Monob.

Pteroclisia Förster, 1856. Hym. Stud., v. 2, p. 144. N. name.

Macrocamptoptera Girault, 1910. N. Y. Ent. Soc. Jour. 18: 239.

Type: *Camptoptera metotarsa* Girault. Monob.

Revision: Girault, 1929. No. Amer. Hym. Mymaridae, p. 20 (*Macrocamptoptera*), 22.

brunnea Dozier. Del.

Camptoptera brunnea Dozier, 1933. Ent. Soc. Wash. Proc. 35: 97. ♀.

metotarsa Girault. Va.

Camptoptera metotarsa Girault, 1905. Psyche 12: 91. ♀.

Taxonomy: Girault, 1910. N. Y. Ent. Soc. Jour. 18: 238-240, ♀.

pulla Girault. Del., Ill., Calif. Hosts: *Hercothrips fasciatus* (Perg.); ?*Aleyrodes* sp.; *Polychrostris vileana* (Clem.).

Camptoptera pulla Girault, 1909. Ent. Soc. Amer. Ann. 2: 27. ♀.

Taxonomy: Girault, 1910. N. Y. Ent. Soc. Jour. 18: 236-238, ♂ ♀.

Genus GONATOCERUS Nees

Gonatocerus Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 192.

Type: *Gonatocerus longicornis* Nees. Monob.

Lymaenon Haliday, 1846. In Walker, Ann. Mag. Nat. Hist. 18: 49, 50.

Type: *Lymaenon acuminatus* Haliday. Desig. by Gahan and Fagan, 1923.

Gonatoceroidea Girault, 1913. Entomologist 46: 255.

Type: *Gonatoceroidea australica* Girault. Monob.

Agonatocerus Girault, 1913. Canad. Ent. 45: 276.

Type: *Agonatocerus humboldti* Girault. Monob.

Revisions: Girault, 1911. Amer. Ent. Soc. Trans. 37: 254-277.—Girault, 1929. No. Amer. Hym. Mymaridae, pp. 22-27.

americanus Brues. Wis.

Gonatocerus americanus Brues, 1907. Wis. Nat. Hist. Soc. Bul. 5: 109. ♀.

anthonomi Girault. Ill., Ga., Tex., N. Mex. Host: ?*Tachypterellus quadrigibbus* (Say).

Gonatocerus anthonomi Girault, 1905. Ent. News 16: 288. ♂ ♀.

Gonatocerus texanus Girault, 1911. Amer. Ent. Soc. Trans. 37: 270. ♀.

Gonatocerus websteri Girault, 1911. Amer. Ent. Soc. Trans. 37: 324.

ashmeadi Girault. No. Amer.

Gonatocerus dolichocerus var. *ashmeadi* Girault, 1916. Ent. News 27: 8.

♂ ♀.

aureus Girault. Ill.

Gonatocerus aureus Girault, 1911. Amer. Ent. Soc. Trans. 37: 263. ♀.

- brunneus** Girault. Ill. Host: ?*Aphis pomi* (Deg.).
Gonatocerus brunneus Girault, 1911. Amer. Ent. Soc. Trans. 37: 261. ♂
 ♀.
- californicus** Girault. Calif.
Gonatocerus californicus Girault, 1911. Amer. Ent. Soc. Trans. 37: 271. ♀.
- capitatus** Gahan. Utah, Ariz., Calif. Host: *Circulifer tenellus* (Baker).
Gonatoceros (!) *capitatus* Gahan, 1932. Ent. Soc. Amer. Ann. 25: 754. ♂
 ♀.
- dolichocerus** Ashmead. Ill., Ga., Fla. Host: *Ceresa bubalus* (F.).
Gonatocerus dolichocerus Ashmead, 1887. Canad. Ent. 19: 192. ♀.
- fasciatus** Girault. D. C., Va., Ill.
Gonatocerus fasciatus Girault, 1911. Amer. Ent. Soc. Trans. 37: 265. ♀.
- illinoiensis** Girault. Ill.
Gonatocerus illinoiensis Girault, 1917. Psyche 24: 91. ♀.
- koebelei** Perkins. Hosts: *Draeculacephala minor* (Wlkr.); *D. mollipes* (Say).
Gonatocerus (!) *koebelei* Perkins, 1912. Hawaii. Sugar Planters' Assoc. Expt. Sta., Div. Ent. Bul. 10: 22. ♂ ♀.
- latipennis** Girault. ?Canada.
Gonatocerus latipennis Girault, 1911. Amer. Ent. Soc. Trans. 37: 268. ♂.
- maga** Girault. Ill.
Gonatocerus maga Girault, 1911. Amer. Ent. Soc. Trans. 37: 267. ♀.
- marylandicus** Girault, emend. Md.
Gonatocerus marilandicus Girault, (1916) 1917. Insector Inscitiae Menstruus 4: 115. ♀.
- maximus** Girault. Ill.
Gonatocerus maximus Girault, 1911. Amer. Ent. Soc. Trans. 37: 264. ♀.
- mexicanus** Perkins. Fla., Ariz. Hosts: *Draeculacephala mollipes* (Say).
Gonatocerus mexicanus Perkins, 1912. Hawaii. Sugar Planters' Assoc. Expt. Sta., Div. Ent. Bul. 10: 21. ♂ ♀.
- Gonatocerus eximius* Gahan, 1913. U. S. Natl. Mus. Proc. 46: 441. ♀.
Gonatocerus gibsoni Crawford, 1915. U. S. Natl. Mus. Proc. 48: 586. ♂ ♀.
 Biology: Gibson, 1915. U. S. Dept. Agr. Bul. 254: 14.
- nigritarsis** Ashmead. Fla.
Gonatocerus nigritarsis Ashmead, 1887. Canad. Ent. 19: 192. ♀.
- novifasciatus** Girault. Tenn.
Gonatocerus novifasciatus Girault, 1911. Amer. Ent. Soc. Trans. 37: 236. ♀.
 Taxonomy: Girault, 1916. Brooklyn Ent. Soc. Bul. 11: 112.
- ornatus** Gahan. Ariz. Host: *Stictocephala festina* (Say).
Gonatocerus ornatus Gahan, 1918. Ent. Soc. Wash. Proc. 20: 23. ♂ ♀.
- ovicenatus** Leonard and Crosby. N. Y. Hosts: *Idiocerus scurra* Germ., Cicadellid eggs in sugar cane.
Gonatocerus ovicenatus Leonard and Crosby, 1915. Jour. Econ. Ent. 8: 545. ♂ ♀.
- partifuscipennis** Girault. Md.
Gonatocerus partifuscipennis Girault, 1916. Canad. Ent. 48: 102. ♀.
- pygmaeus** Girault. Miss.
Gonatocerus pygmaeus Girault, 1911. Amer. Ent. Soc. Trans. 37: 269. ♀.
- rivalis** Girault. Va., Ill., Kans.
Gonatocerus rivalis Girault, 1911. Amer. Ent. Soc. Trans. 37: 257. ♂ ♀.
- tenuipennis** Girault. Ill.
Gonatocerus brunneus var. *tenuipennis* Girault, 1911. Amer. Ent. Soc. Trans. 37: 263. ♀.
- titillatus** Girault. Utah.
Gonatocerus titillatus Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 87. ♀.

utahensis Girault. Utah. Host: ?Cicadellid eggs in *Elymus*.

Gonatocerus utahensis Girault, 1917. U. S. Natl. Mus. Proc. 53: 446. ♀.

Genus ALAPTUS Haliday

Alaptus Haliday, 1840. In Westwood, Introduct. Mod. Classif. Ins., v. 2, p. 79.

Type: *A. aptus minimus* Haliday. Monob.

Metalaptus Malenotti, 1917. Redia 12: 339.

Type: *Metalaptus torquatus* Malenotti. Monob.

Revision: Girault, 1929. No. Amer. Hym. Mymaridae, pp. 9-10.

caecilii Girault. Maine, Fla., Ill., Calif., ?Mass. Hosts: *Caecilius aurantiacus* (Hag.); *C. manteri* Som.; ?*Ectopsocus californicus* (Banks); *Psocus*; Psocid; ?*Trialeurodes fernaldi* (Morrill).

Alaptus caecilii Girault, 1908. Ent. Soc. Amer. Ann. 1: 189. ♂ ♀.

Taxonomy: Girault, 1910. N. Y. Ent. Soc. Jour. 18: 241-243.

eriococci Girault. Calif. Hosts: Psocid; *Aonidiella aurantii* (Mask.); *Eriococcus araucariae* Mask.

Alaptus eriococci Girault, 1908. Ent. Soc. Amer. Ann. 1: 191. ♂ ♀.

globosicornis Girault. Fla. Hosts: *Liposcelis divinatorius* (Müll.); Psocid; ?*Lepidosaphes beckii* (Newm.).

Alaptus globosicornis Girault, 1908. Ent. Soc. Amer. Ann. 1: 188. ♀.

Taxonomy: Girault, 1911. Arch. f. Naturgesch. 77 (1) sup. 2: 132.

iceryae Riley, Ill., Calif. Hosts: *Aspidiotus camelliae* Sign.; ♂ pupa of *Icerya*; *I. purchasi* Mask.

Alaptus iceryae Riley, 1889. U. S. Dept. Agr. Ann. Rpt. for 1888, p. 86.

Taxonomy: Girault, 1908. Ent. Soc. Amer. Ann. 1: 186. ♂ ♀.—Girault, 1910. N. Y. Ent. Soc. Jour. 18: 240-243. ♂ ♀.

intonsipennis Girault. Ill.

Alaptus intonsipennis Girault, 1910. N. Y. Ent. Soc. Jour. 18: 244. ♀.

psocidivorus Gahan. Calif. Hosts: ?*Ectopsocus californicus* Banks; psocid eggs on *Heteromeles*.

Alaptus psocidivorus Gahan, 1927. Pan-Pacific Ent. 3: 180. ♂ ♀.

Biology: Spruyt, 1927. Pan-Pacific Ent. 3: 182-184. ♂ ♀.

torquatus (Malenotti). La. Host: ?*Pseudaonidia duplex* (Ckll.).

Metalaptus torquatus Malenotti, 1917. Redia 12: 339. ♂ ♀.

Taxonomy: Cressman, Bliss, Kessels, and Dumestre, 1935. Jour. Agr. Res. 50: 282.

Genus DICOPUS Enoch

Dicopus Enoch, 1909. Ent. Soc. London Trans., p. 455.

Type: *Dicopus minutissima* Enoch. Monob.

Revision: Girault, 1929. No. Amer. Hym. Mymaridae, pp. 10-11.

halitus Girault. Que. Host: ?*Choristoneura fumiferana* (Clem.).

Dicopus halitus Girault, 1911. Ent. News 22: 347. ♂.

Subfamily MYMARINAE

Genus ERYTHMELUS Enoch

Erythmelus Enoch, 1909. Ent. Soc. London Trans., p. 454.

Type: *Erythmelus gocchi* Enoch. Monob.

Revisions: Girault, 1929. No. Amer. Hym. Mymaridae, pp. 7-8.—Doutt, 1949. Pan-Pacific Ent. 25: 77-81 (Calif.).

flandersi Doutt. Calif.

Erythmelus flandersi Doutt, 1949. Pan-Pacific Ent. 25: 77. ♂ ♀.

gracilipes (Girault). N. Mex.

Anaphes gracilipes Girault, 1916. Ent. News 27: 7. ♀.

- gracilis** (Howard). N. J. to Ga.; Ill. Hosts: *Aspidiotus perniciosus* Comst.; *Lepidosaphes ulmi* (L.); *Carpocapsa pomonella* (L.).
Anaphes gracilis Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 370. ♀.
- Anaphes cinctiventris* Girault, 1911. Amer. Ent. Soc. Trans. 37: 286. ♀.
 Biology: Johnson, 1900. U. S. Dept. Agr. Div. Ent. Bul. (n. s.) 26: 73-74.
- io** (Girault). Ill., Calif.
Anagrus io Girault, 1911. Amer. Ent. Soc. Trans. 37: 294. ♂.
- miridiphagus** Dozier. Calif.
Erythmelus miridiphagus Dozier, 1937. Puerto Rico Univ. Jour. Agr. 21: 133. ♀.
- picinus** (Girault). N. Mex.
Anaphes picinus Girault, 1916. Ent. News 27: 6. ♀.
- psallidis** Gahan. S. C., Miss., Ark., La., Tex., Ariz., Calif. Hosts: ?*Macrolophus separatus* (Uhl.); *Psallus seriatus* (Reut.); ?*Reuteroscopus sulphureus* (Reut.).
Erythmelus psallidis Gahan, 1937. Ent. Soc. Wash. Proc. 39: 268. ♂ ♀.
 Biology: Ewing and Crawford, 1939. Jour. Econ. Ent. 32: 303-305.

Genus PARALLELAPTERA Enoch

- Parallelaptera* Enoch, 1909. Ent. Soc. London Trans., p. 454.
 Type: *Parallelaptera panis* Enoch. Monob.
- Anthemella* Girault, 1911. Ent. Soc. Wash. Proc. 13: 185.
 Type: *Anthemella rex* Girault. Monob.
- Revision: Girault, 1929. No. Amer. Hym. Mymaridae, p. 8.
- rex** (Girault). Ill., Calif. Host: *Circulifer tenellus* (Baker).
Anthemella rex Girault, 1911. Ent. Soc. Wash. Proc. 13: 185. ♀.

Genus STETHYNIUM Enoch

- Stethynium* Enoch, 1909. Ent. Soc. London Trans., p. 452.
 Type: *Stethynium triclavatum* Enoch. Monob.
- annulatum** Doutt. Calif.
Stethynium annulatum Doutt, 1947. Pan-Pacific Ent. 23: 152. ♀.
- faunum** Girault. Ill.
Stethynium faunum Girault, 1911. Amer. Ent. Soc. Trans. 37: 298. ♂ ♀.

Genus PATASSON Walker

- Patasson* Walker, 1846. Ann. Mag. Nat. Hist. 18, errata.
 Type: *Panthus crassicornis* Haliday. Monob.
- Anaphoidea* Girault, 1909. N. Y. Ent. Soc. Jour. 17: 167.
 Type: *Anaphoidea sordidata* Girault. Monob.
- Anaphoides* Enoch, 1915. Hastings and East Sussex Nat. 2: 181 (no species).
 Type: *Patasson crassicornis* (Haliday). Present desig.
- Revisions: Girault, 1910. N. Y. Ent. Soc. Jour. 18: 246-254.—Girault, 1929. No. Amer. Hym. Mymaridae, pp. 13-14 (*Anaphoidea*).
- calendrae** (Gahan), n. comb. N. J., Ind., Mo., Miss. Hosts: *Calendra callosa* (Oliv.); *C. costipennis* (Horn); *C. destructor* (Chitt.); *C. minima* (Hart); *C. parvula* (Gyll.); *C. pertinax* (Oliv.).
Anaphoidea calendrae Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 32. ♂ ♀.
 Biology: Satterthwaite, 1931. N. Y. Ent. Soc. Jour. 39: 171.
- conotracheli** (Girault), n. comb. Conn. to Ga. and Ky.; Minn., Okla., Tex., Utah.
 Hosts: *Conotrachelus nenuphar* (Herbst); *Craponius inaequalis* (Say); *Rhagoletis pomonella* (Walsh); *Sofus pilicornis* (Holmg.).
Anaphes conotracheli Girault, 1905. Ent. News 16: 220. ♂ ♀.
- Anaphoidea luna* Girault, 1914. Ent. Soc. Wash. Proc. 16: 109. ♂ ♀.
 Biology: Johnson and Girault, 1906. U. S. Dept. Agr., Bur. Ent., Cir. 73: 5-6.—

Brooks, 1910. W. Va. Agr. Expt. Sta. Bul. 126: 110.—Porter, 1928. U. S. Dept. Agr. Tech. Bul. 66: 29.—Dozier, Williams, and Butler, 1932. Del. Agr. Expt. Sta. Bul. 175: 38.

Taxonomy: Girault, 1910. N. Y. Ent. Soc. Jour. 18: 247–254. ♂ ♀.

pullicrura (Girault), n. comb. Ill.

Anaphoidea pullicrura Girault, 1910. N. Y. Ent. Soc. Jour. 18: 252. ♂ ♀.

sordidatus (Girault), n. comb. N. J., Ill. Host: *Tyloclerema foveolata* Say.

Anaphoidea sordidata Girault, 1909. N. Y. Ent. Soc. Jour. 17: 169. ♂ ♀.

Genus ANAGRUS Haliday

Anagrus Haliday, 1833. Ent. Mag. 1: 346.

Type: *Ichneumon atomus* Linnaeus. Desig. by Westwood, 1840.

Revisions: Girault, 1911. Amer. Ent. Soc. Trans. 37: 289–298.—Girault, 1929. No. Amer. Hym. Mymaridae, pp. 8–9.

armatus armatus (Ashmead). Ont., N. Y. and Conn. to Md., Ill., Iowa, Fla., Colo., Oreg. Hosts: *Empoasca fabae* Harr.; *Typhlocyba pomaria* McAtee; *T. rosae* (L.); *Delphacodes* sp.; *Aphis pomi* Deg.; *Aspidiotus perniciosus* Comst.; ?*A. wuae* Comst.; *Aulacaspis rosae* (Bouché); *Lecanium corni* Bouché; gall of *Dasyneura serrulatae* O. S.

Litus armatus Ashmead, 1887. Canad. Ent. 19: 193. ♀.

Eustochus xanthothorax Ashmead, 1887. Canad. Ent. 19: 193. ♀.

Anagrus columbi Perkins, 1905. Hawaii. Sugar Planters' Assoc. Expt. Sta., Div. Ent. Bul. 1 (6): 198. ♀.

Anagrus spiritus Girault, 1911. Ent. News 22: 207. ♂ ♀.

Biology: Childs, 1918. Oreg. Agr. Expt. Sta. Bul. 148: 27.

Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 277, 289. ♂ ♀.

armatus nigriceps Girault. Oreg. Host: *Typhlocyba rosae* (L.).

Anagrus armatus var. *nigriceps* Girault, 1915. Ent. Soc. Amer. Ann. 8: 276. ♀.

armatus nigriventris Girault. Ont. to Conn., S. C., and Ill.; N. Mex., Utah. Hosts: *Empoasca fabae* (Harr.); *Typhlocyba pomaria* McAtee; *Halticus bracteatus* (Say).

Anagrus armatus var. *nigriventris* Girault, 1911. Amer. Ent. Soc. Trans. 37: 291. ♀.

Biology: Ackerman, 1919. U. S. Dept. Agr. Bul. 805: 28.—Armstrong, 1936. Ent. Soc. Ontario Ann. Rpt. 66: 17–22, ♂ ♀.—Steiner, 1938. Conn. Pomol. Soc. Proc. 47: 23–25.

delicatus Dozier. Ill.

Anagrus delicatus Dozier, 1936. Hawaii. Ent. Soc. Proc. 9: 177. ♂ ♀.

epos Girault. Pa., Md., Va., Ill., N. Mex., Calif. Hosts: *Empoasca fabae* (Harr.); *Erythroneura plena* Beamer; *E. comes* (Say); *Typhlocyba pomaria* McAtee; *Aspidiotus perniciosus* Comst.; *Coleophora malivorella* Riley.

Anagrus epos Girault, 1911. Amer. Ent. Soc. Trans. 37: 292. ♂ ♀.

Biology: Ackerman, 1919. U. S. Dept. Agr. Bul. 805: 28.

giraulti Crawford. Idaho, Utah, Calif. Hosts: *Arilus cristatus* (L.); *Circulifer tenellus* (Baker); ?*Gnorimoschema operculella* (Zell.).

Anagrus giraulti Crawford, 1913. U. S. Natl. Mus. Proc. 45: 259. ♂ ♀.

Biology: Stahl, 1920. Jour. Agr. Res. 20: 250.—Henderson, 1941. U. S. Dept. Agr. Cir. 593: 2–10.

puella Girault. Ill., Colo.

Anagrus puella Girault, 1911. Amer. Ent. Soc. Trans. 37: 293. ♂ ♀.

Genus MYMAR Curtis

Mymar Curtis, 1832. Brit. Ent., v. 9, p. 411.

Type: *Ichneumon punctum* Shaw. Orig. desig.

Anaphes Haliday, 1833. Ent. Mag. 1: 269, 346.

Type: *Ichneumon punctum* Shaw. Desig. by Westwood, 1840.

Revisions: Girault, 1911. Amer. Ent. Soc. Trans. 37: 277–288 (*Anaphes* in part).—Girault, 1929. No. Amer. Hym. Mymaridae, pp. 13–14 (*Anaphes* in part). Gahan, 1949. Wash. Acad. Sci. Jour. 39: 204–205 (nomencl.).

anomocerus (Girault), n. comb. Tex., Ariz. Host: *Psallus seriatus* (Reut.).

Anaphes iole anomocerus Girault, 1929. No. Amer. Hym. Mymaridae, p. 13.
Biology: Ewing and Crawford, 1939. Jour. Econ. Ent. 32: 303-305.

behmani (Girault), n. comb. U. S.

Anaphes behmani Girault, 1929. No. Amer. Hym. Mymaridae, p. 14.

hercules (Girault), n. comb. Ill.

Anaphes hercules Girault, 1911. Amer. Ent. Soc. Trans. 37: 285. ♀.

iole (Girault), n. comb. Ill. Host: *Hypera nigrirostris* (F.).

Anaphes iole Girault, 1911. Amer. Ent. Soc. Trans. 37: 284. ♀.

nigrellus (Girault), n. comb. Ill.

Anaphes nigrellus Girault, 1911. Amer. Ent. Soc. Trans. 37: 282. ♀.

ovijentatus (Crosby and Leonard), n. comb. N. Y., La., Calif. Hosts: *Lygus hesperus* Knight; *L. oblineatus* (Say).

Anagrus ovijentatus Crosby and Leonard, 1914. Canad. Ent. 46: 181. ♀.

Biology: Romney and Cassidy, 1945. Jour. Econ. Ent. 38: 497.

pallipes (Ashmead). Va., Fla. Host: ?*Gnorimoschema operculella* (Zell.).

Alaptus pallipes Ashmead, 1887. Canad. Ent. 19: 193. ♀.

Taxonomy: Girault, 1910. N. Y. Ent. Soc. Jour. 18: 243-244.—Girault, 1911. Amer. Ent. Soc. Trans. 37: 278-279. ♀.

perdubius (Girault), n. comb. Minn., S. C., Utah. Hosts: Cicadellid; *Halticus bracteatus* (Say).

Anaphes perdubius Girault, 1916. Ent. News 27: 6. ♀.

pratensis (Foerster), n. comb. Conn., Ill., Utah. Hosts: *Hypera postica* (Gyll.); *H. punctata* (F.).

Anaphes pratensis Foerster, 1847. Linnaea Ent. 2: 211. ♂ ♀.

Biology: Pack, 1930. Utah Agr. Expt. Sta. Bul. 216: 29-30.

Taxonomy: Girault, 1912. Canad. Ent. 44: 88.

sinipennis (Girault), n. comb. Ill.

Anaphes sinipennis Girault, 1911. Amer. Ent. Soc. Trans. 37: 280. ♀.

Genus ACMOPOLYNEMA Ogloblin

Acmopolynema Ogloblin, 1946. Iowa State Col. Jour. Sci. 20: 286.

Type: *Stichothrix bifasciatipennis* Girault. Orig. desig.

bifasciatipennis bifasciatipennis (Girault). N. Y. and Mass. to N. C. and Pa.; Tex., Kans. Hosts: *Anaxipha exigua* (Say); *Oecanthus nigricornis* Wlkr.; *O. nigricornis quadripunctatus* Beut.; *O. niveus* (Deg.).

Stichothrix bifasciatipennis Girault, 1908. Psyche 15: 115. ♀.

Polynema oecanthi Girault, 1911. Amer. Ent. Soc. Trans. 37: 317.

Biology: Brandhorst, 1943. Kans. Acad. Sci. Trans. 46: 169, 172.

Taxonomy: Girault, 1910. N. Y. Ent. Soc. Jour. 18: 254-258, ♂ ♀.

bifasciatipennis varium (Girault), n. comb. Kans. Hosts: *Oecanthus* eggs; Tephritid seed maggot from ironweed.

Polynema bifasciatipenne (!) var. *varium* Girault, 1917. Psyche 24: 92. ♂ ♀.

Genus BARYPOLYNEMA Ogloblin

Barypolynema Ogloblin, 1946. Iowa State Col. Jour. Sci. 20: 282.

Type: *Barypolynema reticulatum* Ogloblin. Orig. desig.

aspidioti (Girault). Tex. Host: *Psallus seriatus* (Reut.).

Polynema aspidioti Girault, 1911. Ent. News 22: 358. ♂.

Taxonomy: Girault, 1911. Ent. News 23: 298, ♂.

saga (Girault). D. C., Kans. Host: *Opsius stactogalus* Fieb.

Anagrus saga Girault, 1911. Amer. Ent. Soc. Trans. 37: 296. ♀.

Biology: Lawson, 1929. Ent. Soc. Amer. Ann. 22: 130.

Genus POLYNEMA Haliday

Polynema Haliday, 1833. Ent. Mag. 1: 269, 347.

Type: *Ichneumon oculorum* Linnaeus. Desig. by Westwood, 1840.

- Eutriche* Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 186.
Type: *Eutriche gracilis* Nees. Monob.
- Callitriche* Agassiz, 1848. Nomencl. Zool. Index Univ., pp. 173, 439. Emend.
Preocc.
- Cosmocoma* Foerster, 1856. Hym. Stud., v. 2, pp. 117, 120. N. name.
- Walkerella* Westwood, 1883. Ent. Soc. London, Trans. (2) 1: 32.
Type: *Walkerella temeraria* Westwood. Monob.
- Stephanodes* Enoch, 1909. Ent. Soc. London, Trans, p. 457.
Type: *Stephanodes elegans* Enoch. Monob.
- Revisions: Girault, 1911. Amer. Ent. Soc. Trans. 37: 300-324.—Girault, 1929. No.
Amer. Hym. Mymaridae, pp. 14-19.
- bimaculatipennis** Girault. Tex.
Polynema bimaculatipenne (!) Girault, 1911. Amer. Ent. Soc. Trans. 37:
304. ♀.
- caesariatipennis** Girault. D. C., Kans. Host: Tephritid seed maggot from iron-
weed.
Polynema caesariatipenne (!) Girault, 1911. Amer. Ent. Soc. Trans. 37:
305. ♀.
- ciliatum** (Say), n. comb. Ind.
Psilus ciliatus Say, 1828. Contrib. Maclur. Lyc. Phila. 1: 80.
- consobrinus** Girault. Mich., Ohio, Ga., Ill., Iowa, Minn. Hosts: ?*Empoasca fabae*
(Harr.); *Enchenopa binotata* (Say); *Anthonomus signatus* Say; ?*Tachypterellus*
quadrigibbus (Say).
Polynema consobrinus Girault, 1911. Amer. Ent. Soc. Trans. 37: 308, 309.
♂ ♀.
Taxonomy: Girault, 1911. Ent. News 22: 467.
- enchenopae** Girault. Ill. Host: *Enchenopa binotata* (Say).
Polynema enchenopae Girault, 1911. N. Y. Ent. Soc. Jour. 19: 15. ♂ ♀.
- eutettixi** Girault. Idaho, Utah, Calif. Host: *Circulifer tenellus* (Baker).
Polynema eutettixi Girault, 1917. Deser. Stellarum Nov., p. 18. ♂ ♀.
Polynema eutettixi Stahl, 1920. Jour. Agr. Res. 20: 250. Emend.
Biology: Stahl, 1920. Jour. Agr. Res. 20: 250.
- florum** Girault. B. C.
Polynema florum Girault, 1929. No. Amer. Hym. Mymaridae, pp. 18, 28.
- graculus** Girault. Wis., Ill., Tex.
Polynema graculus Girault, 1911. Amer. Ent. Soc. Trans. 37: 308. ♂.
- howardii** (Ashmead). Calif., ?Colo. Host: *Ceresa bubalus* (F.).
Cosmocoma elegans Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880,
p. 371. ♂. Preocc.
Cosmocoma Howardii Ashmead, 1887. Canad. Ent. 19: 194. N. name.
Cosmocoma Howardi Dalla Torre, 1890. Wien. Ent. Ztg. 9: 97. N. name.
Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 300-302. ♂.
- imitatrix** Gahan. Ariz. Host: *Stictocephala festina* (Say).
Polynema imitatrix Gahan, 1918. Ent. Soc. Wash. Proc. 20: 24. ♂ ♀.
- longipes** (Ashmead). Del., Ohio, Ind., Ill., Tenn., Fla. Hosts: Probably *Aphis*
pomi Deg.; *Harmolita* sp. ex *Elymus canadensis*.
Ooconus longipes Ashmead, 1887. Canad. Ent. 19: 192. ♀.
Polynema citripes Girault, 1909. Psyche 16: 106.
Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 316, 324. ♀.
- maculipes** (Ashmead). Fla.
Cosmocoma maculipes Ashmead, 1887. Canad. Ent. 19: 194. ♂.
Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 306-308. ♀.
- marylandicum** Girault, emend. Md.
Polynema marilandicum Girault, 1917. Deser. Hym. Chalcidoid. Variorum
cum Observ. V, p. 2. ♀.
- mymaripennis** Dozier. Del.
Polynema mymaripennis Dozier, 1933. Ent. Soc. Wash. Proc. 35: 96. ♀.
- nativum** Girault. B. C.
Polynema nativum Girault, 1929. No. Amer. Hym. Mymaridae, pp. 19, 28.

- needhami** Ashmead. Ill. Hosts: *Lestes uncatus* Kirby; *L. unguiculatus* Hagen.
Polynema needhami Ashmead, 1900. Ent. News 11: 616. ♂ ♀.
- picipes** Girault. N. Y., Ga. Host: ?*Tachypterellus quadrigibbus* (Say).
Polynema picipes Girault, 1905. Psyche 12: 91. ♀.
Polynema picipes (!) Girault, 1911. N. Y. Ent. Soc. Jour. 19: 18, 22. Emend.
 Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 313. ♀.
- pratensiphagum** Walley. Ont. Host: *Lygus oblineatus* (Say).
Polynema pratensiphaga (!) Walley, 1929. Canad. Ent. 61: 193. ♂ ♀.
- psecas** Girault. Ill.
 (*Stephanodes*) *Polynema psecas* (Girault), 1911. Amer. Ent. Soc. Trans. 37: 319. ♂ ♀.
Stephanodes psecas Girault, 1912. N. Y. Ent. Soc. Jour. 20: 41. ♀.
- regina** Girault. B. C.
Polynema regina Girault, 1912. Ent. Soc. Wash. Proc. 14: 24. ♀.
- sibylla** Girault. Va., Ill., Wis.
Polynema sibylla Girault, 1911. Amer. Ent. Soc. Trans. 37: 311. ♂ ♀.
- striaticorne** Girault. N. S. to Va., Mo., Colo. and Minn.; Tex., Calif., Idaho, B. C. Hosts: *Ceresa borealis* (Fairm.); *C. bubalus* (F.); *C. taurina* (Fitch); *Stictocephala inermis* (F.); *Oncopsis sobrius* (Wlkr.); *Anuraphis bakeri* (Cowen); ?*Gnorimoschema operculella* (Zell.); ?*Dasyneura leguminicola* (Lint.); gall of *Rhabdophaga triticoideus* Walsh; *Aphelinus lapolisigni* How.; *Pachyneuron siphonophorae* (Ashm.).
Polynema striaticorne Girault, 1911. N. Y. Ent. Soc. Jour. 19: 12. ♂ ♀.
Polynema striaticorne var. *boreum* Girault, 1916. Ent. News 27: 8. ♀.
 Biology: Baldus, 1928. Ent. Soc. Amer. Ann. 21: 419-435. ♂ ♀.
 Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 302, 308. ♂ ♀.
- zetes** Girault. D. C., Ill.
Polynema zetes Girault, 1911. Amer. Ent. Soc. Trans. 37: 314. ♀.

Genus CARAPHRACTUS Haliday

- Caraphractus** Haliday, 1846. In Walker, Ann. Mag. Nat. Hist. 18: 49, 50, 52.
 Type: *Caraphractus cinctus* Haliday. Monob.
- cinctus** Haliday. N. Y.; Europe. Host: *Notonecta* sp.
Caraphractus cinctus Haliday, 1846. In Walker, Ann. Mag. Nat. Hist. (1) 18: 52.
 Biology and taxonomy: Matheson and Crosby, 1912. Ent. Soc. Amer. Ann. 5: 68-70.

Genus NEOMYMAR Crawford

- Neomymar** Crawford, 1913. U. S. Natl. Mus. Proc. 46: 351.
 Type: *Neomymar vierecki* Crawford. Monob.
 Revision: Girault, 1929. No. Amer. Hym. Mymaridae, pp. 12-13.
- vierecki marylandi** Girault, emend. Md.
Neomymar vierecki marylandi Girault, 1917. Chalcidoidea Nova Marylandensis III, p. 2. ♀.
- vierecki vierecki** Crawford. Va.
Neomymar vierecki Crawford, 1913. U. S. Natl. Mus. Proc. 46: 351. ♀.

Genus MYMARILLA Westwood

- Mymar** of American authors.
Mymarilla Westwood, 1878. Linn. Soc. London, Trans. Zool., (2) 1: 585.
 Type: *Mymar wollastonii* Westwood. Monob.
- Oglobliniella** Soyka, 1946. Zentbl. Gesamtgeb. Ent. 1: 181. N. syn.
 Type: (*Mymar*) *Oglobliniella pulchella* Curtis. Orig. desig.
 Revisions: Girault, 1929. No. Amer. Hym. Mymaridae, p. 12.—Gahan, 1949. Wash. Acad. Sci. Jour. 39: 209 (nomencl.).
- cincinnati** (Girault), n. comb. Md.
Mymar cincinnati Girault, 1917. Psyche 24: 99. ♂.

venusta (Girault), n. comb. Pa.

Mymar venustum Girault, 1911. N. Y. Ent. Soc. Jour. 19: 94, 188. ♀.

Genus ARESCON Haliday

Arescon Haliday, 1846. In Walker, Ann. Mag. Nat. Hist. 18: 49, 50.

Type: *Mymar dimidiatus* Curtis. Monob.

Panthus Haliday, 1846. In Walker, Ann. Mag. Nat. Hist. 18: 49, 50.

Type: *Panthus flavovarius* Haliday. Type by elimination.

Leimacis Foerster, 1847. Linnæa Ent. 2: 208.

Type: *Leimacis rufula* Foerster. Monob.

Limacis Foerster, 1856. Hym. Stud., v. 2, p. 120. Emend.

aspidiocola (Ashmead). Fla. Hosts: *Lepidosaphes beckii* (Newm.); *L. gloverii* (Pack.).

Aphelinus aspidiocola Ashmead, 1879. Canad. Ent. 11: 159. ♀.

Family TRICHOGRAMMATIDÆ

The members of this family are primary internal parasites in the eggs of other insects.

Revisions: Girault, 1912. Wis. Nat. Hist. Soc. Bul. 10: 81-100 (cat., keys).—Girault, 1914. Wis. Nat. Hist. Soc. Bul. 12: 55-71 (cat.).—Girault, 1918. No. Amer. Hym. Trichogrammatidae, pp. 1-11 (keys).

Genus TRICHOGRAMMA Westwood

Trichogramma Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 2: 444.

Type: *Trichogramma evanescens* Westwood. Monob.

Calleptiles Haliday, 1833. Ent. Mag. 1: 340.

Type: *Calleptiles latipennis* Haliday. Monob.

Pentarthron Packard, 1872 (1871). Rec. Amer. Ent., p. 8.

Type: *Trichogramma? minuta* Riley. Monob.

Oophthora Aurivillius, 1898 (1897). Ent. Tidskr. 18: 250.

Type: *Oophthora semblidis* Aurivillius. Monob.

Pentarthron Dalla Torre, 1898. Cat. Hym., v. 5, p. 3. Emend.

Xanthoatomus Ashmead, 1904. Carnegie Mus. Mem. 1: xi, 360.

Type: (*Xanthoatomus albipes* Ashmead)=*Trichogramma minutum* Riley. Monob.

Trichogrammatoidea Girault, 1911. Amer. Ent. Soc. Trans. 37: 13.

Type: *Chaetosticha nana* Zehntner. Orig. desig.

Revision: Girault, 1918. No. Amer. Hym. Trichogrammatidae, pp. 4-5.

evanescens Westwood. Minn., Oreg. Hosts: *Heliopsis* sp.; *Malacosoma disstria* Hbn.; *Melissopus latiferreanus* (Wlsm.); *Sitotroga cerealella* (Oliv.).

Trichogramma evanescens Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 2: 444.

Biology: Gatenby, 1918. Quart. Jour. Micros. Sci. 63: 161-174.—Thompson and Parker, 1928. U. S. Dept. Agr. Tech. Bul. 59: 17.—Hase, 1929. Internatl. Corn Borer Invest. Sci. Rpt. 2: 85-89.—Salt, 1937. Roy. Soc. London, Proc. (Ser. B) 122: 57-75.—Salt, 1939 (1938). Parasitology 30: 511-522.—Salt, 1942 (1941). Biol. Rev. Cambridge Phil. Soc. 16: 242-248.

minutum Riley. Common throughout U. S. and Canada. Hosts: *Chrysopa oculata* Say; *C. oculata albicornis* Fitch; *Lepidosaphes ulmi* (L.); *Chalepus dorsalis* Thunb.; *Deloyala guttata* (Oliv.); *Metriona bicolor* (F.); *Odontota suturalis* Thunb.; *Papilio glaucus* L.; *Colias philodice eurytheme* Bdvl.; *Pieris rapae* (L.); *Danaus plexippus* (L.); *Oeneis macounii* Edw.; *Agraulis vanillae* L.; *Basilarchia archippus* (Cram.); *Nymphalis milberti* Godt.; *Polygonia interrogationis* (F.); *Vanessa atalanta* (L.); *Lycaena hanno* (Stoll); *Catpodes ethlius* (Stoll); *Erynnis lucilius* (Scud. and Burg.); *Urbanus proteus* (L.); *Ceratonia catalpae* (Bdvl.); *Protoparce quinquemaculata* (Haw.); *P. sexta* (Johan.); *Coloradia pandora* Blake; *Anisota senatoria* (A. and S.); *Celama sorghiella* (Riley); *Cisthene nexa* (Bdvl.); *Estigmene acrea* (Drury); *Hyphantria cunea* (Drury); *Alabama argillacea* (Hbn.); *Anomis erosa* (Hbn.);

Anticarsia gemmatilis (Hbn.); *Caenurgina erecta* (Cram.); *Ceramica picta* (Harr.); *Heliothis armigera* (Hbn.); *Heterocampa guttivitta* (Wlkr.); *H. pseudotsugata* (McD.); *Laphygma frugiperda* (A. and S.); *Peridroma margaritosa* (Haw.); *Plathypena scabra* (F.); *Trichoplusia ni* (Hbn.); *Datana integerrima* Grote and Rob.; *Oligocentris lignicolor* (Wlkr.); *Nygmia phaeorrhoea* (Donov.); *Olene plagiata pinicola* Dyar; *Stilpnotia salicis* (L.); *Alsophila pometiaria* (Harr.); *Cnidocampa flavescens* (Wlkr.); *Acrobasis caryae* Grote; *A. juglandis* (LeB.); *Chilo forbesellus* Fern.; *C. plejadellus* Zinck; *Corecya cephalonica* Staint; *Diatraea crambidoides* (Grote); *D. grandiosella* Dyar; *D. saccharalis* (F.); *D. zeacoella* Dyar; *Ephestia cautella* (Wlkr.); *E. kühniella* Zell.; *Loxostege similalis* (Guen.); *Mineola vaccinii* (Riley); *Occidentalia comptulatalis* (Hulst.); *Phlyctaenia rubigalis* (Guen.); *P. tertialis* (Guen.); *Plodia interpunctella* (Hbn.); *Pyrausta ainsliei* Heinr.; *P. nubilalis* (Hbn.); *P. penitalis* (Grote); *Schoenobia melinella* dispersellus Rob.; *Ancylis comptana* (Froehl.); *Bactra lanceolana* (Hbn.); *Carpocapsa pomonella* (L.); *Grapholitha molesta* (Busck); *Gretchena bolliana* (Sling.); *Laspesyria caryana* (Fitch); *Melissopus latiferreanus* (Wlsm.); *Polychrosis viteana* (Clem.); *Rhyacionia buoliana* (Schiff.); *R. frustrana* (Comst.); *Spilonota ocellana* (D. and S.); *Amelia iwana* (Fern.); *Archips rosaceana* (Harr.); *Argyrotaenia citrana* (Fern.); *A. mariana* (Fern.); *A. velutinana* (Wlkr.); *Choristoneura fumiferana* (Clem.); *Peronea variana* Fern.; *Platynota rostrana* (Wlkr.); *Gnorimoschema operculella* (Zell.); *Sitotroga cerealella* (Oliv.); *Sanninoidea exitiosa* (Say); *Coleophora malivorella* (Riley); *C. pruniella* Clem.; *C. salmani* Heinr.; *Thyridopteryx ephemeriformis* (Haw.); *Pegomya calyptata* (Zett.); *P. hyoscyami* (Panz.); *Cimex americana* Leach; *Ametastegia glabrata* (Fall.); *Caliroa aethiops* (F.); *C. amygdalina* Roh.; *C. cerasi* (L.); *C. obsoleta* (Nort.); *Heterarthrus nemoratus* (Fall.); *Nematus populi* (Marl.); *N. ribesii* (Scop.); *?Pachynematus palliventris* (Cress.); *Pikonema alaskensis* (Roh.); *Profenusia canadensis* (Marl.).

Trichogramma (?) *minuta* Riley, 1871. Mo. State Bd. Agr. Ann. Rpt. 6: 157.

Trichogramma pretiosa Riley, 1879. Canad. Ent. 11: 161. ♂ ♀.

Ttichogramma minutissimum Packard, 1881. Boston Soc. Nat. Hist. Proc. 21: 37. ♂ ♀.

Trichogramma odontotae Howard, 1885. Ent. Amer. 1: 117. ♂ ♀.

Trichogramma intermedium Howard, 1889. In Scudder, Butterflies of Eastern U. S. and Canada, pp. 1872, 1895. ♂ ♀.

Xanthoatomus albipes Ashmead, 1904. Carnegie Mus. Mem. 1: xi, 360. ♂ ♀.

Trichogramma pretiosa var. *nigra* Girault, 1906. Canad. Ent. 38: 82. ♂ ♀. N. syn.

Trichogramma helocharae Perkins, 1907. Hawaii. Sugar Planters' Assoc. Expt. Sta., Div. Ent. Bul. 4: 58.

Pentarthron euproctidis Girault, 1911. Amer. Ent. Soc. Trans. 37: 46. ♂ ♀.

Biology: Newcomer, 1915. U. S. Dept. Agr. Bul. 265: 34.—Cleare, 1928. Ent. Res. Bul. 19: 31–38.—Holloway, Haley, and Loftin, 1928. U. S. Dept. Agr. Tech. Bul. 41: 40–42, 55–56.—Wishart, 1929. Sci. Agr. 9: 616–617.—Peterson, 1929. Ent. Soc. Ontario Ann. Rpt. 59: 83–84.—Flanders, 1929 (1928). Fourth Internatl. Cong. Ent. Trans., pp. 110–130.—Hinds and Spencer, 1929 (1928). Fourth Internatl. Cong. Ent. Trans., pp. 1029–1035.—Garman, 1930 (1929). Conn. Pomol. Soc. Proc. 39: 41–43.—Garman, 1930. Conn. Agr. Expt. Sta. Bul. 313: 441–444.—Hinds and Spencer, 1930. Jour. Econ. Ent. 23: 121.—Flanders, 1931. Hilgardia 5: 395–406.—Morrill, 1931. Jour. Econ. Ent. 24: 1264–1273.—Essig, 1931. Hist. of Ent., pp. 325–329.—Crowley, 1931. Wash. Agr. Expt. Sta. Bul. 260: 68.—Schread, 1932. Conn. Agr. Expt. Sta. Bul. 338: 600–601.—Slate, 1932. Conn. Agr. Expt. Sta. Bul. 337: 462–463.—Hinds and Osterberger, 1932. Internatl. Soc. Sugar Cane Technol., Fourth Cong. Bul. 52, pt. 2.—Hinds, Osterberger, and Dugas, 1933. La. Agr. Expt. Sta. Bul. 235: 1–36.—Hinds, Osterberger, and Dugas, 1934. La. Agr. Expt. Sta. Bul. 248: 1–34.—Van Steenburgh, 1934. Canad. Jour. Res. 10: 287–314.—Nettles, 1934. S. C. Agr. Expt. Sta. Bul. 295: 25–27.—Van Steenburgh, 1935. Ent. Soc. Ontario Ann. Rpt. 65: 68–69.—Schread, 1936. Conn. Agr. Expt. Sta. Bul. 383: 344–346.—Jaynes and Bynum, 1936. Sugar Bul. 14 (19): 1–4.—Keen, 1938. U. S. Dept. Agr. Misc. Pub. 273: 71.—Smith and Garman 1938. Conn. Agr. Expt. Sta. Bul.

408: 228-230.—Jaynes and Bynum, 1941. U. S. Dept. Agr. Tech. Bul. 743: 1-42.—Douglas and Ingram, 1942. U. S. Dept. Agr. Cir. 632: 14.—Summerland and Steiner, 1943. Jour. Econ. Ent. 36: 75.—Underhill, 1943. Va. Agr. Expt. Sta. Bul. 349: 13.—McKinney, 1944. U. S. Dept. Agr. Tech. Bul. 846: 14.

Economics: Alden, 1929. Ga. State Hort. Soc. Proc. 53: 35-37.—Flanders, 1929 (1928). Fourth Internatl. Cong. Ent. Trans., pp. 110-130.—Flanders, 1930. Hilgardia 4: 465-501.—Hinds, 1933. Trav. V. Cong. Internatl. d'Ent., pp. 557-572.—Spencer, Brown and Phillips, 1935. U. S. Dept. Agr. Cir. 376: 1-17.—Garman, 1939. Conn. Agr. Expt. Sta. Bul. 428: 65-67.—Ingram and Bynum, 1941. U. S. Dept. Agr. Farmers' Bul. 1884: 8-9.—Spencer, Brown, and Phillips, 1949. U. S. Dept. Agr. Cir. 818: 1-17.

Taxonomy: Peterson, 1930. N. Y. Ent. Soc. Jour. 38: 1-7.—Peterson, 1930. U. S. Dept. Agr. Tech. Bul. 215: 1-21.—Lund, 1934. Ent. Soc. Amer. Ann. 27: 324-340.—Bare, 1935. Jour. Econ. Ent. 28: 803-815.

retorridum (Girault). Iowa, N. Mex. Host: *Protoleucania albilinea* (Hbn.).

Pentarthron retorridum Girault, 1911. Amer. Ent. Soc. Trans. 37: 52. ♂

♀.

Biology: Webster, 1912. Jour. Econ. Ent. 5: 335.

semblidis (Aurivillius). Ont., N. Y., Sask. Hosts: *Chauliodes rastricornis* Ramb.; *Sialis infumata* Newm.; *Ephesia kühniella* Zell.; *Sitotroga cerealella* (Oliv.); *Chrysops aestuans* Wulp.; *C. excitans* Wlkr.; *C. mitis* O. S.; *C. striatus* O. S.; *?Tabanus lasiophthalmus* Macq.

Oophthora semblidis Aurivillius, 1897. Ent. Tidskr. 18: 253. ♂ ♀.

Biology: Cameron, 1926. Bul. Ent. Res. 17: 38-39.—Van Steenburgh, 1938. Ent. Soc. Ontario Ann. Rpt. 69: 74-75.—Salt, 1939 (1938). Parasitology 30: 511-522.—Salt, 1942 (1941). Cambridge Phil. Soc. Biol. Rev. 16: 249.

Genus APHELINOIDEA Girault

Aphelinoidea Girault, 1911. Amer. Ent. Soc. Trans. 37: 2.

Type: *Aphelinoidea semifuscipennis* Girault. Monob.

Revision: Girault, 1918. No. Amer. Hym. Trichogrammatidae, p. 9.

plutella Girault. Ill., Tex., N. Mex., Calif., Utah, Idaho. Host: *Circulifer tenellus*⁸ (Baker).

Aphelinoidea plutella Girault, 1912. Ent. News 23: 296. ♂ ♀.

Biology: Henderson, 1941. U. S. Dept. Agr. Cir. 593: 1-18.

semifuscipennis Girault. Ill.

Aphelinoidea semifuscipennis Girault, 1911. Amer. Ent. Soc. Trans. 37: 4.

♀.

Genus ZAGA Girault

Zaga Girault, 1911. Amer. Ent. Soc. Trans. 37: 30.

Type: *Zaga latipennis* Girault. Monob.

latipennis Girault. Va. Host: Recorded from apple twigs infested with *Aspidiotus perniciosus* Comst. but probably from membracid eggs.

Zaga latipennis Girault, 1911. Amer. Ent. Soc. Trans. 37: 31. ♂.

Genus TRICHOGRAMMATOMYIA Girault

Trichogrammatomyia Girault, 1916. Canad. Ent. 48: 268.

Type: *Trichogrammatomyia tortricis* Girault. Monob.

tortricis Girault. Ont., N. B., N. Y. Hosts: *Archips argyrospila* (Wlkr.); *A. cerasivorana* (Fitch).

Trichogrammatomyia tortricis Girault, 1916. Canad. Ent. 48: 268. ♂ ♀.

Biology: Baird, 1918. Agr. Gaz. Canada 5: 766, 771.—Chapman, Pearce, and Avens, 1941. Jour. Econ. Ent. 34: 643-644.

Genus LATHROMEROIDES Girault

Lathromeroides Girault, 1913. Ent. News 24: 211.

Type: *Lathromeroides longicorpus* Girault. Monob.

Krygeriola Nowicki, 1934. *Polski Pismo Ent.* 12: 3.

Type: *Krygeriola dolichoptera* Nowicki. Monob.

Revision: Girault, 1918. No. Amer. Hym. Trichogrammatidae, p. 10.

neomexicanus Girault. N. Mex. Host: Membracid.

Lathromeroides neomexicanus Girault, 1916. *Ent. News* 27: 5. ♀.

Genus LATHROMERIS Foerster

Lathromeris Foerster, 1856. *Hym. Stud.*, v. 2, pp. 87, 89.

Type: *Lathromeris scutellaris* Foerster. Monob.

Revision: Girault, 1918. No. Amer. Hym. Trichogrammatidae, p. 7.

scutellaris Foerster. ?W. Va. Host: Lepidopterous eggs on wild cherry twigs.

Lathromeris scutellaris Foerster, 1856. *Hym. Stud.*, v. 2, p. 89. ♂.

Biology: Hopkins, 1893. W. Va. Agr. Expt. Sta. Bul. 32: 228.

Genus MEGAPHRAGMA Timberlake

Megaphragma Timberlake, 1924. *Hawaii. Ent. Soc. Proc.* 5: 413.

Type: *Megaphragma mymaripenne* Timberlake. Monob.

Sethosiella Kryger, 1932. *Soc. Ent. d'Égypte Bul.*, p. 38.

Type: *Sethosiella priesneri* Kryger. Monob.

Revision: Ghesquière, 1939. *Rev. Zool. Bot. Africaines* 33: 39.

mymaripennis Timberlake. La.

Megaphragma mymaripenne (!) Timberlake, 1924. *Hawaii. Ent. Soc.*

Proc. 5: 413. ♀.

Genus POROPOEA Foerster

Poropoea Foerster, 1851. *Naturh. Ver. Rheinlande Verh.* 8: 28.

Type: *Poropoea stollwerckii* Foerster. Monob.

attelaborum Girault. Eastern U. S. Host: *Attelabus analis* Ill.

Poropoea attelaborum Girault, 1911. *Amer. Ent. Soc. Trans.* 37: 68. ♂.

Genus ZAGELLA Girault

Zagella Girault, 1918. No. Amer. Hym. Trichogrammatidae, v. 2, p. 7.

Type: *Paracentrobia flavipes* Girault. Monob.

flavipes (Girault). D. C., Ga. Hosts: *Lestes* sp.; ?*Tachypterellus quadrigibbus* (Say).

Paracentrobia flavipes Girault, 1905. *Ent. News* 16: 287. ♂ ♀.

Taxonomy: Girault, 1911. *Amer. Ent. Soc. Trans.* 37: 75. ♂ ♀.

Genus XENUFENS Girault

Xenufens Girault, 1916. *Ent. News* 27: 5.

Type: *Xenufens ruskini* Girault. Monob.

ruskini Girault. Fla. Hosts: *Calpodus ethlius* (Stoll); *Lerema accius* (A. and S.); *Urbanus proteus* (L.).

Xenufens ruskini Girault, 1916. *Ent. News* 27: 6. ♀.

Genus TUMIDICLAVA Girault

Tumidiclava Girault, 1911. *Amer. Ent. Soc. Trans.* 37: 6.

Type: *Tumidiclava pulchrinotum* Girault. Monob.

pulchrinotum Girault. Ill.

Tumidiclava pulchrinotum Girault, 1911. *Amer. Ent. Soc. Trans.* 37: 8. ♀.

Genus OLIGOSITA Haliday

Oligosita Haliday, 1851. *In* Walker, *Ann. Mag. Nat. Hist.* (2) 7: 212, 213.

Type: *Oligosita collina* Walker. Monob.

Westwoodella Ashmead, 1904. *Carnegie Mus. Mem.* 1: 359.

Type: *Oligosita subfasciata* Westwood. Monob.

Revision: Girault, 1918. No. Amer. Hym. Trichogrammatidae, pp. 8-9.

americana Girault. S. C., Ind., Ill., N. Mex. Hosts: *Dorycephalus platyrhynchus* Osb.; Cicadellid eggs in *Elymus* stems; *Halticus bracteatus* (Say); *Harmolita grandis* (Riley); *H. tritici* (Fitch); *H. neocaptiva* Peck.
Oligosita americana Girault, 1909. Psyche 16: 106. ♀.
 Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 56-63. ♂ ♀.

comosipennis (Girault). N. Y.

Westwoodella comosipennis Girault, 1911. Amer. Ent. Soc. Trans. 37: 66. ♀.

marylandia Girault, emend. Md.

Oligosita marilandia Girault, 1917. Chalcidoidea Nova Marilandensis II, p. 1. ♀.

sanguinea clarimaculosa (Girault). Ill.

Westwoodella clarimaculosa Girault, 1911. Amer. Ent. Soc. Trans. 37: 67. ♀.

sanguinea claripes Girault. Ariz. Hosts: *Asphondylia milkii* Wachtl; *A. websteri* Felt.

Oligosita sanguinea var. *claripes* Girault, 1916. Ent. News 27: 4. ♀.

sanguinea sanguinea (Girault). D. C., Ohio, Ill. Hosts: *Oscinis* sp.; ? *Harmolita* in *Eragrostis poaeoides*.

Westwoodella sanguinea Girault, 1911. Amer. Ent. Soc. Trans. 37: 58. ♂ ♀.

subfasciatipennis (Girault). Wash. Host: Cicadellid in wheat.

Westwoodella subfasciatipennis Girault, 1911. Amer. Ent. Soc. Trans. 37: 63. ♂ ♀.

Genus BRACHISTA Haliday

Brachista Haliday, 1851. In Walker, Ann. Mag. Nat. Hist. (2) 7: 212 (no species).

Type: *Brachysticha fidae* Ashmead. Included by Ashmead, 1894.

Brachysticha Foerster, 1856. Hym. Stud., v. 2, p. 88. Emend.

Giraultiola Nowicki, 1936. Ztschr. f. Angew. Ent. 23: 136.

Type: *Brachysticha fidae* Ashmead. Monob.

fidiae (Ashmead). Pa., Va., Ohio. Hosts: *Magicicada septendecim* (L.); *Fidia vilicida* Walsh.

Brachysticha fidae Ashmead, 1894. Cincinnati Soc. Nat. Hist. Jour. 17: 171. ♀.

Lathromeris cicadae Howard, 1898. Canad. Ent. 30: 102. ♂ ♀.

Biology: Johnson and Hammar, 1910. U. S. Dept. Agr. Bur. Ent. Bul. 89: 51, 56-57.

—Marlatt, 1898. U. S. Dept. Agr. Div. Ent. Bul. 14 (n. s.): 99.

Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 69-74.

Genus UFENS Girault

Ufens Girault, 1911. Amer. Ent. Soc. Trans. 37: 32.

Type: *Trichogramma nigrum* Ashmead. Monob.

Stephanotheisa Soika, 1931. Natuurh. Maandbl. 20: 111.

Type: *Stephanotheisa vitoldi* Soika. Monob.

Revision: Girault, 1918. No. Amer. Hym. Trichogrammatidae, p. 6.

niger (Ashmead). D. C., N. C., Fla., Ill., Tex. Hosts: *Draeculacephala mollipes* (Say); *Homalodisca* sp.; *Diatraea saccharalis* (F.).

Trichogramma nigrum Ashmead, 1888. Canad. Ent. 20: 107. ♀.

Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 35. ♂ ♀.

spiritus americanus Girault. Md.

Ufens spiritus americanus Girault, 1918. No. Amer. Hym. Trichogrammatidae, p. 6.

spiritus spiritus Girault. Md.

Ufens spiritus Girault, 1918. No. Amer. Hym. Trichogrammatidae, p. 6.

Genus HYDROPHYLITA Ghesquière

Hydrophylax Matheson and Crosby, 1912. Ent. Soc. Amer. Ann. 5: 65. Preocc.

Type: *Hydrophylax aquivolans* Matheson and Crosby. Monob.

Hydrophylita Ghesquière, 1946. Rev. Zool. Bot. Africaines 34: 371. N. name.

aquivolans (Matheson and Crosby), n. comb. N. Y. Host: *Ischnura* sp., probably *verticalis* (Say).

Hydrophylax aquivolans Matheson and Crosby, 1912. Ent. Soc. Amer. Ann. 5: 65. ♂ ♀.

Genus USCANA Girault

Uscana Girault, 1911. Amer. Ent. Soc. Trans. 37: 22.

Type: *Uscana semifumipennis* Girault. Monob.

Revision: Girault, 1918. No. Amer. Hym. Trichogrammatidae, pp. 9-10.

marylandica Girault, emend. Md. Host: *Callosobruchus maculatus* (F.).

Uscana marilandica Girault, 1918. No. Amer. Hym. Trichogrammatidae, p. 10.

semifumipennis Girault. Tex. Host: *Callosobruchus maculatus* (F.).

Uscana semifumipennis Girault, 1911. Amer. Ent. Soc. Trans. 37: 23. ♂ ♀.

Biology: Paddock and Reinhard, 1919. Tex. Agr. Expt. Sta. Bul. 256: 81-83.

Genus ABBELLA Girault

Abbella Girault, 1911. Amer. Ent. Soc. Trans. 37: 9.

Type: *Abbella subflava* Girault. Orig. desig.

Ittys Girault, 1911. Amer. Ent. Soc. Trans. 37: 25.

Type: *Trichogramma ceresarum* Ashmead. Monob.

Brachistella Girault, 1911. N. Y. Ent. Soc. Jour. 19: 184.

Type: *Trichogramma acuminata* Ashmead. Monob.

Jassidophthora Perkins, 1912. Hawaii. Sugar Planters' Assoc. Expt. Sta., Div. Ent. Bul. 10: 17.

Type: *Jassidophthora prima* Perkins. Monob.

Abbellisca Ghesquière, 1946. Rev. Zool. Bot. Africaines 34: 371. N. name.

Revision: Girault, 1918. No. Amer. Hym. Trichogrammatidae, pp. 5-6, 7 (*Abbella*, *Ittys*).

acuminata (Ashmead). N. Y., Fla., Ill. Hosts: *Lestes uncatus* Kirby; *L. unguiculatus* Hagen; *Draeculacephala minor* (Wlkr.); *D. mollipes* (Say).

Trichogramma acuminatum Ashmead, 1888. Canad. Ent. 20: 107. ♂ ♀.

Brachista pallida Ashmead, 1900. Ent. News 11: 616. ♀.

Biology: Gibson, 1915. U. S. Dept. Agr. Bul. 254: 14.

Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 77.

americana Girault. Utah. Host: Cicadellid in *Elymus*.

Abbella americana Girault, 1917. U. S. Natl. Mus. Proc. 53: 445. ♂ ♀.

auriscutellum Girault. Ariz. Host: *Draeculacephala mollipes* (Say).

Abbella auriscutellum Girault, 1916. Ent. News 27: 4. ♀.

Biology: Gibson, 1915. U. S. Dept. Agr. Bul. 254: 14.

ceresarum (Ashmead), n. comb. N. S., N. J., Ohio, Ill. Hosts: *Ceresa borealis* Fairm.; *C. bubalus* (F.); *C. taurina* Fitch; *Stictocephala inermis* (F.).

Trichogramma ceresarum Ashmead, 1888. Canad. Ent. 20: 107. ♀.

Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 26-30, ♂ ♀.

nympha Girault. U. S. Hosts: Cicadellid on *Ambrosia artemisiaefolia*; *Diplosis* sp. on *A. artemisiaefolia*.

Abbella nympha Girault, 1911. Entomologist 44: 197. ♀.

perditrix Gahan. Ariz. Host: *Stictocephala festina* (Say).

Abbella (Ittys) perditrix Gahan, 1918. Ent. Soc. Wash. Proc. 20: 25. ♂ ♀.

prima (Perkins). Southwest U. S.

Jassidophthora prima Perkins, 1912. Hawaii. Sugar Planters' Assoc. Expt. Sta., Div. Ent. Bul. 10: 18. ♂ ♀.

subflava Girault. D. C., S. C., Ill., Kans., S. Dak., Idaho, Calif., Wash. Hosts: *Blissus leucopertus* (Say); *Balclutha impicta* (Van Duzee); *Circulifer tenellus* (Baker); *Empoasca* sp.; *Halticus bracteatus* (Say); *Polynema eulettixi* (Gir).

Abbella subflava Girault, 1911. Amer. Ent. Soc. Trans. 37: 11. ♂ ♀.

Biology: McCulloch, 1915. Ent. News 26: 147-148.—Stahl, 1920. Jour. Agr. Res. 20: 250.—Henderson, 1941. U. S. Dept. Agr. Cir. 593: 1-18.

Genus NEOBRACHISTELLA Girault

Neobrachistella Girault, 1912. Queensland Mus. Mem. 1: 89.

Type: *Neobrachistella maxima* Girault. Monob.

Revision: Girault, 1918. No. Amer. Hym. Trichogrammatidae, p. 11.

livii Girault. Md.

Neobrachistella livii Girault, 1918. No. Amer. Hym. Trichogrammatidae, p. 11. ♀.

Genus CENTROBIOPSIS Girault

Centrobiopsis Girault, 1918. No. Amer. Hym. Trichogrammatidae, pp. 4, 7.

Type: *Centrobia odonatae* Ashmead. Monob.

odonatae (Ashmead). N. Y., Ill. Hosts: *Lestes uncatatus* Kirby; *L. unguiculatus* Hagen.

Centrobia odonatae Ashmead, 1900. Ent. News 11: 616. ♀.

Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 74. ♀.

Family EULOPHIDAE

Subfamily EULOPHINAE

Genus PNIGALIO Schrank

Pnigalio Schrank, 1802. Fauna Boica, v. 2, sec. 2, p. 315.

Type: *Ichneumon pectinicornis* Linnaeus. Monob.

Notanisomorphomyia Girault, 1913. Queensland Mus. Mem. 2: 289. N. syn.

Type: *Notanisomorphomyia albicoxa* Girault. Monob.

agromyzae agromyzae (Gahan). Maine, Md., Fla. Hosts: *Agromyza parvicornis* Loew; *Phytomyza aquilegiae* Hardy.

Sympiesis agromyzae Gahan, 1913. U. S. Natl. Mus. Proc. 46: 440. ♀.

Sympiesis wordsworthi Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 10. ♀. N. syn.

agromyzae pennsylvanicus (Girault), n. comb. N. J., Pa. Hosts: *Coptodisca kalmiella* Dietz; *Callisto geminatella* (Pack.).

Sympiesis agromyzae var. *pennsylvanicus* Girault, 1917. Deser. Stellarum Nov., p. 7. ♀.

coloni (Girault), n. comb. Calif. Host: Leaf miner on *Convolvulus*.

Sympiesis coloni Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 2. ♀.

dandoloni (Girault), n. comb. Va.

Sympiesis dandoloni Girault, 1917. New Chalcid Flies, p. 1. ♂ ♀.

felti (Crawford). Ont., N. Y., Conn. Hosts: *Agromyza melampyga* Loew; *Phytomyza ilicis* (Curt.).

Sympiesis felti Crawford, 1911. U. S. Natl. Mus. Proc. 40: 448. ♀.

flavipes (Ashmead), n. comb. Fla. Host: Rose gall.

Sympiezus flavipes Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 133. ♀.

guttiventris (Girault), n. comb. Del., D. C., La. Host: *Tischeria malifoliella* Clem.

Eulophus guttiventris Girault, 1906. Ent. News 17: 305. ♂ ♀.

kukakensis (Ashmead), n. comb. Alaska.

Eulophus kukakensis Ashmead, 1902. Wash. Acad. Sci. Proc. 4: 147. ♂.

lineaticoxa (Girault). Conn., Mo., La. Hosts: *Callisto geminatella* (Pack.); *Tischeria* sp.

Eulophus lineaticoxa Girault, 1916. Soc. Ent. 31: 37. ♀.

maculipes (Crawford). Ont., Maine, Mass., N. Y., Wis. Hosts: *Coleophora pruniella* Clem.; *Cameraria hamameliella* Busck; *Lithocolletis* sp.; mines of *Cameraria hamadryadella* (Clem.) in leaves of swamp white oak; *Agromyza melampyga* Loew.

Sympiesis maculipes Crawford, 1913. U. S. Natl. Mus. Proc. 45: 258. ♂ ♀.

metacomet (Crawford), n. comb. Maine, Mass., La., Tex. Host: *Cameraria caryaefoliella* (Clem.).

Sympiesis metacomet Crawford, 1913. U. S. Natl. Mus. Proc. 45: 257. ♀.

minio (Walker), n. comb. Fla.

Eulophus Minio Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 26. ♀.

proximus (Ashmead), n. comb. W. Va., Va.

Elachistus proximus Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 340. ♀.

quericola (Ashmead), n. comb. N. J., Ill., Kans. Host: *Caulocampus acericaulis* (MacG.).

Sympiesis quericola Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VII. ♀.

tischeriae (Ashmead), n. comb. D. C., Ill., Mo., Kans. Hosts: *Callisto geminatella* (Pack.); *Tischeria malifoliella* Clem.

Sympiesis tischeriae Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VI. ♀.

unicarinatus (Ashmead), n. comb. W. Va., Va.

Sympiesis uncarinatus Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 343. ♀.

uroplatae (Howard), n. comb. Maine, D. C., Mich., Mo., Kans., Oreg. Hosts: *Chalepus dorsalis* Thunb.; *Baliosus ruber* (Web.); *Coleophora salmani* Heinr.; *Cameraria cincinnatiella* (Chamb.); *Gracilaria belfragella* Chamb.; *G.* sp. on pepperwood; *Rhus* leaf roller.

Sympiezus uroplatae Howard, 1885. Ent. Amer. 1: 117. ♂.

Biology: Chittenden, 1902. U. S. Dept. Agr. Div. Ent. Bul. 38: 82.

Taxonomy: Girault, 1916. Soc. Ent. 31: 37.

Genus SYMPIESIS Foerster

Sympiesis Foerster, 1856. Hym. Stud., v. 2, pp. 74, 76.

Type: *Eulophus sericeicornis* Nees. Orig. desig.

Sympiezus Thomson, 1878. Hym. Scand., v. 5, p. 208. Emend.

Notanisomorphella Girault, 1913. Queensland Mus. Mem. 2: 287.

Type: *Notanisomorphella australiensis* Girault. Orig. desig.

Pseudopheliminus Girault, 1913. Queensland Mus. Mem. 2: 286.

Type: *Pseudopheliminus longiventris* Girault. Monob.

ancylae Girault. N. J., Ohio, Iowa. Hosts: *Ancylis comptana* (Froel.); *A.* sp.; *Sparganothis sulfureana* (Clem.).

Sympiesis ancylae Girault, 1917. U. S. Natl. Mus. Proc. 53: 448. ♀.

argenticoxae Girault. Md., W. Va. Host: *Coleophora malivorella* Riley.

Sympiesis argenticoxae Girault, 1917 (1916). Insectur Insectiae Menstruus 4: 120. ♀.

bimaculatipennis (Girault). Maine, N. H., Iowa, Kans. Hosts: ?Hyperparasite of *Acleris minuta* (Rob.); *Callisto geminatella* (Pack.); *Tischeria malifoliella* Clem.

Astichus bimaculatipennis Girault, 1912. Canad. Ent. 44: 8. ♀.

Sympiesis bimaculata Crawford, 1913. U. S. Natl. Mus. Proc. 45: 259. ♀.

Taxonomy: Girault, 1917. U. S. Natl. Mus. Proc. 53: 449.

chenopodii Ashmead. Ill., Kans. Host: *Lithocolletis* mining in *Chenopodium hybridum*.

Sympiesis chenopodii Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VII.

compressicornis (Provancher), n. comb. Ont.

Coccophagus compressicornis Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 206. ♀.

conica (Provancher), n. comb. Que.

Metacolus conicus Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 200. ♀.

- dolichogaster** Ashmead. Ont., Maine, Fla., La., Kans., Ill. Hosts: *Episimus argutatus* (Clem.); *Gracilaria cuculipennella* (Hbn.); *G.* sp. near *violacella* Clem.
Sympiesis dolichogaster Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VII. ♀.
 Taxonomy: Girault, 1916. Soc. Ent. 31: 36-37, ♀.
- gracillariae** (Chambers), n. comb. Ky. Host: *Gracilaria stigmatella* (F.).
Eulophus Gracillariae Chambers, 1872. Canad. Ent. 4: 28.
- guttatipennis** Girault. Md. Host: *Polyhymno luteostrigella* Chamb.
Sympiesis guttatipennis Girault, 1917. Deser. Stellarum Nov., p. 15. ♀.
- lexingtonensis** Girault. Maine, Ky. Host: Blotch miner of beech.
Sympiesis lexingtonensis Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 6. ♀.
- marylandensis** Girault. Md.
Sympiesis marylandensis Girault, 1917. Entomologist 50: 37. ♀.
- marylandia** Girault, emend. Md.
Sympiesis marilandia Girault, 1917. Chalcidoidea Nova Marilandensis [I], p. 1. ♀.
- marylandica** Girault, emend. Md.
Sympiesis marilandica Girault, 1917 (1916). Insecutor Insectiae Menstruus 4: 119. ♀.
- massasoit** Crawford. Mass., Conn., Pa., Wis., Iowa, La. Hosts: *Coleophora pruniella* Clem.; *Callisto geminatella* (Pack.); *Gracilaria azaleella* Brants; ?*Lithocolletis crataegella* (Clem.); mines of *Cameraria hamadryadella* (Clem.); *Tischeria malifoliella* Clem.; *Apanteles melanoscelus* (Ratz.).
Sympiesis massasoit Crawford, 1913. U. S. Natl. Mus. Proc. 45: 258. ♂ ♀.
- meteori** Girault. Mo. Host: *Callisto geminatella* (Pack.).
Sympiesis metcori Girault, 1916. Soc. Ent. 31: 37. ♀.
- miltoni** Girault. Pa.
Sympiesis miltoni Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 7. ♀.
- nigrifemora** Ashmead. Maine to D. C.; Mich. Ohio, Ill., Mo., Kans. Hosts: *Callisto geminatella* (Pack.); *Cameraria cincinnatiella* (Chamb.); ?*Lithocolletis crataegella* (Clem.); *Tischeria malifoliella* Clem.; lepidopterous leaf miner on elm; dipterous and coleopterous leaf miners of *Ambrosia artemisiaefolia*; balsam leaf miner; oak leaf miner.
Sympiesis nigrifemora Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VII. ♀.
Sympiesis lithocolletidis Viereck, 1916. Conn. State Geol. and Nat. Hist. Survey Bul. 22: 461.
- nigripes** Ashmead. Maine, N. J., Ohio, Ind., Tex., Kans. Hosts: *Cameraria caryae-foliella* (Clem.); *Lithocolletis* sp. on soft maple; *Tischeria malifoliella* Clem.; lepidopterous leaf miner of Burr Oak; *Amelanchier* blotch miner.
Sympiesis nigripes Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VII. ♂ ♀.
- rex** Girault. Maine, Oreg. Hosts: *Lithocolletis crataegella* (Clem.); blotch miner on willow.
Sympiesis rex Girault, 1917. New Chalcid Flies, p. 2.
- stigmata** Girault. Calif.
Sympiesis stigmatus Girault, 1917. Deser. Stellarum Nov., p. 15. ♀.
- stigmatipennis** Girault. Va., Calif. Hosts: *Gnorimoschema operculella* (Zell.); *Keiferia lycopersicella* (Busek).
Sympiesis stigmatipennis Girault, 1917. Deser. Stellarum Nov., p. 14. ♂ ♀.
 Biology: Graf, 1917. U. S. Dept. Agr. Bul. 427: 33-38.
- substigmata** Girault. Conn.
Sympiesis substigmatus Girault, 1917. U. S. Natl. Mus. Proc. 53: 447. ♀
- viridula** (Thomson), n. comb. Ont., Mich., Ohio, Ind. Hosts: *Pyrausta ainsliei* Heinr.; *P. nubilalis* (Hbn.); *P. penitalis* (Grote).
Eulophus viridulus Thomson, 1878. Hym. Scand., v. 5, p. 233. ♀.

- Biology: Dudich, 1928. Internatl. Corn Borer Invest. Sci. Rpt. (1): 188.—Thompson and Parker, 1928. U. S. Dept. Agr. Tech. Bul. 59: 17.—Sachtleben, 1930. Internatl. Corn Borer Invest. Sci. Rpt. 3: 52, 108-111.—Parker and Smith, 1933. Ent. Soc. Amer. Ann. 26: 21-39, ♂ ♀.—Baker and Bradley, 1940 (1939). Sixth Pacific Sci. Cong. Proc. 4: 332-333.—Wishart, 1943. Ent. Soc. Ontario Ann. Rpt. 73: 28-29.
- Taxonomy: Ellinger and Sachtleben, 1928. Internatl. Corn Borer Invest. Sci. Rpt. (1): 126-129, ♂ ♀.

Genus NECREMNUM Thomson

- Necremnum* Thomson, 1878. Hym. Scand., v. 5, pp. 208, 234.
Type: *Eulophus leucarthros* Nees. Desig. by Ashmead, 1904.
Revision: Gahan, 1941. Wash. Acad. Sci. Jour. 31: 196-203.
- breviramulus* Gahan. Kans. Hosts: ?*Hypera compta* (Say); *H. eximius* (Lec.).
Necremnum breviramulus Gahan, 1941. Wash. Acad. Sci. Jour. 31: 197, 199.
♂ ♀.
- californicus* (Girault). Calif.
Eulophus californicus Girault, 1917. U. S. Natl. Mus. Proc. 53: 446. ♀.
- comptus* Gahan. Calif.
Necremnum comptus Gahan, 1941. Wash. Acad. Sci. Jour. 31: 197, 198. ♀.
- cyriades* (Walker), n. comb. Fla., D. C. Host: *Hedia ochroleucana* (Hbn.).
Eulophus Cyriades Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 25. ♂.
- duplicatus* Gahan. Wash. Host: *Ceutorhynchus assimilis* (Payk.).
Necremnum duplicatus Gahan, 1941. Wash. Acad. Sci. Jour. 31: 197, 198, 201.
♂ ♀.
- Biology: Hanson, Carlson, and Breakley, 1948. Wash. Agr. Expt. Sta. Bul. 498: 14-15.
- iphinoë* (Walker), n. comb. Fla.
Eulophus Iphinoë Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 25. ♂.
- oregonensis* Gahan. Oreg. Host: *Hypera rumicis* (L.).
Necremnum oregonensis Gahan, 1941. Wash. Acad. Sci. Jour. 31: 197, 200.
♂ ♀.

Genus HEMIPTARSENUS Westwood

- Hemiptarsenus* Westwood, 1833. Mag. Nat. Hist. 6: 122.
Type: *Hemiptarsenus fulvicollis* Westwood. Desig. by Westwood, 1840.
- Hemiptarsenoideus* Girault, 1916. Queensland Mus. Mem. 5: 220.
Type: *Hemiptarsenoideus semialbiclava* Girault. Desig. by Gahan and Fagan, 1923.
- americanus* (Girault), n. comb. D. C.
Hemiptarsenoideus americanus Girault, 1916. U. S. Natl. Mus. Proc. 51: 47. ♀.
- calavius* (Walker), n. comb. Fla.
Eulophus Calavius Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 24. ♂ ♀.

Genus PARDIAULOMELLA Girault

- Pardialomella* Girault, 1915. Queensland Mus. Mem. 3: 295.
Type: *Pardialomella consonus* Girault. Monob.
- ibseni* Girault. D. C., Va. Host: *Desmia funeralis* (Hbn.).
Pardialomella ibseni Girault, 1916. U. S. Natl. Mus. Proc. 51: 50. ♂ ♀.
- Biology: Strauss, 1916. U. S. Dept. Agr. Bul. 419: 9-12.

Genus DIAULOMORPHA Ashmead

- Diaulomorpha* Ashmead, 1900. Linn. Soc. N. S. Wales Proc. 25: 347.
Type: *Diaulomorpha australiensis* Ashmead. Monob.

borrowi (Girault), n. comb. Calif.

Eulophus borrowi Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 9. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 201.

Genus SOLENOTUS Foerster

Solenotus Foerster, 1856. Hym. Stud., v. 2, pp. 74, 76.

Type: *Solenotus viridis* Foerster. Monob.

Diaulus Ashmead, 1904. Carnegie Mus. Mem. 1: 356, 357. Preocc.

Type: *Diaulus begini* Ashmead. Monob.

Solenonotus Schulz, 1906. Spolia Hym., p. 143. Emend. Preocc.

Diaulinus Schulz, 1906. Spolia Hym., p. 146. N. name.

Revision: Crawford, 1912. U. S. Natl. Mus. Proc. 43: 183-185. (*Diaulinus*).

begini (Ashmead), n. comb. N. H., N. Y., Md., Ind., Kans., N. Mex., Calif. to Idaho, Wyo. Hosts: *Agromyza parvicornis* Loew; *A. pusilla* Meig.; *A. scutellata* Fall.; *Phytomyza albiceps* Meig.; *P. aquilegiae* Hardy; *P. chrysanthemi* Kow.

Diaulus begini Ashmead, 1904. Carnegie Mus. Mem. 1: 356, 372. ♀.

Biology: Webster and Parks, 1913. Jour. Agr. Res. 1: 78.—Sweetman, 1936. Biol. Control of Insects, pp. 146-147.

Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 315.

carlylei (Girault), n. comb. Calif.

Diaulinus carlylei Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 6. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 203, ♀.

intermedius (Girault), n. comb. R. I. Host: *Phytomyza chrysanthemi* Kow.

Diaulinus intermedius Girault, 1916. Canad. Ent. 48: 265. ♀.

pulchripes (Crawford). N. Y., Md., Ind., Ill., Mich., Ont. Hosts: *Agromyza melampyga* Loew; *A. parvicornis* Loew; *A. posticata* Meig.; *Phytomyza aquilegiae* Hardy; *Macrosargus clavis* Will.

Diaulinus pulchripes Crawford, 1912. U. S. Natl. Mus. Proc. 43: 184. ♀.

websteri (Crawford), n. comb. N. Y., Kans., Ariz., Utah, Nev., Calif. Hosts: *Agromyza parvicornis* Loew; *A. pusilla* Meig.; *A. scutellata* Fall.; *Calycomyza artemisiae* (Kalt.); *Cerodonta dorsalis* Loew; *C. femoralis* Meig.; *Phytomyza obscurella* Fall.

Diaulinus websteri Crawford, 1912. U. S. Natl. Mus. Proc. 43: 184. ♂ ♀.

Biology: Webster and Parks, 1913. Jour. Agr. Res. 1: 78-79.

Genus NOTANISOMORPHA Ashmead

Notanisomorpha Ashmead, 1904. Carnegie Mus. Mem. 1: 356, 357.

Type: *Notanisomorpha collaris* Ashmead. Monob.

ainsliei Crawford. Ind., Colo., Utah. Hosts: *Agromyza angulata* Loew; *A. parvicornis* Loew.

Notanisomorpha ainsliei Crawford, 1912. U. S. Natl. Mus. Proc. 43: 185.

♂ ♀.

collaris Ashmead. Md.

Notanisomorpha collaris Ashmead, 1904. Carnegie Mus. Mem. 1: 356, 382. ♀.

Taxonomy: Crawford, 1912. U. S. Natl. Mus. Proc. 43: 185.—Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 2.—Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 316.

longifasciata Girault. Ind. Host: *Agromyza angulata* Loew.

Notanisomorpha longifasciata Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 2. ♀.

meromyzae Gahan. Ind., Kans., S. Dak. Host: *Meromyza americana* Fitch.

Notanisomorpha meromyzae Gahan, 1917. U. S. Natl. Mus. Proc. 53: 216.

♂ ♀.

nevadensis Girault. Nev.

Notanisomorpha nevadensis Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 1. ♀.

noncarinata Girault. Ariz.

Notanisomorpha noncarinata Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 1. ♀.

particola Girault. Fla.

Notanisomorpha particola Girault, 1916. Soc. Ent. 31: 42. ♀.

Genus EULOPHUS Geoffroy

Eulophus Geoffroy, 1762. Hist. Abrégé des Insectes, v. 2, p. 312.

Type: *Ichneumon ramicornis* Fabricius. Desig. by Latreille, 1810.

Comedo Schrank, 1802. Fauna Boica 2, pt. 2, p. 315.

Type: *Ichneumon larvarum* Linnaeus. Monob.

Cratotechus Thomson, 1878. Hym. Scand., v. 5, pp. 208, 219.

Type: *Ichneumon larvarum* Linnaeus. Desig. by Ashmead, 1904.

Cratotrechus Dalla Torre, 1898. Cat. Hym., v. 5, p. 55. Emend.

Revision: Crawford, 1912. U. S. Natl. Mus. Proc. 43: 186-188 (*Comedo*).

anomocerus (Crawford), n. comb. Conn., N. J., W. Va. Hosts: *Schizura unicornis* (A. and S.); *Anthophila pariana* (Clerek).

Comedo anomocerus Crawford, 1912. U. S. Natl. Mus. Proc. 43: 187. ♂ ♀.

Biology: Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 81, 154.

basalis Say. Ind., Mo.

Eulophus basalis Say, 1836. Boston Jour. Nat. Hist. 1: 273. ♀.

Comedo omari Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 9. ♀. N. syn.

brevicapitatus (Cook and Davis), n. comb. Que., Mass., Mich., La. Hosts: *Euplexia benesimitis* McD.; *Heterocampa bilineata* (Pack.); *H. manteo* (Dblly.); *Symmerista albifrons* (A. and S.).

Cratotechus brevicapitatus Cook and Davis, 1891. Mich. Agr. Expt. Sta. Bul. 73: 12. ♂ ♀.

Biology: Dimmock, 1898. Ent. Soc. Wash. Proc. 4: 150.—Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 154.

koebelei (Crawford), n. comb. Calif. Host: *Hemerocampa vetusta* (Bdvl.).

Comedo koebelei Crawford, 1912. U. S. Natl. Mus. Proc. 43: 187. ♀.

magnisulcatus Girault. N. J., W. Va. Host: *Coleophora malivorella* Riley.

Eulophus magnisulcatus Girault, 1916. Ent. News 27: 404. ♀.

nebulosus (Provancher), n. comb. Ont., Mass., Va. Hosts: *Amphipyra pyramidoides* Guen.; *Lithophane* sp.

Miotropis nebulosa Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 208. ♀.

Comedo hookeri Crawford, 1912. U. S. Natl. Mus. Proc. 43: 188. ♀. N. syn.

Biology: Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 49, 154.

neomexicanus (Girault), n. comb. N. Mex.

Comedo neomexicanus Girault, 1917. New Chalcid Flies, p. 4.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 201.

orgyiae (Fitch), n. comb. Ont., N. Y., N. J., Pa., N. C. Hosts: *Hemerocampa leucostigma* (A. and S.); *Stenomna algidella* (Wlkr.).

Trichogramma? orgyiae Fitch, 1856. Country Gentleman 7: 235.

Taxonomy: Fitch, 1856. N. Y. State Agr. Soc. Trans. 15: 448-449.—Howard, 1897. U. S. Dept. Agr., Div. Ent., Tech. Ser. 5: 28.—Girault, 1920. U. S. Natl. Mus. Proc. 58: 201.

pallipes (Provancher), n. comb. Ont., N. H., Mass., Md. Hosts: *Paonias excaecata* (A. and S.); *Amphipyra pyramidoides* Guen.

Caccophagus (!) *pallipes* Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 206. ♀.

Cratotechus smerinthi Ashmead, 1898. Ent. Soc. Wash. Proc. 4: 158. ♂ ♀. N. syn.

Coccophagus pallidipes Provancher. Dalla Torre, 1898. Cat. Hym., v. 5, p. 226. Emend.

Biology: Dimmock, 1898. Ent. Soc. Wash. Proc. 4: 150.—Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 52, 154.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 201.

- tricladus** Provancher. Ont., N. Y., Mich. Hosts: *Cameraria cincinnatiella* (Chamb.); *Tischeria malifoliella* Clem.
Eulophus tricladus Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 208. ♂ ♀.

Genus DAHLBOMINUS Hincks

- Microplectron** Dahlbom, 1857. Öfvers. Svenska Vetensk. Akad. Förh. 14: 292 (no species). Preocc.
 Type: *Entedon fuscipennis* Zetterstedt. Included by Thomson, 1878.
Dahlbominus Hincks, 1945. Entomologist 78: 90. N. name.
fuscipennis (Zetterstedt). Newfoundland to Conn., N. Y., Que., and Ont. Hosts: *Diprion fruletorum* (F.); *D. hercyniae* (Htg.); *D. similis* (Htg.).
Entedon fuscipennis Zetterstedt, 1838. Insecta Lapponica, p. 427 [recte 429]. ♀.
 Biology: Morris and Cameron, 1935. Bul. Ent. Res. 26: 407-418. ♂ ♀.—Ullyett, 1936. Bul. Ent. Res. 27: 195-217.—Ullyett, 1936. Roy. Soc. London, Proc. Ser. B 120: 253-291.—Dowden, 1939. Jour. Econ. Ent. 32: 623.—Miller, 1940. U. S. Bur. Ent. Plant Quar. ET-161: 1-5.—Balch, 1941 (1940). N. S. Dept. Lands and Forests Rpt., pp. 72-74.—Wilkes, 1942. Roy. Soc. London, Proc. Ser. B 130: 400-415.—Wilkes, 1947. Roy. Soc. London, Proc. Ser. B 134: 227-245.

Genus DIMMOCKIA Ashmead

- Dimmockia** Ashmead, 1904. Carnegie Mus. Mem. 1: 357.
 Type: *Eulophus incongruus* Ashmead. Monob.
Crateulophus Masi, 1917. Novitates Zool. 24: 206.
 Type: *Crateulophus niger* Masi. Monob.
incongrua (Ashmead). Ont., Mass., N. Y., Pa., N. C., Ill. Hosts: *Sphecodina abbotii* (Swains.); *Sparganothis peltitana* (Rob.); *Exorista larvarum* (L.); *Winthemia datanae* (Tsn.); ?*Alegina annulata* Ashm.; ?*Gelis tenellus* (Say); *Sphecophaga burra* Cress.; *Apanteles clisiocampae* Ashm.; *A. congregatus* (Say); *A. melanoscelus* (Ratz.); *Psychophagus omnivorus* (Wlkr.).
Eulophus incongruus Ashmead, 1898. Ent. Soc. Wash. Proc. 4: 158. ♂ ♀.
Dimmockia botticellini Girault, 1917. New Chalcid Flies, p. 2. N. syn.
 Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 12, 29-30.—Proper, 1934. Jour. Agr. Res. 48: 362.
 Morphology: Snodgrass, 1910. U. S. Natl. Mus. Proc. 39: 66.
marylandica Girault. Md.
Dimmockia marylandica Girault, 1920. U. S. Natl. Mus. Proc. 58: 202. ♀.
pallipes Muesebeck. Mass. Host: *Apanteles melanoscelus* (Ratz.).
Dimmockia pallipes Muesebeck, 1927. Jour. Agr. Res. 34: 333. ♂ ♀.
 Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 12, 30.

Genus DICLADOCERUS Westwood

- Dicladocerus** Westwood, 1832. London, Edinb., and Dublin Phil. Mag. and Jour. Sci. (3) 1: 128.
 Type: *Dicladocerus westwoodii* Westwood, Monob.
albitarsis (Ashmead), n. comb. D. C.
Eulophus albitarsis Ashmead, 1900. Ent. News 11: 623. ♀.
dicladus (Say), n. comb. Ind.
Eulophus dicladus Say, 1836. Boston Jour. Nat. Hist. 1: 273. ♀.
westwoodii Westwood. Ont. Host: *Coleophora laricella* (Hbn.).
Dicladocerus Westwoodii Westwood, 1832. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 1: 128.
 Biology: Thorpe, 1933. Bul. Ent. Res. 24: 277-280.—Graham, 1944. Ent. Soc. Ontario Ann. Rpt. 74: 50-51.
 Taxonomy: Ferrière, 1933. In Thorpe, Bul. Ent. Res. 24: 290.

Subfamily APHELININAE

Revisions: Mercet, 1912. Trab. Mus. Cien. Nat., Madrid 10: 1-306.—Mercet, 1929. Rev. Biol. Forest. y Linnologia (B) 1: 1-99.—De Santis, 1948. La Plata Mus. Rev. Zool. (n. s.) 5: 23-280.

Genus ERETMO CERUS Haldeman

Eretmocerus Haldeman, 1850. Amer. Jour. Sci. Arts (2) 9: 111.

Type: *Eretmocerus corni* Haldeman. Monob.

Revisions: Dozier, 1932. Ent. Soc. Wash. Proc. 34: 112-118.—Compere, 1936. Calif. Univ., Pubs., Ent. 6: 316-321.

californicus Howard. Calif. Host: *Aleyrodes* on *Quercus agrifolia*.

Eretmocerus californicus Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 16. ♂ ♀.

corni Haldeman. N. J., Pa. Hosts: *Tetraleurodes corni* (Hald.); *Trialeurodes packardi* (Morrill).

Eretmocerus corni Haldeman, 1850. Amer. Jour. Sci. Arts (2) 9: 110.

Taxonomy: Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 16.

haldemani Howard. Fla., Miss., Calif. Hosts: *Aleyrodes* spp. on *Ambrosia*, on *Erigonum*, on *Hardinbergia*, on *Quercus*, and on *Solidago*; *Aleuroplatus coronatus* (Quaint.); *Aleurothrixus floccosus* Mask.; *Trialeurodes vaporariorum* (Westw.).

Eretmocerus haldemani Howard, 1908. Ent. Soc. Wash. Proc. 10: 65. ♂ ♀.

Biology: Watson and Berger, 1932. Fla. Agr. Expt. Sta. Ext. Bul. 67: 56-57.—Watson and Berger, 1937. Fla. Agr. Expt. Sta. Ext. Bul. 88: 53-55.

illinoisensis Dozier. Ill.

Eretmocerus illinoisensis Dozier, 1932. Ent. Soc. Wash. Proc. 34: 115. ♂.

Genus EUDEROMPHALE Girault

Euderomphale Girault, 1916. Canad. Ent. 48: 410.

Type: (*Euderomphale fuscipennis* Girault)=[*Cyrolasia*] *flavimedia* (Howard). Monob.

Aleurodiphagus Nowicki, 1929. Neue Beitr. System. Insektenk. 4: 154.

Type: *Pteroptrix flavimedia* Howard. Present desig.

Revision: Dozier, 1932. Ent. Soc. Wash. Proc. 34: 120.

flavimedia (Howard). Md., N. Mex., Calif. Hosts: *Aleyrodes pruinosa* Bernis; *A. spiraeoides* Quaint.; *A.* spp. on *Aquilegia*, on *Fuchsia*, on *Iris*, on *Sambucus*, on *Sonchus*, on *willow*.

Gyrolasia flavimedia Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 369. ♂.

Euderomphale fuscipennis Girault, 1916. Canad. Ent. 48: 410. ♀.

quercicola Dozier. La. Host: *Tetraleurodes* sp. on *Quercus virginiana*.

Euderomphale quercicola Dozier, 1933. Ent. Soc. Wash. Proc. 35: 85. ♂ ♀.

Genus ARCHENOMUS Howard

Archenomus Howard, 1898. Ent. Soc. Wash. Proc. 4: 136.

Type: *Archenomus bicolor* Howard. Monob.

bicolor Howard. Ga., cosmopolitan. Host: *Aspidiotus* sp. on sweet gum.

?*Pteroptrix dimidiatus* Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 3: 344.

Archenomus bicolor Howard, 1898. Ent. Soc. Wash. Proc. 4: 137. ♂ ♀.

Genus CENTRODORA Foerster

Centrodora Foerster, 1878. Naturh. Ver. Rheinlande Verh. 35: 66.

Type: *Centrodora amoena* Foerster. Monob.

Paraphelinus Perkins, 1906. Hawaii. Sugar Planters' Assoc. Expt. Sta., Div. Ent. Bul. 1: 264.

Type: *Paraphelinus xiphidii* Perkins. Monob.

- speciosissima** (Girault). N. Y. to Va., Ky., and Ill. Hosts: *Conocephalus fuscus* (F.); *C. sp.*; *Phytophaga destructor* (Say); *Platygaster vernalis* (Myers); *Harmolita tritici* (Fitch).
- ?*Agonioneurus locustarum* Giraud, 1863. Zool.-Bot. Gesell. Wien. Verh. 13: 1278. ♂ ♀.
- ?*Centrodora amoena* Foerster, 1878. Naturh. Ver. Rheinlande Verh. 35: 67. ♂ ♀.
- Paraphelinus speciosissimus** Girault, 1911. N. Y. Ent. Soc. Jour. 19: 181. ♀.
- Biology: Hill and Smith, 1928. Jour. Agr. Res. 36: 153-155.
- Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 124-128, ♂ ♀.
- Morphology: Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 5, 11-13.

Genus MARIETTA Motschulsky

- Marietta** Motschulsky, 1863. Moskov. Obshch. Isp. Prirody 36 (2): 51.
Type: *Marietta leopardina* Motschulsky. Monob.
- Perissopterus** Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 20.
Type: *Aphelinus pulchellus* Howard. Orig. desig.
- Pseudaphelinus** Brèthes, 1918. Soc. Rur. Argentina An. 53: 157.
Type: *Pseudaphelinus caridei* Brèthes. Monob.
- Paraphytis** Compere, 1925. Amer. Ent. Soc. Trans. 51: 129.
Type: *Paraphytis vittata* Compere. Monob.
- Revision: Compere, 1936. Calif. Univ., Pubs., Ent. 6: 306-315.
- carnesi** (Howard). Del., Va., ?Calif. Hosts: *Aspidiotus perniciosus* Comst.; *Lepidosaphes beckii* (Newm.); *Comperiella bifasciata* How.
- Perissopterus carnesi** Howard, 1910. Ent. News 21: 162. ♀.
- javensis** (Howard). Asia, ?Calif. Hosts: *Coccophagus lycimnia* (Wlkr.); *Microterys flavus* (How.).
- Perissopterus javensis** Howard, 1907. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 12: 87, 88. ♂ ♀.
- Biology: Timberlake, 1913. Jour. Econ. Ent. 6: 300
- mexicana** (Howard). Pa., Va., Calif. Hosts: *Aspidiotus perniciosus* Comst.; *Coccus hesperidum* L.; *Lecaniodiaspis rufescens* (Ckll.); *Lecanium nigro-fasciatum* Perg.; *Lepidosaphes ulmi* (L.); *Aphycus lounsburyi* How.
- Perissopterus mexicanus** Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 21. ♂ ♀.
- Biology: Smith, 1933. Ent. Soc. Amer. Ann. 26: 525.—Essig, 1931. A Hist. of Ent., pp. 348-349, 354.—Flanders, 1940. Ent. Soc. Amer. Ann. 33: 252.—Cox, 1942. Jour. Econ. Ent. 35: 700-701.
- pulchella** (Howard). Que., R. I., N. Y., N. J., D. C., Ill., Mo., La., Nebr., Mont., Calif., B. C. Hosts: *Aspidiotus forbesi* Johns.; *A. juglans-regiae* Comst.; *A. perniciosus* Comst.; *Chionaspis americana* Johns.; *Lecaniodiaspis* sp. on *Tilia americana*; *L. sp.* on willow; *Phenacaspis pinifoliae* (Fitch); *Proso-pophora* on cottonwood; *Pseudaulacaspis pentagona* (Targ.).
- Aphelinus pulchellus** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 356. ♀.
- Biology: Felt, 1916. N. Y. State Mus. Bul. 180: 84.

Genus APHYTIS Howard

- Aphytis** Howard, 1900. Canad. Ent. 32: 168.
Type: *Aphytis chilensis* Howard. Monob.
- Prospaphelinus** DeGregorio, 1914. Agr. Siciliana Ann. 3 (4): 406.
Type: *Prospaphelinus silvestrii* DeGregorio. Monob.
- Revision: Mercet, 1932. Eos 8: 353-365.
- abnormis** (Howard). N. J., D. C. Hosts: *Lepidosaphes ulmi* (L.); *L. sp.* on *Salix caprea*.
- Aphelinus abnormis** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, pp. 353, 355. ♀.
- chilensis** Howard. Calif. Hosts: *Aspidiotus camelliae* Sign.; *A. hederæ* (Vallot); *A. sp.* on *Pinus radiata*; *Diaspis zamiae* Morg.; *Phenacaspis pinifoliae* (Fitch).
- Aphytis Chilensis** Howard, 1900. Canad. Ent. 32: 168. ♀.

- Aphelinus longiclavae* Mercet, 1911. Assoc. Españ. Prog. Cien., Cong. Valencia, p. 14. ♂ ♀.
- Aphelinus capitatus* Rust, 1915. Ent. News 26: 73. ♀.
Taxonomy: Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 11.
- chrysomphali** (Mercet). N. Y., Fla., La., Calif. Hosts: *Aonidiella aurantii* (Mask.), *A. citrina* (Coq.); *Chrysomphalus dictyospermi* (Morg.); *C. umboniferus* Newst.
- Aphelinus chrysomphali* Mercet, 1912. Soc. Españ. Hist. Nat. Bol. 12: 135. ♀.
- Aphelinus quaylei* Rust, 1915. Ent. News 26: 75. ♀.
Biology: Quayle, 1932. Calif. Agr. Expt. Sta. Bul. 542: 31-33.—Woglum, LaFollette, Landon, and Lewis, 1947. Jour. Econ. Ent. 40: 818-819.
Taxonomy: De Santis, 1948. La Plata Mus. Rev. Zool. (n. s.) 5: 122-126, ♀.
- mytilaspidis** (LeBaron). Cosmopolitan. Hosts: *Aspidiotus britannicus* Newst.; *A. hederæ* (Vallot); *A. juglans-regiæ* Comst.; *A. ostreaeformis* Curt.; *A. perniciosus* Comst.; *Aulacaspis rosæ* (Bouché); *Chionaspis furfura* (Fitch); *C. salicis-nigræ* (Walsh); *Diaspis carueli* Targ.; *Lepidosaphes ulmi* L.; *L. sp.* on *Ptelia trifoliata*; *Parlatoria blanchardii* (Targ.); *Phenacaspis pinifoliae* (Fitch); *P. pinifoliae* var. *heterophyllæ* Cooley; *Pinnaspis aspidistrae* (Sign.).
- Aphelinus mytilaspidis* LeBaron, 1870. Amer. Ent. and Bot. 2: 360. ♀.
Biology: Imms, 1916. Quart. Jour. Micros. Sci. 61: 218-272, ♂ ♀.—Griswold, 1925. N. Y. (Cornell) Agr. Expt. Sta. Mem. 93: 44-47, 56-67.—Essig, 1931. A Hist. of Ent., p. 339.—Lord, 1949 (1947). Canad. Ent. 79: 196-208.
- proclia** (Walker). Cosmopolitan. Hosts: *Aonidiella aurantii* (Mask.); *Aspidiotus camelliae* Sign.; *A. destructor* Comst.; *A. hederæ* (Vallot); *A. juglans-regiæ* Comst.; *A. ostreaeformis* Curt.; *A. perniciosus* Comst.; *A. uvæ* Comst.; *Aulacaspis rosæ* (Bouché); *Chrysomphalus aonidium* (L.); *C. dictyospermi* (Morg.); *Diaspis bromeliæ* (Kern.); *D. echinocacti* (Bouché); *Lepidosaphes beckii* (Newm.); *L. gloveri* (Pack.); *L. ulmi* (L.); *Pinnaspis strachani* (Cooley); *Pseudoaonidia duplex* (Ckll.); *Pseudaulacaspis pentagona* (Targ.); *Unaspis euvonymi* (Comst.).
- Aphelinus Proclia* Walker, 1839. Monog. Chalciditum, v. 1, p. 9. ♀.
- Aphelinus diaspidis* Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 355. ♂ ♀.
- Aphelinus fuscipennis* Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 356. ♀.
- Biology: Smith, 1897. N. J. Agr. Expt. Sta. Ann. Rpt. 17: 483-519.—Quayle, 1911. Calif. Agr. Expt. Sta. Bul. 214: 463-466.—Essig, 1931. A Hist. of Ent., pp. 339-341.
- Taxonomy: De Santis, 1948. La Plata Mus. Rev. Zool. (n. s.) 5: 133-138, ♂ ♀.

Genus APHELINUS Dalman

- Aphelinus* Dalman, 1820. Svenska Vetensk. Akad. Handl. 21: 181.
Type: *Entedon abdominalis* Dalman. Monob.
- Agonioneurus* Westwood, 1833. Mag. Nat. Hist. 6: 122.
Type: *Agonioneurus basalis* Westwood. Monob.
- Myina* Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 189.
Type: *Myina abdominalis* Nees. Desig. by Gahan and Fagan, 1923.
- Eriophilus* Haldeman, 1851. Pa. Farm Jour. 1: 130.
Type: *Eriophilus mali* Haldeman. Monob.
- Misina* Rondani, 1870. Arch. Zool., Anat. e Fisiol. (2) 2: 11. Error for *Myina*.
- aureus** Gahan. Calif. Host: *Chaitophorus saliciola* Essig.
Aphelinus aureus Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 9. ♂ ♀.
- automatus** Girault. Ill. Host: *Hysteroneura setariae* (Thos.).
Aphelinus automatus Girault, 1911. Entomologist 44: 178. ♀.
- howardii** Dalla Torre. Calif.
Aphelinus flaviceps Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Bul. 1: 25. ♂. Preocc.
Aphelinus howardii Dalla Torre, 1898. Cat. Hym., v. 5, p. 221. N. name.

- jucundus** Gahan. Ont., Que., N. Y., Calif. Hosts: *Macrosiphum cornelli* Patch; *M. pseudodirhodum* Patch; *M. solanifolii* (Ashm.); *Myzus persicae* (Sulz.).
Aphelinus jucundus Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 8. ♀.
 Biology: Griswold, 1927. Jour. Econ. Ent. 20: 93.—Griswold, 1929. Ent. Soc. Amer. Ann. 22: 440.
- lapisligni** Howard. Idaho, Oreg. Host: *Anuraphis bakeri* (Cowen).
Aphelinus lapisligni Howard, 1917. Biol. Soc. Wash. Proc. 30: 77. ♀.
 Biology: Smith, 1923. Idaho Agr. Expt. Sta. Res. Bul. 3: 55–57.
- mali** (Haldeman). Throughout U. S.; Ont., B. C., cosmopolitan. Hosts: *Aphis monardae* Oestl.; *A. pomi* Deg.; *Brevicoryne brassicae* (L.); *Colopha eragrostidis* Midd.; *Eriosoma crataegi* Oestl.; *E. lanigerum* (Hausm.); *Macrosiphum floridae* Ashm.; *M. rosae* (L.); *Myzus lythri* Schrank; *Prociphilus fraxinifolii* (Riley); *Tetraneura graminis* Monell; *Toxoptera graminum* (Rond.); *Lepidosaphes ulmi* (L.); *Coleophora malivorella* Riley.
Eriophilus mali Haldeman, 1851. Pa. Farm Jour. 1: 130. ♂ ♀.
Blastothrix rosae Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 130. ♀.
Aphelinus varicornis Girault, 1909. Psyche 16: 29. ♀.
 Biology: Lundie, 1924. N. Y. (Cornell) Agr. Expt. Sta. Mem. 79: 1–27.—Gibson, 1939. VII. Internatl. Kong. Ent. Verhandl. 3: 1454.
 Taxonomy: De Santis, 1948. La Plata Mus. Rev. Zool. (n. s.) 5: 103.
- marlatti** (Ashmead). Ont., Kans. Host: *Aphis* sp. on *Cineraria*.
Baeocharis Marlatti Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. V. ♂ ♀.
Aphelinus subapterus Girault, 1916. Ent. News 27: 405. ♂.
 Biology: McLeod, 1938. Ent. Soc. Ontario Ann. Rpt. 68: 45–48.
 Taxonomy: Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 12.
- nigritus** (Howard). Minn., S. C., N. Mex., Kans. Hosts: *Hysteroneura setariae* (Thos.); *Toxoptera graminum* (Rond.); *Pseudococcus* on *Artemisia*.
Aphelinus nigritus Howard, 1908. Ent. News 19: 366. ♀.
 Biology: Webster and Phillips, 1912. U. S. Dept. Agr. Bur. Ent. Bul. 110: 123.
- perpallidus** Gahan. Iowa, Calif. Hosts: *Monellia costalis* (Fitch); *M.* sp. on hickory; *Chromaphis juglandicola* (Kltb.); *Myzocallis fumipennellus* (Fitch).
Aphelinus perpallidus Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 10. ♂ ♀.
- sanborniae** Gahan. Pa., Ohio. Hosts: *Kakimia houghtonensis* (Troop); *Sanbornia juniperi* (Perg.).
Aphelinus sanborniae Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 7. ♂ ♀.
- semiflavus** Howard. N. Y., Ohio, Ind., Okla., N. Mex., Colo., Kans., Minn. Hosts: *Anuraphis viburnicola* (Gill.); *Capitophorus rosarum* (Kltb.); *Chaitophorus viminalis* Monell; *Macrosiphum cornelli* Patch; *M. granarium* (Kby.); *M. pisi* (Kltb.); *M. sanborni* Gill.; *Myzus persicae* (Sulz.); *M.* sp. on *Aquilegia*; *Rhopalosiphum poae* (Gill.); *R. pseudobrassicae* (Davis); *Toxoptera graminum* (Rond.).
Aphelinus semiflavus Howard, 1908. Ent. News 19: 366. ♂ ♀.
Aphelinus brevipennis Girault, 1917. Descr. Stellarum Nov., p. 18. ♀.
 Biology: Hartley, 1922. Ohio Jour. Sci. 22: 209–236, ♀.
- siphonophorae** (Ashmead), n. comb. N. J., No. Amer. Host: *Macrosiphum* sp.
Anozus siphonophorae Ashmead, 1888. Canad. Ent. 20: 104. ♀.

Genus MESIDIA Foerster

Mesidia Foerster, 1856. Hym. Stud., v. 2, p. 30 (no species).

Type: *Mesidia pumila* Mayr. Included by Mayr, 1904.

gillettei Howard. Ill., Colo. Host: *Brachycolus tritici* Gill.

Mesidia gillettei Howard, 1914. Ent. Soc. Wash. Proc. 16: 80. ♀.

Taxonomy: Dozier, 1933. Ent. Soc. Wash. Proc. 35: 90. ♀.

Genus ABLERUS Howard

Ablerus Howard, 1894. U. S. Dept. Agr. Insect Life 7: 7.

Type: *Centrodora clisiocampae* Ashmead. Monob.

americanus Girault. D. C. Host: *Aspidiotus wae* Comst.

Ablerus americanus Girault, 1916. Soc. Ent. 31: 44. ♀.

clisiocampae (Ashmead). Ont., N. Y. and Mass. to Fla.; La., and Minn. Hosts: *Aspidiotus forbesi* Johns.; *A. perniciosus* Comst.; *A. wae* Comst.; *Chionaspis furfura* (Fitch); *Chrysomphalus obscurus* (Comst.); *Pseudaulacaspis pentagona* (Targ.); *Malacosoma americanum* (F.); *M. disstria* Hbn.

Centrodora clisiocampae Ashmead, 1894. Ent. Soc. Wash. Proc. 3: 10. ♀. Biology: Baker, 1933. U. S. Dept. Agr. Cir. 295: 8-9.—Hodson, 1939. Ent. Soc. Amer. Ann. 32: 131.

perspeciosus Girault. D. C. Hosts: *Chrysomphalus aonidum* (L.); *Pseudaulacaspis pentagona* (Targ.).

Ablerus perspeciosus Girault, 1916. Ent. Soc. Amer. Ann. 9: 292. ♀.

Azotus silvestrii Compere, 1926. Calif. Univ., Pubs., Ent. 4: 9. ♀.

Taxonomy: Gahan, 1942. U. S. Natl. Mus. Proc. 92: 47.

Genus AZOTUS Howard

Azotus Howard, 1898. Ent. Soc. Wash. Proc. 4: 138.

Type: *Azotus marchali* Howard. Monob.

Dimacrocerus Brèthes, 1914. Nunquam Otiosus, Buenos Aires, p. 4.

Type: *Dimacrocerus platensis* Brèthes. Monob.

americanus Dozier. Del. Hosts: *Aspidiotus perniciosus* Comst.; *?Lecanium corni* Bouché; *?Lepidosaphes ulmi* (L.).

Azotus americanus Dozier, 1928. Ent. Soc. Wash. Proc. 30: 36. ♂.

marchali Howard. D. C. Host: *Aspidiotus wae* Comst.

Azotus marchali Howard, 1898. Ent. Soc. Wash. Proc. 4: 138. ♂.

Genus TUMIDISCAPUS Girault

Tumidiscapus Girault, 1911. N. Y. Ent. Soc. Jour. 19: 182.

Type: *Tumidiscapus flavus* Girault. Monob.

Revision: Milliron, 1947. Ent. Soc. Wash. Proc. 49: 195-196.

cercopiphagus Milliron. Wis. Host: *Aphrophora saratogensis* (Fitch).

Tumidiscapus cercopiphagus Milliron, 1947. Ent. Soc. Wash. Proc. 49: 193.

♂ ♀.

flavus Girault. Pa., S. Dak., Iowa, Ill., Tenn. Hosts: *Orchelimum vulgare* Harris; *Phytophaga destructor* (Say); *Lasioptera* sp. on *Muhlenbergia*.

Tumidiscapus flavus Girault, 1911. N. Y. Ent. Soc. Jour. 19: 182. ♂.

Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 121-124, ♂ ♀.

orchelimumis Gahan. Pa., Va., Ill. Host: *Orchelimum vulgare* Harris.

Tumidiscapus orchelimumis Gahan, 1932. Ent. Soc. Amer. Ann. 25: 741.

♂ ♀.

orthopterae Gahan. Fla. Host: Tettigoniid eggs on *Andropogon glomeratus*.

Tumidiscapus orthopterae Gahan, 1919. U. S. Natl. Mus. Proc. 55: 406.

♂ ♀.

Genus PHYSCUS Howard

Physcus Howard, 1895. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 1: 43.

Type: *Coccophagus varicornis* Howard. Monob.

Revision: De Santis, 1940 (1939). La Plata Univ. Nac., Facultad de Agron. Rev. 24: 29-44.

howardi Compere. Calif. Host: *Aspidiotus californicus* Col.

Physcus howardi Compere, 1928. Calif. Univ., Pubs., Ent. 4: 223. ♂ ♀.

stanfordi Howard. Calif. Host: *Stramenaspis kelloggi* Col.

Physcus stanfordi Howard, 1914. Ent. Soc. Wash. Proc. 16: 84. ♀.

varicornis (Howard). Que. to Fla., Calif., Nebr. Hosts: *Aspidiotus ancyclus* (Putn.); *A. juglans-regiae* Comst.; *A. perniciosus* Comst.; *A. wae* Comst.; *Chionaspis americana* Johns.; *C. furfura* (Fitch); *C. quercus* Comst.; *Chrysomphalus obscurus* (Comst.); *Lecanium nigrofasciatum* Perg.; *Phenacaspis pinifoliae* (Fitch).

Coccophagus varicornis Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880. p. 360. ♀.

Physcus variicornis Howard. Dalla Torre, 1898. Cat. Hym., v. 5, p. 226. Emend.

Biology: Baker, 1933. U. S. Dept. Agr. Cir. 295: 8-9.

Taxonomy: Girault, 1911. N. Y. Ent. Soc. Jour. 19: 183, ♂.

Genus PROSPALTELLA Howard

Prospalta Howard, 1894. U. S. Dept. Agr. Insect Life 7: 6. Preocc.

Type: (*Prospalta murtfeldtii* Howard)=*Prospaltella murtfeldtae* (Howard). Monob.

Prospaltella Ashmead, 1904. Ent. Soc. Wash. Proc. 6: 126. N. name.

Mimatomus Cockerell, 1911. Ent. News 22: 464.

Type: *Mimatomus peltatus* Cockerell. Monob.

Revision: Howard, 1908. Ent. Soc. Amer. Ann. 1: 281-284.

aurantii (Howard). Cosmopolitan. Hosts: *Aonidiella aurantii* (Mask.); *A. citrina* (Coq.); *Aspidiotus ancylus* (Putn.); *A. ancylus* var. on linden; *A. camelliae* Sign.; *A. californicus* Col.; *A. forbesi* Johns.; *A. hederæ* (Vallot); *A. howardi* Ckll.; *A. juglans-regiæ* Comst.; *A. perniciosus* Comst.; *Chionaspis* sp.; *Chrysomphalus dictyospermi* (Morg.); *Kermes nigropunctatus* Ckll.; *Lecanium corni* Bouché; *L. nigrofasciatum* Perg.; *L. persicæ* (F.); *Lepidosaphes beckii* (Newm.); *L. concolor* (Ckll.); *L. gloverii* (Pack.); *L. ulmi* (L.); *Pseudaonidia duplex* (Ckll.); *Aleuroplatus coronatus* Quaint.

Coccophagus aurantii Howard, 1894. U. S. Dept. Agr. Insect Life 6: 231. ♀.

Biology: Taylor, 1907. Colo. Agr. Expt. Sta. Bul. 120: 10.—Essig, 1913. Calif. State Com. Hort. Monthly Bul. 2: 276.—Griffiths and Stearns, 1947. Fla. Ent. 30: 4-7.

Taxonomy: Rust, 1913. Ent. News 24: 161.

bella Gahan. Mich. Host: *Phenacaspis pinifoliae* (Fitch).

Prospaltella bella Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 21. ♂ ♀.

berlesei (Howard). D. C., La. Hosts: *Chrysomphalus obscurus* (Comst.); *Pseudaulacaspis pentagona* (Targ.).

Prospalta berlesei Howard, 1906. Ent. News 17: 292. ♀.

Biology: Baker, 1933. U. S. Dept. Agr. Cir. 295: 8-9.

Taxonomy: Silvestri, 1908. Lab. Zool. Gen. e Agr. Portici Bol. 3: 22-28.—Masi, 1908. Lab. Zool. Gen. e Agr. Portici Bol. 3: 143-146.

Morphology: Snodgrass, 1910. U. S. Natl. Mus. Proc. 39: 66.

citrella Howard. Fla., Ariz., Calif. Hosts: *Aleuroplatus coronatus* Quaint.; *Kermes* sp. on *Quercus undulata*.

Prospaltella citrella Howard, 1908. Ent. Soc. Amer. Ann. 1: 282. ♀.

diaspidicola Silvestri. Va. Host: *Aspidiotus perniciosus* Comst.

Prospalta diaspidicola Silvestri, 1909. R. Accad. Naz. dei Lincei Atti. 18 (1): 564. ♀.

fasciata Malenotti. La. Host: *Pseudaonidia duplex* (Ckll.).

Prospaltella fasciata Malenotti, 1916. Redia 12: 195. ♀.

fasciiventris Girault. Mich., Ill. Hosts: *Aspidiotus aesculi* (Johns.); *A. forbesi* Johns.; *A. juglans-regiæ* Comst.; ?*A. perniciosus* Comst.; ?*Chionaspis furfura* (Fitch).

Prospaltella fasciiventris Girault, 1908. Psyche 15: 117. ♀.

forbesi Dozier. Del. Host: *Aspidiotus forbesi* Johns.

Prospaltella forbesi Dozier, 1928. Ent. Soc. Wash. Proc. 30: 37. ♀.

fuscipennis Girault. Ill., La. Host: *Chrysomphalus obscurus* (Comst.).

Prospaltella fuscipennis Girault, 1908. Psyche 15: 120. ♀.

Biology: Baker, 1933. U. S. Dept. Agr. Cir. 295: 8-9.

murtfeldtae (Howard), emend. D. C., Ill., Mo., Mont. Hosts: *Aspidiotus forbesi* Johns.; *A. wuae* Comst.; *Pseudaulacaspis pentagona* (Targ.).

Prospalta murtfeldtii Howard, 1894. U. S. Dept. Agr. Insect Life 7: 6. ♀.

peltatus (Cockerell). Colo. Host: *Aleyrodes pruinosæ euphorbium* Ckll.

Mimatomus peltatus Cockerell, 1911. Ent. News 22: 464. ♀.

perniciosi Tower. Ont., N. Y. to Va.; Ind., Ill., Ark., Kans. Hosts: *Aspidiotus perniciosus* Comst.; *Lepidosaphes ulmi* (L.).

Prospaltella perniciosi Tower, 1913. Ent. Soc. Amer. Ann. 6: 125. ♂ ♀.

Biology: Tower, 1914. Jour. Econ. Ent. 7: 422.—Tower, 1914. Ent. Soc. Amer. Ann. 7: 249.—Rice, 1937. Abs. Doctors' Diss. Ohio State Univ. 24: 267-278.—Flanders, 1939. Jour. Econ. Ent. 32: 890.—Flanders, 1944. Science 100: 168.

perspicuipennis Girault. Ill.

Prospaltella perspicuipennis Girault, 1910. N. Y. Ent. Soc. Jour. 18: 234. ♀.

quercicola Howard. Calif. Hosts: *Aleuroplatus coronatus* (Quaint.); *A. gelatinosus* (Ckll.).

Prospaltella quercicola Howard, 1908. Ent. Soc. Amer. Ann. 1: 282. ♀.

Genus ENCARSIA Foerster

Encarsia Foerster, 1878. Naturh. Ver. Rheinlande Verh. 35: 65.

Type: *Encarsia tricolor* Foerster. Monob.

Doloresia Mercet, 1912. Madrid Mus. Cien. Nat. Trab. 10: 294.

Type: *Prospaltella filicornis* Mercet. Monob.

Revision: Howard, 1907. U. S. Dept. Agr. Bur. Ent. Tech. Bul. 12 (4): 76-79.

angelica Howard. Calif. Hosts: *Aleuroplatus coronatus* (Quaint.); *Aleyrodes* sp. on willow, *A.* sp.

Encarsia angelica Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 30. ♂.

coquilletti Howard. Calif. Host: *Aleyrodes* sp. on *Sonchus*.

Encarsia coquilletti Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 29. ♂ ♀.

formosa Gahan. Canada, N. Y., D. C., Ohio, Mich., Idaho, cosmopolitan. Host: *Trialeurodes vaporariorum* (Westw.).

Encarsia formosa Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 14. ♂ ♀.

Biology: Speyer, 1927. Bul. Ent. Res. 17: 301-308.—McLeod, 1938. Sci. Agr. 18: 529-535.—Burnett, 1948. Ecology 29: 181-189.—Burnett, 1949. Ecology 30: 113-133.

luteola Howard. Mass., Conn., D. C. Hosts: *Trialeurodes fernaldi* (Morrill); *T. packardii* (Morrill).

Encarsia luteola Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 29. ♀.

Biology: Morrill and Back, 1912. U. S. Dept. Agr. Bur. Ent. Bul. 102: 8.

meritoria Gahan. Fla. Host: *Trialeurodes floridensis* (Quaint.).

Encarsia meritoria Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 19. ♂ ♀.

pergandiella Howard. N. Y., D. C., Mich., Ky., Ill., Calif., Wash. Hosts: *Aleuroplatus coronatus* (Quaint.); *Trialeurodes vaporariorum* (Westw.).

Encarsia pergandiella Howard, 1907. U. S. Dept. Agr. Bur. Ent. Tech. Bul. 12: 78. ♀.

Encarsia versicolor Girault, 1908. Psyche 15: 53. ♂ ♀. N. syn.

Biology: Garman, 1922. Ky. Agr. Expt. Sta. Bul. 241: 92-93.

quaintancei Howard. D. C. Host: *Aleyrodes* on *Polygonum*.

Encarsia quaintancei Howard, 1907. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 12: 79. ♀.

variegata Howard. Fla. Host: *Paraleyrodes perseae* (Quaint.).

Encarsia variegata Howard, 1908. Ent. Soc. Wash. Proc. 10: 64. ♀.

Biology: Morrill and Back, 1912. U. S. Dept. Agr. Bur. Ent. Bul. 102: 8.

Genus ASPIDIOTIPHAGUS Howard

Aspidiotiphagus Howard, 1894. U. S. Dept. Agr. Insect Life 6: 229-230.

Type: *Coccophagus citrinus* Craw. Monob.

Prospaltoides Brèthes, 1914. Nunquam Otiosus, Buenos Aires, p. 1a.

Type: (*Prospaltoides howardi* Brèthes)=[*Coccophagus*] *citrinus* (Craw). Monob.

Revision: Compere, 1936. Calif. Univ., Pubs., Ent. 6: 294-302.

citrinus agilior Berlese. Va.; cosmopolitan. Host: *Unaspis euonymi* (Comst.).

Aspidiotiphagus citrinus var. *agilior* Berlese, 1916. Redia 12: 5, 7, 10. ♀.

Taxonomy: Paoli, 1926. Soc. Ent. Ital. Bol. 58: 97-105.

citrinus citrinus (Craw). Widespread in U. S.; cosmopolitan. Hosts: *Aonidiella aurantii* (Mask.); *A. citrina* (Coq.); *Aspidiotus ancylus* (Putn.); *A. britannicus* Newst.; *A. californicus* Col.; *A. destructor* Sign.; *A. hederae* (Vallot); *A. perniciosus* Comst.; *Aulacaspis rosae* (Bouché); *Chrysomphalus aonidium* (L.); *C. dictyospermi* (Morg.); *Coccus hesperidum* L.; *Diaspis bromeliae* (Kern.); *D. echinocacti* (Bouché); *D. visci* (Schränk); *Kuwanaspis hikosani* (Kuw.); *Lepidosaphes beekii* (Newm.); *L. ulmi* (L.); *Melanaspis tenebri-cosus* (Comst.); *Parlatoria oleae* (Colv.); *P. pergandii* Comst.; *Phenacaspis pinifoliae* (Fitch); *Pinnaspis aspidistrae* (Sign.); *P. strachani* (Cooley); *Pseudaonidia duplex* (Ckll.); *Pseudaulacaspis pentagona* (Targ.).

Coccophagus citrinus Craw, 1891. Calif. State Bd. Insect. Bul. 57: 4.

Biology: Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 7, 31. ♀.—Isaac, 1905. Calif. State Commr. Hort. Bien. Rpt. 1: 95.—Essig, 1931. A Hist. of Ent., pp. 341-342, 386.

Taxonomy: Paoli, 1926. Soc. Ent. Ital. Bol. 58: 97-105.—Dozier, 1926. Puerto Rico Dept. Agr. Jour. 10: 275-276.—De Santis, 1948. La Plata Mus. Rev. Zool. (n. s.) 5: 225-231.

Morphology: Parker and Thompson, 1925. Ent. Soc. Amer. Ann. 18: 387.

lounsburyi (Berlese and Paoli). Fla. Hosts: *Aonidiella aurantii* (Mask.); *Chrysomphalus aonidium* (L.); *C. dictyospermi* (Morg.).

Prospaltella lounsburyi Berlese and Paoli, 1916. Redia 11: 305. ♀.

Biology: Mathis, 1947. Fla. Ent. 29: 33.

Genus ANERISTUS Howard

Aneristus Howard, 1895. Canad. Ent. 27: 351.

Type: *Aneristus ceroplastae* Howard. Monob.

Revisions: Dozier, 1932. Puerto Rico Dept. Agr. Jour. 16: 94-102.—Compere, 1936. Calif. Univ., Pubs., Ent. 6: 285-288.—Ghesquière, 1949. Soc. Ent. Belg. Bul. et Ann. 85: 161-167.

The species in this genus are internal parasites of lecaniine Coccidae.

ceroplastae Howard. La., Calif. Hosts: *Coccus hesperidum* L.; *C. pseudomagnolarum* (Kuw.); *Saissetia hemisphaerica* (Targ.).

Aneristus ceroplastae Howard, 1895. Canad. Ent. 27: 351. ♀.

Coccophagus orientalis Howard, 1896. In Howard and Ashmead, U. S. Natl. Mus. Proc. 18: 633. ♀.

Biology: Smith and Compere, 1928. Calif. Univ., Pubs., Ent. 4: 242, 246-247.

Taxonomy: Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 13.

youngi Girault. La., Tex. Hosts: ?*Ceroplastes* sp. on *Chrysanthemum*; *Coccus hesperidum* L.; *Saissetia hemisphaerica* (Targ.).

Aneristus (!) **youngi** Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V. p. 11. ♀.

Genus COCCOPHAGUS Westwood

Coccophagus Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 3: 344.

Type: *Entedon scutellaris* Dalman. Desig. by Westwood, 1840.

Paracharitopus Brèthes, 1913. Buenos Aires Mus. Nac. Hist. Nat. An. 24: 105.

Type: *Paracharitopus lecanii* Brèthes. Monob.

Onophilus Brèthes, 1918. Soc. Rural Argentina An. 53: 155.

Type: *Onophilus caridei* Brèthes. Monob.

Parencarsia Mercet, 1930. Eos 6: 198.

Type: *Coccophagus krygeri* Mercet. Monob.

Revisions: Mercet, 1929. Rev. Biol. Forest. y Limnologia (B) 1: 87-91.—Compere, 1931. U. S. Natl. Mus. Proc. 78 (7): 1-132.

albicoxa Howard. Calif. Host: *Physokermes insignicola* (Craw).

Coccophagus albicoxa Howard, 1911. Jour. Econ. Ent. 4: 276. ♀.

capensis Compere. Calif. Hosts: *Saissetia nigra* (Niethn.); *S. oleae* (Bern.).

Coccophagus modestus Amer. Auct., nec Silvestri.

Coccophagus modestus var. **capensis** Compere, 1931. U. S. Natl. Mus. Proc. 78 (7): 83.

- Biology: Smith and Compere, 1926. Calif. Univ., Pubs., Ent. 4: 51-61.—Essig, 1931. A Hist. of Ent., pp. 346-386.—Flanders, 1936. Jour. Econ. Ent. 29: 468.—Cendana, 1937. Univ. Calif., Pubs., Ent. 6: 390-396.
- cinguliventris** Girault. Md., Ill., Wis. Hosts: *Lecanium corni* Bouché; *L. nigrofasciatum* Perg.
- Coccophagus cinguliventris** Girault, 1909. Psyche 16: 79. ♀.
- Taxonomy: Girault, 1916. Ent. Soc. Amer. Ann. 9: 297. ♂.
- flavifrons** Howard. Fla. Hosts: ?*Lecanium* sp. on *Pinus palustris*; *Toumeyella liriodendri* (Gmel.).
- Coccophagus flavifrons** Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 25. ♂.
- Coccophagus koebelei** Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 25. ♂.
- fletcheri** Howard. Ont., N. Y. Host: *Lecanium fletcheri* Ckll.
- Coccophagus fletcheri** Howard, 1897. U. S. Dept. Agr. Div. Ent. Bul. 7 (n. s.): 63. ♀.
- fraternus** Howard. N. Y. to Va.; Mich., Fla., Colo. Hosts: *Lecanium nigrofasciatum* Perg.; *L. persicae* (F.); *Pulvinaria acericola* (W. and R.).
- Coccophagus fraternus** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 359. ♀.
- Coccophagus fuscipes** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 359. ♂ ♀.
- Taxonomy: Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 34.
- gossypariae** Gahan. N. B., N. Y., Mass. Host: *Gossyparia spuria* (Mod.).
- Coccophagus gossypariae** Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 24. ♀.
- Biology: Griswold, 1927. Ent. Soc. Amer. Ann. 20: 533.
- gurneyi** Compere. Calif. Hosts: *Phenacoccus gossypii* T. and C.; *P. solani* Ferris; *Pseudococcus adonidum* (L.); *P. citri* (Risso); *P. comstocki* (Kuw.); *P. gahani* Green; *P. maritimus* (Ehrh.); *Tetracnemus peregrinus* Comp.
- Coccophagus gurneyi** Compere, 1929. Calif. Univ., Pubs., Ent. 5: 1. ♂ ♀.
- Biology: Compere and Smith, 1932. Hilgardia 6: 585-617.—Cendana, 1937. Calif. Univ., Pubs., Ent. 6: 340-359.—Clancy, 1944. Jour. Econ. Ent. 37: 450.—DeBach, 1949. Ecology 30: 16-24.
- immaculatus** Howard. N. Y., Pa., D. C., Fla., Ala., Colo., Calif. Hosts: *Aspidiotus perniciosus* Comst.; *Coccus hesperidum* L.; *Eriococcus azaleae* Comst.; *Lecanium* sp. on mulberry; *Pulvinaria bigeloviae* (Ckll.); *Saissetia hemisphaerica* (Targ.); *Toumeyella parvicornis* (Ckll.); *T. turgida* Ckll.
- Coccophagus immaculatus** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 358. ♂ ♀.
- Biology: Felt, 1916. N. Y. State Mus. Bul. 180: 65.
- longifasciatus** Howard. Ill. Host: *Lecanium nigrofasciatum* Perg.
- ?*Aphelinus Inaron* Walker, 1839. Monog. Chalciditum, v. 1, p. 10. ♂.
- Coccophagus longifasciatus** Howard, 1907. U. S. Dept. Agr. Bur. Ent. Tech. Bul. 12: 80. ♂ ♀.
- Taxonomy: Mercet, 1931. Eos 7: 400.
- lycimnia** (Walker). Cosmopolitan. Hosts: *Aspidiotus perniciosus* Comst.; *Ceroplastes ferdinandis* Comst.; *Coccus hesperidum* L.; *C. pseudomagnoliarum* (Kuw.); *Icerya purchasi* Mask.; *Kermes* sp. on ash; *Lecanium corni* Bouché; *L. fletcheri* Ckll.; *L. nigrofasciatum* Perg.; *L. persicae* (F.); *L. pruinatum* Coq.; *L. quercifex* Fitch; *Lepidosaphes beckii* (Newm.); *Parlatoria pergandii* Comst.; *Phenacoccus acericola* (King); *Physokermes insignicola* (Craw); *Pseudococcus citri* (Risso); *Pulvinaria acericola* (W. and R.); *P. amygdali* Ckll.; ? *P. bigeloviae* Ckll.; *P. vitis* (L.); *P. floccifera* (Westw.); *Saissetia hemisphaerica* (Targ.); *S. nigra* (Nieth.); *S. oleae* (Bern.); *Toumeyella liriodendri* (Gmel.).
- Aphelinus Lycimnia* Walker, 1839. Monog. Chalciditum, v. 1, p. 11. ♀.
- Platygaster Lecanii** Fitch, 1859. N. Y. State Agr. Soc. Trans. 18: 805.
- Coccophagus lecanii** E. A. Smith, 1878. Amer. Nat. 12: 661.
- Coccophagus ater** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 359. ♂ ♀.
- Coccophagus cognatus** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 359. ♂ ♀.
- Coccophagus flavoscutellum** Ashmead, 1881. Fla. Agr. 4: 65. ♂ ♀.

- Coccophagus vividus* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 24.
♂ ♀.
- Coccophagus californicus* Howard, 1889. U. S. Dept. Agr. Insect Life, v. 1,
p. 269. ♀.
- Coccophagus couperi* Girault, 1917. Descr. Stellarum Nov., p. 1.
- Coccophagus coccidis* Girault, 1917. Descr. Stellarum Nov., p. 2. ♀.
- Biology: Flanders, 1936. Science 84: 85.—Flanders, 1936. Jour. Econ. Ent. 29: 468.
—Flanders, 1936. Ent. Soc. Amer. Ann. 29: 253.—Flanders, 1942.
Ecology 23: 120.—Flanders, 1943. Jour. Econ. Ent. 36: 802.
- ochraceus* Howard. La., Calif. Hosts: *Lecanium corni* Bouché; *Saissetia hemisphaerica* (Targ.); *S. nigra* (Nieth.); *S. oleae* (Bern.).
- Coccophagus ochraceus* Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 38. ♂ ♀.
- Coccophagus bifasciaticorpus* Girault, 1916. Soc. Ent. 31: 44. ♂ ♀.
- Biology: Cendana, 1937. Calif. Univ., Pubs., Ent. 6: 359-371.—Flanders, 1942.
Ecology 23: 120.
- perflavus* Girault. Que., Wis. Hosts: *Kermes* sp. on ash; *Lecanium corni* Bouché.
- Coccophagus perflavus* Girault, 1916. Soc. Ent. 31: 43. ♀.
- purpureus* Ashmead. Fla.
- Coccophagus purpureus* Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 132. ♀.
- rusti* Compere. Calif. Host: *Saissetia oleae* (Bern.).
- Coccophagus rusti* Compere, 1928. In Smith and Compere, Calif. Univ., Pubs., Ent. 4: 261-262. ♀.
- Biology: Flanders, 1942. Jour. Econ. Ent. 35: 687.
- scutatus* Howard. Calif. Host: *Kermes nigropunctatus* Ehrh. and Ckll.
- Coccophagus scutatus* Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 38. ♂ ♀.
- scutellaris* (Dalman). Calif., cosmopolitan. Hosts: *Coccus hesperidum* L.; *C. pseudomagnoliarum* (Kuw.); *Lecanium corni* Bouché; *Saissetia hemisphaericum* (Targ.); *S. oleae* (Bern.).
- Entedon scutellaris* Dalman, 1825. Svenska Vetensk. Akad. Handl. 46: 365.
- Coccophagus lunulatus* [Howard], 1894. U. S. Dept. Agr. Insect Life 6: 232.
♀.
- Biology: Smith and Compere, 1928. Calif. Univ., Pubs., Ent. 4: 242, 254-257.—
Cendana, 1937. Calif. Univ., Pubs., Ent. 6: 379-390.
- timberlakei* Compere. Utah. Host: *Pulvinaria bigeloviae* Ckll.
- Coccophagus timberlakei* Compere, 1931. U. S. Natl. Mus. Proc. 78 (7): 28.
♀.
- trifasciatus* Compere. Calif. Host: *Saissetia oleae* (Bern.).
- Coccophagus trifasciatus* Compere, 1925. Calif. Univ., Pubs., Ent. 3: 311.
♂ ♀.
- Biology: Cendana, 1937. Calif. Univ., Pubs., Ent. 6: 372-379.—Flanders, 1942.
Ecology 23: 120.

Genus TETRACYCLOS Kryger

Tetracyclos Kryger, 1942. Ent. Meddel. 22: 260.

Type: *Tetracyclos boreios* Kryger. Monob.

boreios Kryger. Greenland.

Tetracyclos boreios Kryger, 1942. Ent. Meddel. 22: 260. ♀.

Subfamily TETRASTICHINAE

Revision: Kurdjumov, 1913. Rev. Russe d'Ent. 13: 243-256 (transl. by Nowicki, 1927. Eos. 3: 513-617).

Genus CERATONEURA Ashmead

Ceratoneura Ashmead, 1894. In Riley and Howard, Linn. Soc. London, Jour. Zool. 25: 178.

Type: *Ceratoneura petiolata* Ashmead. Desig. by Ashmead, 1904.

Ceratotetraschodes Girault, 1917. Speciosissima Genera Nova Eulophidorum, p. 2.

Type: *Ceratoneura pretiosa* Gahan. Monob.

pretiosa Gahan. Tex.

Ceratoneura pretiosa Gahan, 1914. U. S. Natl. Mus. Proc. 48: 165. ♂ ♀.
Biology: Gahan, 1941. Ent. Soc. Wash. Proc. 43: 2.

Genus PARASPALANGIA Ashmead

Paraspalangia Ashmead, 1904. Carnegie Mus. Mem. 1: 334.

Type: *Paraspalangia annulipes* Ashmead. Monob.

Stigmatotrastichus Girault, 1916. Ent. Soc. Amer. Ann. 9: 303.

Type: (*Stigmatotrastichus emersoni* Girault) = *Paraspalangia annulipes* Ashmead. Monob.

annulipes Ashmead. Tex.

Paraspalangia annulipes Ashmead, 1904. Carnegie Mus. Mem. 1: 334. ♀.

Stigmatotrastichus emersoni Girault, 1916. Ent. Soc. Amer. Ann. 9: 304.

♀.

Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 316.

Genus WINNEMANA Crawford

Winnemana Crawford, 1911. U. S. Natl. Mus. Proc. 39: 620.

Type: *Winnemana argei* Crawford. Monob.

argei Crawford. Md. Hosts: Eggs of *Arge pectoralis* (Leach) and *A. salicis* Roh.

Winnemana argei Crawford, 1911. U. S. Natl. Mus. Proc. 39: 620. ♂ ♀.

Genus THRIPOCTENUS Crawford

Thripoctenus Crawford, 1911. Ent. Soc. Wash. Proc. 13: 233.

Type: *Thripoctenus russelli* Crawford. Monob.

americensis Girault. Utah, Alta. Host: ?Thrips in alfalfa.

Thripoctenus americensis Girault, 1917. U. S. Natl. Mus. Proc. 53: 448.

♀.

nubilipennis Williams. Mass. Hosts: *Cryptothrips rectangularis* Hood; *Megalothrips spinosus* Hood.

Thripoctenus nubilipennis Williams, 1916. Psyche 23: 54. ♂ ♀. Biol.

russelli Crawford. Calif. Hosts: *Frankliniella tritici* (Fitch); *Hercothrips fasciatus* (Perg.); *?Scirtothrips citri* (Moult.); *Taeniothrips simplex* (Mor.); *Thrips tabaci* Lind.

Thripoctenus russelli Crawford, 1911. Ent. Soc. Wash. Proc. 13: 233. ♀.

Biology: Russell, 1912. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 23: 25-52.—Bailey, 1933. Hilgardia 7: 501-502.—Bailey, 1937. Calif. Agr. Expt. Sta. Bul. 609: 26.

Genus THRIPOSOMA Crawford

Thriposoma Crawford, 1913. U. S. Natl. Mus. Proc. 45: 255.

Type: *Thriposoma grafi* Crawford. Monob.

grafi Crawford. Calif.

Thriposoma grafi Crawford, 1913. U. S. Natl. Mus. Proc. 45: 255. ♀.

Genus OMPHALOMOPSIS Girault

Omphalomopsis Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 88.

Type: *Omphalomopsis marilandia* Girault. Monob.

marylandia Girault, emend. Md.

Omphalomopsis marilandia Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 88

♀.

Genus GALEOPSOMYIA Girault

Galeopsomyia Girault, 1916. Ent. News 27: 348.

Type: *Euderus columbianus* Ashmead. Monob.

columbiana (Ashmead). N. J., Md., D. C., Fla., Tex. Host: *Asphondylia globulus* O. S.

Euderus columbiana Ashmead, 1888. Canad. Ent. 20: 104. ♀.

Taxonomy: Girault, 1912. Canad. Ent. 44: 50-52.

nigrocyanea (Ashmead), n. comb. Fla., La. Host: Gall of *Belonocnema treatae* Mayr.
Gyrolasia nigrocyanus Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 134. ♀.

Genus PARAGALEOPSOMYIA Girault

Paragaleopsomyia Girault, 1917. Speciosissima Genera Nova Eulophidorum, p. 1.
 Type: *Paragaleopsomyia eja* Girault. Monob.

eja Girault. Kans.

Paragaleopsomyia eja Girault, 1917. Speciosissima Genera Nova Eulophidorum, p. 1. ♀.

gallicola Gahan. Ariz. Host: Itonidid gall on *Pluchea borealis*.

Paragaleopsomyia gallicola Gahan, 1919. Ent. Soc. Amer. Ann. 12: 167.
 ♂ ♀.

Genus PROTHMYUS Girault

Prothymus Girault, 1917. New Chalcid Flies, p. 1.
 Type: *Prothymus novus* Girault. Monob.

novus Girault. Fla.

Prothymus novus Girault, 1917. New Chalcid Flies, p. 1.

Genus GALEOPSOMOPSIS Girault

Galeopsomopsis Girault, 1917. Speciosissima Genera Nova Eulophidorum, p. 1.
 Type: *Galeopsomopsis multisulcata* Girault. Orig. desig.

squamosa Girault. Calif.

Galeopsomopsis squamosus Girault, 1917. New Chalcid Flies, p. 3.

transcarinata Gahan. Ariz. Host: *Asphondylia websteri* Felt.

Galeopsomopsis transcarinatus Gahan, 1919. Ent. Soc. Amer. Ann. 12: 168.
 ♂ ♀.

Genus THYMISCUS Ghesquière

Thymus Girault, 1916. Canad. Ent. 48: 113. Preocc. by *Timus*.
 Type: *Encyrtus albocinctus* Ashmead. Monob.

Thymiscus Ghesquière, 1946. Rev. Zool. Bot. Africaines 34: 371. N. name.

albocinctus (Ashmead). Fla. Host: Gall of *Cynips* sp. on *Quercus nigra*.

Eupelmus (!) *albocinctus* Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. XVI. ♀.

Genus TETRASTICHUS Walker

Tetrastichus Walker, 1842. Ann. Mag. Nat. Hist. 10: 116.

Type: *Cirrospilus lycidas* Walker. Present desig.

Trichoceras Ratzeburg, 1844. Ichn. d. Forstins., v. 1, table opposite p. 40, p. 171.

Type: *Trichoceras erythrophthalmus* Ratzeburg. Monob.

Geniocerus Ratzeburg, 1848. Ichn. d. Forstins., v. 2, p. 175. N. name.

Baryscapus Foerster, 1856. Hym. Stud., v. 2, p. 84 (no species).

Type: *Baryscapus centricolae* Ashmead. Included by Ashmead, 1887.

Oomyzus Rondani, 1870. Comizio Agr. Parma Bol. 3: 141.

Type: *Oomyzus gallerucae* Rondani. Monob.

Tetrastichodes Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 203.

Type: (*Tetrastichus floridanus* Ashmead)=[*Entedon*] *hagenowii* (Ratzeburg). Monob.

Neotetrastichus Perkins, 1912. Hawaii. Sugar Planters' Assoc. Expt. Sta., Div. Ent. Bul. 10: 14.

Type: *Neotetrastichus mimus* Perkins. Monob.

Epitetrastichus Girault, 1913. Queensland Mus. Mem. 2: 205 (footnote), 229.

Type: *Epitetrastichus speciosissimus* Girault. Orig. desig.

Neomphaloidella Girault, 1913. Roy. Soc. So. Australia Trans. 37: 69.

Type: *Neomphaloidella fasciiventris* Girault. Monob.

- Epomphalooides* Girault, 1913. Arch. f. Naturgesch. 79A (6): 49.
Type: *Epomphalooides flavus* Girault. Monob.
- Neotetrastichodes* Girault, 1913. Queensland Mus. Mem. 2: 228.
Type: *Neotetrastichodes flavus* Girault. Orig. desig.
- Aprostoceroloides* Girault, 1913. Queensland Mus. Mem. 2: 243.
Type: *Aprostoceroloides speciosus* Girault. Orig. desig.
- Blattotetrastichus* Girault, 1917. Ent. News 28: 257.
Type: *Entedon hagenowii* Ratzeburg. Monob.
- Revision: Burks, 1943. U. S. Natl. Mus. Proc. 93: 505-608.
- acutus** Ashmead. Fla.
Tetrastichus acutus Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 134. ♂.
- aeneoviridis** (Girault). Ill. Hosts: ?*Malacosoma americanum* (F.); Syrphid puparia.
Trichaporus aeneoviridis Girault, 1912. Canad. Ent. 44: 52, 76. ♂ ♀.
- agrili** Crawford. N. Y. Host: *Agrilus sinuatus* (Oliv.).
Tetrastichus agrili Crawford, 1914. Insector Inscitiae Menstruus 2: 181.
♀.
- ainsliei** Gahan. N. Y., Conn., Md., Va., Ill., Iowa, Kans., S. Dak., N. Dak. Hosts:
Mordellistena pustulata (Melsh.); *Cylindrocopturus adspersus* (Lec.);
Phytophaga destructor (Say).
Tetrastichus ainsliei Gahan, 1917. U. S. Natl. Mus. Proc. 53: 214. ♂ ♀.
Neomphaloidella mediogutta Girault, 1917. Ent. News 28: 255. ♀.
- alaskensis** Ashmead. Alaska.
Tetrastichus alaskensis Ashmead, 1902. Wash. Acad. Sci. Proc. 4: 146. ♂.
- anthophilus** Burks. Ill. Host: *Rhopalomyia anthophila* O. S.
Tetrastichus anthophilus Burks, 1947. Ent. News 58: 85. ♂ ♀.
- anthracinus** Ashmead. Alaska. Host: ?*Agrilus angelicus* Horn.
Tetrastichus anthracinus Ashmead, 1902. Wash. Acad. Sci. Proc. 4: 146. ♀.
- argyrus** Burks. Va., S. C., Ga., Iowa. Host: Itonidid in leaf gall of *Solidago leavenworthii*.
Tetrastichus argyrus Burks, 1943. U. S. Natl. Mus. Proc. 93: 558. ♂ ♀.
- asparagi** Crawford. Man., Ont., Que., N. B., N. Y., Mass., R. I., Conn., Md., Ill., Ky., Va., W. Va., Ariz. Host: *Criocer asparagi* (L.).
Tetrastichus asparagi Crawford, 1909. Ent. Soc. Wash. Proc. 11: 150.
Biology: Russell and Johnston, 1912. Jour. Econ. Ent. 5: 429.—Johnston, 1915. Jour. Agr. Res. 4: 303.
- baldufi** Burks. Ill. Host: Gall of *Neuroterus verrucarum* O. S.
Tetrastichus baldufi Burks, 1943. U. S. Natl. Mus. Proc. 93: 540. ♂ ♀.
- banksii** Howard. N. J., D. C., Fla. Host: Egg sacs of argiopid spiders.
Tetrastichus banksii Howard, 1892. Ent. Soc. Wash. Proc. 2: 299. ♀.
- blastophagi** (Ashmead). D. C., Fla. Host: Gall of *Callirhytis blastophaga* (Ashm.).
Hyperteles blastophagi Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 202.
♂ ♀.
- brevistigma** Gahan. New England, D. C., Ohio, Ind., Ky., Calif., Oreg., Wash.
Host: *Galerucella xanthomelaena* (Schränk).
Tetrastichus brevistigma Gahan, 1936. Ent. Soc. Wash. Proc. 38: 76. ♂
♀.
- Biology: Berry, 1938. U. S. Dept. Agr. Cir. 485: 1-11.
- bruchivorus** Gahan. N. C. Host: *Bruchus brachialis* Fahr.
Tetrastichus bruchivorus Gahan, 1942. Ent. Soc. Wash. Proc. 44: 8. ♂ ♀.
- bruchophagi** Gahan. Generally distributed in North America. Hosts: *Bathyplectes curculionis* (Thoms.); *Bruchophagus gibbus* (Boh.).
Tetrastichus bruchophagi Gahan, 1913. U. S. Natl. Mus. Proc. 46: 439. ♂ ♀.
Tetrastichus bruchophagi Girault, 1916. U. S. Natl. Mus. Proc. 51: 128, 1932. Emend.
- Biology: Urbahns, 1917. Jour. Agr. Res. 8: 277-282.—Urbahns, 1920. U. S. Dept. Agr. Bul. 812: 17.
- carinatus** Forbes. Ont. to N. C., Kans., Minn.; Oreg., Wash. Hosts: ?*Dasyneura leguminicola* (Lint.); *Phytophaga destructor* (Say); *Platygaster herrickii* Pack.; *P. vernalis* (Myers); *P. zosine* Wlkr.

- Tetrastichus carinatus*** Forbes, 1885. Ill. State Dept. Agr. Trans. 22: App. p. 48. ♀.
Biology: Hill, Pinckney, and Udine, 1939. U. S. Dept. Agr. Tech. Bul. 689: 4-7, 10-15.
Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 138-142, 144.—Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 10-13.
- carpatu**s Burks. N. H., Mass., Md., Ohio, Mo., Calif. Hosts: *Tineola bisselliella* (Hum.); *Tinea fuscipunctella* Haw.; *T. pellionella* (L.); *Apanteles carpatu*s (Say).
Tetrastichus carpatus Burks, 1943. U. S. Natl. Mus. Proc. 93: 566. ♂ ♀.
- cassidis** Burks. La. Hosts: *Deloyala guttata* (Oliv.); *Metriona bicolor* (F.).
Tetrastichus cassidis Burks, 1943. U. S. Natl. Mus. Proc. 93: 555. ♂ ♀.
- centricolae** (Ashmead). N. C. Host: Gall of *Atrusca centricola* (O. S.).
Baryscapus centricolae Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 202. ♀.
- chlamyitis** Ashmead. Maine, N. J., Md., D. C., Va., Ill., Miss., Minn. Hosts: *Chlamisus gibbosa* (F.); *C. spp.*; *Exema dispar* Lacord.
Tetrastichus chlamyitis Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 234. ♂ ♀.
- chrysopae** (Crawford). Md. to Fla., Ohio, Tenn., Tex.; Ill.; Calif. Hosts: *Chrysopa californica* Coq.; *C. oculata* Say; *C. plorabunda* Fitch; *C. rufilabris* Burm.
Geniocerus chrysopae Crawford, 1915. U. S. Natl. Mus. Proc. 48: 584. ♀.
Aprostoceroloides annapolis Girault, 1917. Chalcidoidea Nova Marilandensis, II, p. 2. ♀.
Biology: Clancy, 1946. Calif. Univ., Pubs., Ent. 7: 448-454. ♀.
- coerulescens** Ashmead. N. B. to Ga., Tex. and Kans.; Colo., Calif., Nev. Hosts: *Malacomyza westwoodi* Fitch; *Chalcodermus collaris* Horn; *Fascista cercerisella* (Chamb.); *?Recurvaria thujaella* Kearf.; *?Argyresthia thujaella* (Pack.); *Coleophora malivorella* Riley; *Callisto geminatella* (Pack.); *Amphibolips cinerea* (Ashm.); *Apanteles congregatus* (Say); *Bracon gelechiae* Ashm.; *B. hebetor* Say; *?Microgaster* sp.; *Catolaccus aeneoviridis* Gir.; *Dibrachys cavus* (Wlkr.); *Meraporus* sp.; *Pteromalus* sp.
Tetrastichus coerulescens Ashmead, 1898. Ent. Soc. Wash. Proc. 4: 130. ♂ ♀.
- Tetrastichus doteni*** Crawford, 1911. Ent. Soc. Wash. Proc. 13: 234. ♂ ♀.
- compsivorus** Crawford. Miss., Tex., Okla. Host: *Compsus auricephalus* (Say).
Tetrastichus compsivorus Crawford, 1915 (1914). Insecutor Inscitiae Menstruus 2: 180. ♂ ♀.
- cormus** Burks. Ill. Hosts: Gall of *Aulacidea podagrae* (Bass.); ?gall of *Hemadas nubilipennis* (Ashm.).
Tetrastichus cormus Burks, 1943. U. S. Natl. Mus. Proc. 93: 579. ♂ ♀.
- diarthronomyiae** Gahan. Md. Host: *Diarthronomyia hypogaea* (Loew).
Tetrastichus diarthronomyiae Gahan, 1923. Ent. Soc. Wash. Proc. 25: 65. ♀.
Biology: Hamilton, 1924. Md. Agr. Expt. Sta. Bul. 269: 32.
- dolosus** Gahan. La., Tex., Kans. Hosts: *Ancyliis comptana* (Froehl.); *Fascista cercerisella* (Chamb.); *Euplectrus comstockii* How.; *E. plathypenae* How.
Tetrastichus dolosus Gahan, 1917. U. S. Natl. Mus. Proc. 53: 215. ♂ ♀.
- dyrus** Burks. Mont. Hosts: *Trioza* nymphs on *Angelica lyalli*, on *Salix*, and on *Thalictrum occidentale*.
Tetrastichus dyrus Burks, 1943. U. S. Natl. Mus. Proc. 93: 541. ♂ ♀.
- epidius** Walker. Fla.
Tetrastichus Epidius Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 28. ♀.
- euplectri** Gahan. La., Tex. Hosts: *Meteorus* sp.; *Euplectrus plathypenae* How.
Tetrastichus euplectri Gahan, 1914. U. S. Natl. Mus. Proc. 48: 167. ♂ ♀.
- faustus** Burks. Mont. Host: *Rhagoletis fausta* (O. S.).
Tetrastichus faustus Burks, 1943. U. S. Natl. Mus. Proc. 93: 582. ♀.
- flavipes** Ashmead. Fla. Host: Gall of *Disholcaspis virens* (Ashm.).
Tetrastichus flavipes Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 135.

flavopictus (Ashmead). Fla.

Ceraniscus flavopictus Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 202. ♂
♀.

flora (Girault). Md., D. C., Fla., Tenn. Host: *Monarthropalpus buxi* (Laboulb.).

Aprostocetus flora Girault, 1917. New Chalcid Flies, p. 3.

Epitetrastichus tricolor Girault, 1917. Descr. Stellarum Nov., p. 9. ♀.

floridae (Girault), emend., n. comb. Fla.

Neomphaloidella florida Girault, 1917. New Chalcid Flies, p. 4. ♂ ♀.

fumipennis (Girault). Md., D. C., Va., Ind., Ill., Iowa. Hosts: ?*Gnorimoschema gallaesolidaginis* (Riley); gall of *Asteromyia carbonifera* (Felt).

Neomphaloidella fumipennis Girault, 1917. Chalcidoidea Nova Marilandensis [I], p. 2. ♀.

gala Walker. Fla.

Tetrastichus Gala Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 28. ♀.

gelastus Burks. Fla. Host: *Trioza* on Chinese elm.

Tetrastichus gelastus Burks, 1943. U. S. Natl. Mus. Proc. 93: 539. ♀.

gerstaeckeriae Gahan. Tex. Hosts: *Gerstaeckeria nobilis* Lec.; *G. porosa* Lec.

Tetrastichus gerstaeckeriae Gahan, 1936. U. S. Natl. Mus. Proc. 83: 485.
♂ ♀.

gibboni (Girault). Ariz. Host: *Languria mozardi* Latr.

Ootetrastichus gibboni Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 86. ♀.

gigas Burks. Calif., Oreg., Wash. Host: Gall of *Andricus californicus* Ashm.

Tetrastichus gigas Burks, 1943. U. S. Natl. Mus. Proc. 93: 560. ♂ ♀.

granulatus Walker. Ont.

Tetrastichus granulatus Walker, 1844. Ann. Mag. Nat. Hist. (1) 14: 17. ♀.

hagenowii (Ratzeburg). Fla., La. Hosts: *Blatta orientalis* L.; *Blattella germanica* (L.); *Periplaneta americana* (L.); *P. australasiae* (F.); *Evania appendigaster* (L.).

Entedon Hagenowii Ratzeburg, 1852. Ichn. d. Forstins., v. 3, p. 211.

Tetrastichus floridanus Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 203.
♂ ♀.

Taxonomy: Gahan, 1914. U. S. Natl. Mus. Proc. 48: 168.

hesperius Burks. Ill. Host: Gall of *Diplolepis ignota* (O. S.).

Tetrastichus hesperius Burks, 1947. Ent. News 58: 88. ♂ ♀.

hibus Burks. Calif. Host: Cup-gall on *Artemisia ludoviciana*.

Tetrastichus hibus Burks, 1943. U. S. Natl. Mus. Proc. 93: 582. ♂ ♀.

hillmeadia (Girault). Md.

Ootetrastichus hillmeadia Girault, 1917. Chalcidoidea Nova Marilandensis III, p. 2. ♀.

holbeini Girault. W. Va., Mo., Calif. Hosts: *Chrysobothris femorata* (Oliv.); *C. mali* Horn.

Tetrastichus holbeini Girault, 1917. New Chalcid Flies, p. 2. ♀.

hunteri Crawford. Conn., Miss., La., Tex. Host: *Anthonomus grandis* Boh.

Tetrastichus hunteri Crawford, 1909. Ent. Soc. Wash. Proc. 11: 150. ♀.

Biology: Pierce, Cushman, and Hood, 1912. U. S. Dept. Agr. Bur. Ent. Bul. 100: 1, 52, 56-63.

ichthyus Burks. Tex. Hosts: ?Gall of *Neuroterus rileyi* Ashm.; probably *Xanthoteras emoryi* (Ashm.).

Tetrastichus ichthyus Burks, 1943. U. S. Natl. Mus. Proc. 93: 528. ♂ ♀.

impexus Girault. Va. Host: Gall of *Disholcaspis quercus-globulus* (Fitch).

Tetrastichus impexus Girault, 1917. New Chalcid Flies, p. 2.

johnsoni Ashmead. Ill. Host: Nest of *Phanagenia bombycina* (Cress.).

Tetrastichus johnsoni Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 233. ♀.

juniperi (Crawford). N. Y., Va., Oreg. Host: Juniper berries, probably with itonidid larvae or *Anthonomus juniperinus* Sanb.

Geniocerus juniperi Crawford, 1915. U. S. Natl. Mus. Proc. 48: 585. ♀.

Biology: Marcovitch, 1915. Ent. Soc. Amer. Ann. 8: 169. ♂ ♀.

- lasius** Burks. Ohio. Hosts: *Asteromyia argrostis* O. S.; *Lasioptera muhlenbergiae* Mart.
Tetrastichoides lasiopterae Ashmead, 1894. Cincinnati Soc. Nat. Hist. Jour. 17: 54. ♂ ♀. Preocc.
- Tetrastichus lasius* Burks, 1943. U. S. Natl. Mus. Proc. 93: 596. ♂ ♀. N. name.
- lissus** Burks. Ariz. Host: In pods of *Astragalus mollissimus*.
Tetrastichus lissus Burks, 1943. U. S. Natl. Mus. Proc. 93: 527. ♀.
- longicorpus** (Girault). N. Mex. Host: *Rhyacionia frustrana bushnelli* (Busck).
Neotetrastichodes longicorpus Girault, 1916. U. S. Natl. Mus. Proc. 51: 129. ♀.
- malacosomae** Girault. Que., N. Y., Mass., Conn., Del., Pa., Nebr., N. Mex., Idaho, Calif., Oreg. Hosts: *Malacosoma americanum* (F.); *M. disstria* Hbn., *M. fragile* Stretch.
Tetrastichus malacosomae Girault, 1917 (1916). Insector Inscitiae Menstruus 4: 110. ♂ ♀.
- malophilus** Burks. Ohio. Host: *Rhynchaenus pallicornis* (Say).
Tetrastichus malophilus Burks, 1943. U. S. Natl. Mus. Proc. 93: 585. ♀.
- marcovitchi** (Crawford). N. Y. Hosts: ?*Tetrastichus juniperi* (Cwfd.); ?phytophagous *Eurytoma* sp. in berries of *Juniperus virginiana*.
Geniocerus marcovitchi Crawford, 1915. U. S. Natl. Mus. Proc. 48: 586. ♂ ♀.
 Biology: Marcovitch, 1915. Ent. Soc. Amer. Ann. 8: 170.
- marylandensis** (Girault). Mass., Md., D. C., Va., Miss., Mo., Ill. Hosts: ?*Aphis maidis* Fitch; ?*Rhyacionia frustrana* (Comst.); ?*Exzoteleia pinifoliella* (Chamb.), ?*Itonidid*.
Epitetrastichus marylandensis Girault, 1916. Ent. Soc. Amer. Ann. 9: 295. ♀.
Epitetrastichus cuneiformis Girault, 1917. Descr. Stellarum Nov., p. 18. ♀
- melanis** Burks. Ont., Mass., Wash. Host: *Coccinella quinque-notata* Kirby.
Tetrastichus melanis Burks, 1943. U. S. Natl. Mus. Proc. 93: 529. ♂ ♀.
- microrhopalae** Ashmead. Man., N. J., D. C., Va. Hosts: *Cicindela limbalis* var. *awemeana* Casey; *Microrhopala xerene* Newm.
Tetrastichus microrhopalae Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 234. ♂ ♀.
- minutus** (Howard). Conn., D. C., Va., Fla., Kans., N. Mex., Ariz., Utah, Calif. Hosts: *Aphis gossypii* Glov.; *A. pomi* Deg.; *Lecanium corni* Bouché; *L. nigrofasciatum* Perg.; *L. persicae* (F.); *Phenacoccus acericola* King; *P. helianthi* (Ckll.); *Physokermes insignicola* (Craw); *Pseudococcus juniperi* Ehrh.; *Pulvinaria bigeloviae* Ckll.; *Saissetia oleae* (Bern.); ?*Cycloneda sanguinea* (L.); *C. sanguinea immaculata* (F.); *Coccophagus albicoxa* How.; *C. lycimnia* (Wlkr.); *Anagyris yuccae* (Coq.) *Aphycus lounsburyi* How.; *A. physokermis* Timb.; *Blastothrix longipennis* How.; ?*Chalcaspis phenacocci* (Ashm.); *Chrysoplatycerus ferrisi* Timb.; *C. splendens* How.; *Clausenia purpurea* Ishii; ?*Homalotylus terminalis* (Say); *Microterys mazzinini* Gir.; *Pseudoleptomastix squammulata* Gir.; *Zarhopalus corvinus* (Gir.); *Pachyneuron californicum* Gir.
Astichus minutus Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 369. ♂.
Tetrastichus lecanii Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. XIX. ♂.
Tetrastichus blepyri Ashmead, 1902. Canad. Ent. 34: 302. ♀.
Tetrastichus (Tetrastichodes) detrimentosus Gahan, 1913. U. S. Natl. Mus. Proc. 46: 439. ♂ ♀.
- Biology: Timberlake, 1924. Calif. Univ., Pubs., Ent. 3: 248-251.—Clausen, 1924. Calif. Univ., Pubs., Ent. 3: 257-266, 286-287.—Smith and Compere, 1928. Calif. Univ., Pubs., Ent. 4: 242, 306-308.
- Taxonomy: Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 19.
- modestus** Howard. N. J. to Va. and Ohio; Iowa, Calif. Hosts: *Apanteles atalantae* (Pack.); *A. edwardsii* Riley; *Microgaster congregatiformis* Vier.
Tetrastichus modestus Howard, 1889. In Scudder, Butterflies of Eastern U. S. and Canada, pp. 1872, 1894. ♂ ♀.

- Epitetrastichus mundicornis* Girault, 1917. Chalcidoidea Nova Marilandensis III, p. 1. ♀.
- nebraskensis** (Girault) Nebr.
Neomphaloidella nebraskensis Girault, 1916. Canad. Ent. 48: 103. ♀.
- neuroteri** (Ashmead). N. Y., D. C., Va., Fla., Mo., Ill. Hosts: *Neuroterus rileyi* Ashm.; gall of *N. saltarius* Weld.
Hyperteles neuroteri Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 203. ♂ ♀.
- oecanthivorus compar** Gahan. Pa., S. C., Tex. This may be identical with *T. oecanthivorus oecanthivorus* Gahan, 1932, n. name for *T. dispar* Silvestri, preocc., occurring in Italy. Host: *Oecanthus nigricornis quadripunctatus* Beut.
Tetrastichus oecanthivorus var. **compar** Gahan, 1932. Ent. Soc. Amer. Ann. 25: 743. ♂ ♀.
- oklahomae** (Girault), emend. Okla., Utah. Host: ? *Harmolita* sp. in grass stem.
Neomphaloidella oklahoma Girault, 1917. Descr. Stellarum Nov., p. 9, ♂ ♀.
- oncideridis** Gahan. W. Va. Host: *Oncideres cingulatus* (Say).
Tetrastichus oncideridis Gahan, 1932. Ent. Soc. Amer. Ann. 25: 745. ♂ ♀.
- ovipransus** Crosby and Leonard. Va. Host: *Blepharida rhois* (Forst.).
Tetrastichus ovipransus Crosby and Leonard, 1917. Ent. News 28: 368. ♀.
- pandora** Burks. Oreg. Host: *Coloradia pandora* Blake.
Tetrastichus pandora Burks, 1943. U. S. Natl. Mus. Proc. 93: 530. ♂ ♀.
- paracholus** Burks. Va. Host: *Gnorimoschema gallaesolidaginis* (Riley).
Tetrastichus paracholus Burks, 1943. U. S. Natl. Mus. Proc. 93: 551. ♂ ♀.
- pattersonae** Fullaway. Fla., Utah, Calif. Hosts: *Antron echinus* (Ashm.); *Callirhytis pomiformis* Ashm.; ? *Disholcaspis chrysolepidis* (Beut.).
Tetrastichus pattersonae Fullaway, 1912. N. Y. Ent. Soc. Jour. 20: 280. ♀.
- phegus** Burks. Ill., Tex., Calif. Hosts: *Disholcaspis cinerosa* (Bass.); gall of *D. mamma* (Walsh); gall of *Heteroecus pacificus* Ashm.
Tetrastichus phegus Burks, 1943. U. S. Natl. Mus. Proc. 93: 559. ♂ ♀.
- polynemae** Ashmead. N. Y., Del., Ill. Hosts: Egg of *Lestep* sp.; *Polynema needhami* (Ashm.).
Tetrastichus p. lynemae Ashmead, 1900. Ent. News 11: 616. ♀.
Ootetrastichus mymaridis Girault, 1916. U. S. Natl. Mus. Proc. 51: 130. ♀.
- productus** Riley. P. E. I., N. J., Ohio, Mo., Kans. Hosts: ? *Phytophaga destructor* (Say); gall on *Salix*.
Tetrastichus productus Riley, 1885. U. S. Natl. Mus. Proc. 8: 419. ♂ ♀.
 Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 143-144, ♂ ♀.
- pulchriventris** (Girault). Md., La.
Neomphaloidella pulchriventris Girault, 1916. Canad. Ent. 48: 101. ♀.
- punctatifacies** Girault. Australia; ?Conn.
Tetrastichus punctatifacies Girault, 1926. Insector Inscitiae Menstruus 14: 142.
 Taxonomy: Britton, 1938. Conn. State Geol. and Nat. Hist. Survey Bul. 60: 144.
- punctatifrons** (Girault). Ariz. Host: ? *Paraleucoptera albella* (Chamb.).
Epitetrastichus punctatifrons Girault, 1916. U. S. Natl. Mus. Proc. 51: 128. ♀.
- racemariae** Ashmead. Ont., Conn., N. J., W. Va., Ill., Fla., Kans., Minn., Calif. Hosts: ? *Eurytoma californica* Ashm.; galls of: *Amphibolips cinerea* Ashm.; *A. prunus* Cress.; *A. racemaria* Ashm.; *Andricus flocci* (O. S.); *A. lasius* (Ashm.); *Callirhytis pomiformis* (Ashm.); *Disholcaspis mamma* (Walsh); ? *Neuroterus noxiousus* (Bass.); *N. quercus-batatus* (Fitch).
Tetrastichus racemariae Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 134. ♂ ♀.
- Tetrastichus californicus* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 203. ♀.
- Hyperteles flocci* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 203. ♂ ♀.

- rapo** (Walker). N. Y., D. C., N. C., cosmopolitan. Host: *Apanteles glomeratus* (L.).
- Cirrospilus Rapo*** Walker, 1839. Ann. Mag. Nat. Hist. (1) 3: 415. ♂ ♀.
Biology: Masi, 1908. Lab. Zool. Gen. e Agr. Portici Bol. 3: 133.
- repulsus** Girault. Iowa.
Tetrastichus repulsus Girault, 1917. New Chalcid Flies, pp. 2, 4.
- rosae** Ashmead. N. J., D. C., Va., Fla., Mich., Colo., Idaho, B. C. Hosts: *Diplolepis ignota* (O. S.); *D. ostensackenii* (Beut.).
- Tetrastichus rosae*** Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 134. ♀ (♂ misdet.).
- rugglesi** Rohwer. N. Y., Conn., W. Va., Minn. Hosts: *Agrilus arcuatus* (Say); *A. champlaini* Frost; *A. viridis* var. *fagi* (Ratz.).
- Tetrastichus rugglesi*** Rohwer, 1919. Canad. Ent. 51: 160. ♀.
- saundersii** (Packard). Ont., Conn., N. J. Hosts: *Strymon* sp., presumably *edwardsii* (Saund.); *S. falacer* (Godt.).
- Eulophus Saundersii*** Packard, 1881. Boston Soc. Nat. Hist. Proc. 21: 34. ♂.
- scolyti** Ashmead. N. J., W. Va. Host: *Scolytus rugulosus* (Ratz.).
- Tetrastichus scolyti*** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 343. ♀.
- scriptus** Burks. N. J. Host: ?*Euplectrus* sp.
- Tetrastichus scriptus*** Burks, 1943. U. S. Natl. Mus. Proc. 93: 550. ♀.
- semiauraticeps** (Girault). Maine, Colo., Ariz. Hosts: Needle gall on *Pinus ponderosa*; bud gall on *Pinus scopulorum*.
- Epitetrastichus semiauraticeps*** Girault, 1916. U. S. Natl. Mus. Proc. 51: 127. ♀.
- semideae** (Packard). N. H., Conn. Host: *Oeneis melissa* (Say).*
- Eulophus semideae*** Packard, 1874. In Hitchcock and Huntington, Geol. of N. H., pt. 1, p. 347. ♂ ♀.
- semilongifasciatus** (Girault). Md., D. C.
Neomphaloidella semilongifasciata Girault, 1916. Soc. Ent. 31: 35. ♀.
- silvaticus** Gahan. N. B., Vt., Conn., Minn. Host: *Malacosoma disstria* Hbn.
- Tetrastichus silvaticus*** Gahan, 1937. Ent. Soc. Wash. Proc. 39: 266. ♂ ♀.
Biology: Hodson, 1939. Ent. Soc. Amer. Ann. 32: 131-136.
- sobrius** Gahan. Conn., Ariz., Calif. Hosts: ?*Asphondylia bea* Felt; *A. websteri* Felt.
- Tetrastichus sobrius*** Gahan, 1919. Ent. Soc. Amer. Ann. 12: 166. ♂ ♀.
- solidaginis** Burks. Utah. Host: Gall of *Eurosta solidaginis* (Fitch).
- Tetrastichus solidaginis*** Burks, 1943. U. S. Natl. Mus. Proc. 93: 534. ♂ ♀.
- spilopteris** Burks. N. Mex., Calif., Oreg. Hosts in galls of: *Andricus kingi* Bass.; *Dryocosmus bicornis* (McC. and E.); *Neuroterus saltatorius* (Edw.).
- Tetrastichus spilopteris*** Burks, 1943. U. S. Natl. Mus. Proc. 93: 564. ♂ ♀.
- stanfordiensis** Fullaway. Calif. Host: Pimplly gall on *Quercus douglasii*, possibly *Antron douglasii* (Ashm.).
- Tetrastichus stanfordiensis*** Fullaway, 1912. N. Y. Ent. Soc. Jour. 20: 281. ♀.
- strobilus** Burks. Oreg. Host: Lepidopteron in cone of *Pseudotsuga taxifolia*, probably *Barbara colfaxiana* Kearf.
- Tetrastichus strobilus*** Burks, 1943. U. S. Natl. Mus. Proc. 93: 570. ♂ ♀.
- tesserus** Burks. Va., Mich., Ill., Iowa. Host: *Asteromyia* gall on goldenrod.
- Tetrastichus tesserus*** Burks, 1943. U. S. Natl. Mus. Proc. 93: 552. ♂ ♀.
- thanasimi** Ashmead. Pa., W. Va., Mich., Mont., Calif. Hosts: *Chilocorus stigma* (Say); *Cymatodera* sp.; *Thanasimus dubius* (F.); *T. trifasciatus* (Say); *T.* larva in sumach.
- Tetrastichus thanasimi*** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 343. ♀.
- theclae** (Packard). New England, N. J. Host: *Strymon falacer* (Godt.).
- Eulophus theclae*** Packard, 1881. Boston Soc. Nat. Hist. Proc. 21: 34. ♂.
- thripophonus** Waterston. Fla. Host: *Liothrips laureli* (Mason).
- Tetrastichus thripophonus*** Waterston, 1923. Bul. Ent. Res. 13: 453. ♀.
Biology: Mason, 1922. Ent. News 33: 199.

- tibialis** (Ashmead). N. Y., Mass., Del., W. Va., Ont. Hosts: *Apanteles* sp. on *Apatela americana* (Harr.); *Olesicampe* sp.; *Homalotylus* sp.
Tetrastichodes tibialis Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 344. ♀.
 Biology: Dimmock, 1898. Ent. Soc. Wash. Proc. 4: 150.
- triozæ** Burks. Kans., Colo., N. Mex., Ariz., Calif., Idaho, Mont., Wash. Hosts: *Calophya nigripennis* Riley; *Paratrioza cockerelli* (Sule).
Tetrastichus triozæ Burks, 1943. U. S. Natl. Mus. Proc. 93: 542. ♂ ♀.
- trisolcatus** Provancher. N. B. to Va., west to Ill. and Ont. Hosts: *Arge pectoralis* (Leach); ?*Neodiprion* sp.
Tetrastichus trisolcatus Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 211. ♂ ♀.
Hyperteles hylotomæ Ashmead, 1888. Canad. Ent. 20: 105. ♀. N. syn.
- turionum** (Hartig). N. Y., Conn., Mass., N. J. Host: *Rhyacionia buoliana* (Schiff.).
Eulophus turionum Hartig, 1838. Jahresber. über die Fortsch. der Fortw. u. Forstl. Naturk. 1: 268. ♂ ♀.
 Biology: Dowden, 1934. Ent. Soc. Amer. Ann. 27: 600.—Bergold and Ripper, 1937. Ztschr. f. Parasitenk. 9: 399, 414-415.
- ulysses** (Girault). Md.
Aprostocetus ulysses Girault, 1916. Brooklyn Ent. Soc. Bul. 11: 112. ♀.
- varicornis** (Girault). Md.
Epitetrastichus varicornis Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 4. ♀.
- venustus** Gahan. Ind., Iowa, Ariz., Calif. Hosts: ?*Asphondylia websteri* Felt; ?*Bruchophagus gibbus* (Boh.).
 ?*Cynipis breicornis* Panzer, 1804. Syst. Nomencl., p. 134.
Tetrastichus venustus Gahan, 1914. U. S. Natl. Mus. Proc. 48: 168. ♀.
 Biology: Urbans, 1920. U. S. Dept. Agr. Bul. 812: 18.
- verrucarii** Balduf. N. Y., D. C., Va., Ill., Calif. Hosts in galls of: *Neuroterus floccosus* (Bass.); *N. niger* Gill.; *N. varians* Kinsey; *N. verrucarum* O. S.
Tetrastichus verrucarii Balduf, 1929. Canad. Ent. 61: 221. ♂ ♀.
 Biology: Balduf, 1929. Canad. Ent. 61: 125-130.
- whitmani** (Girault). Md., Minn., S. Dak. Host: *Physonota unipunctata* (Say).
Aprostocetus whitmani Girault, 1916. Ent. Soc. Amer. Ann. 9: 296. ♂ ♀.
Aprostocetus marilandicus (!) Girault, 1917. Ent. News 28: 21. ♀.
- xanthomelaenæ** (Rondani). N. Y., Conn., N. J., D. C. Host: *Galerucella xanthomelaena* (Schränk).
Oomyzus xanthomelaenæ Rondani, 1872. Repertorio degli insetti parassiti e della loro vittime, v. 2, p. 16.
 Biology: Berry, 1938. Jour. Agr. Res. 57: 859-863.
- xanthops** (Ratzeburg). Mass. Hosts: *Fenusa ulmi* (Sund.); *Heterarthrus nemoratus* (Fall.).
Eulophus xanthops Ratzeburg, 1844. Ichn. d. Forstins., v. 1, p. 170. ♀.
 Biology: Berry, 1938. Jour. Agr. Res. 57: 859-863.—Dowden, 1941. U. S. Dept. Agr. Tech. Bul. 757: 8, 10, 32-35.

Genus APROSTOCETUS Westwood

- Aprostocetus* Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 2: 444.
 Type: *Aprostocetus caudatus* Westwood. Monob.
- Lonchentedon* Ratzeburg, 1852. Ichn. d. Forstins., v. 3, p. 215.
 Type: (*Eulophus longicaudatus* Foerster)=*Aprostocetus caudatus* Westwood. Monob.
- Tetrastichomorpha* Girault, 1913. Queensland Mus. Mem. 2: 227. N. syn.
 Type: *Tetrastichomorpha flava* Girault. Orig. desig.
- Neomphaloidomyia* Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 118. N. syn.
 Type: *Hyperteles polynemæ* Ashmead. Monob.
- ajax** (Girault), n. comb. D. C.
Tetrastichomorpha ajax Girault, 1916. U. S. Natl. Mus. Proc. 51: 132-133. ♀.

americanus Ashmead. N. H., Kans.

Aprostocetus americanus Ashmead, 1888. Canad. Ent. 20: 106. ♀.
Biology: Brandhorst, 1943. Kans. Acad. Sci. Trans. 46: 169.

animus Girault. N. Mex.

Aprostocetus animus Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum
Observ. III, p. 6. ♀.

bewicki Girault. Wash.

Aprostocetus bewicki Girault, 1917. New Chalcid Flies, p. 2. ♂ ♀.

canadensis Ashmead. Canada, Ohio. Hosts: "*Cecidomyia* sp."; *Orellia florescentiae*
(L.); ?*Crataepus fletcheri* Ashm.

Aprostocetus canadensis Ashmead, 1888. Canad. Ent. 20: 106. ♀.
Biology: Detmers, 1927. Ohio Agr. Expt. Sta. Bul. 414: 26-29, ♀.

cincinnatus (Girault), n. comb. Md.

Neomphaloides cincinnatus Girault, 1917. Psyche 24: 92. ♀.

diplosidis Crawford. La., Tex. Host: *Contarinia sorghicola* Coq.

Aprostocetus diplosidis Crawford, 1907. N. Y. Ent. Soc. Jour. 15: 180. ♂ ♀.
Biology: Dean, 1911. U. S. Dept. Agr. Bur. Ent. Bul. 85: (4) 55-57.—Walter, 1941.
U. S. Dept. Agr. Tech. Bul. 778: 18.

fidius Girault. Miss., N. Mex.

Aprostocetus fidius Girault, 1917. New Eulophidae, p. 1. ♀.
Biology: Myers, 1930. Bul. Ent. Res. 21: 309-313.

granulatus Ashmead. Fla.

Aprostocetus granulatus Ashmead, 1888. Canad. Ent. 20: 105. ♀.

Tetrastichus microcosmus Girault, 1917. Deser. Stellarum Nov., p. 22.
N. name.

Taxonomy: Burks, 1943. U. S. Natl. Mus. Proc. 93: 605.

irvingi (Girault), n. comb. N. Mex.

Neomphaloidella irvingi Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 118. ♀.

kansasiae Girault, emend. Kans.

Aprostocetus kansasia Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 88. ♀.

oviductus (Girault), n. comb. Md.

Epitetrastichus oviductus Girault, 1917 (1916). Insecutor Insectiae Men-
struus 4: 111. ♀.

polynemae (Ashmead), n. comb. N. Y., Ill. Host: *Polynema needhami* Ashm.

Hyperteles polynemae Ashmead, 1900. Ent. News 11: 615. ♂ ♀.

Genus SYNTOMOSPHYRUM Foerster

Syntomosphyrum Foerster, 1878. Naturh. Ver. Rheinlande Verh. 35: 60.

Type: *Syntomosphyrum fulvipes* Foerster. Monob.

Tetrastichopsis Girault, 1916. U. S. Natl. Mus. Proc. 51: 132.

Type: *Tetrastichopsis prionomeri* Girault. Monob.

esurus (Riley). N. B., Conn., N. J., Pa., D. C., W. Va., Ga., Ala., Tex. Hosts:
Chilocorus similis (Rossi); *Hyphantria cunea* (Drury); *Alabama argillacea*
(Hbn.); *Anomis erosa* (Hbn.); *Hemerocampa leucostigma* (A. and S.);
Nygmia phaeorrhoea (Donov.); ?*Porthetria dispar* (L.); *Diatraea saccharalis*
(F.); *Grapholitha molesta* (Busek); *Stenoma algidella* (Wlkr.).

Cirrospilus esurus Riley, 1879. Canad. Ent. 11: 162. ♂ ♀.

Syntomosphyrum orgyiae Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 343.

♀. N. syn.

Biology: Howard, 1897. U. S. Dept. Agr. Div. Ent. Tech. Ser. 5: 38-39.—Driggers,
1931. N. J. Agr. Expt. Sta. Ann. Rpt. 52: 192-193.

ischnopterae (Girault), n. comb. Md. Host: Eggs of *Ischnoptera* sp.

Epompaloides ischnopterae Girault, 1917. Ent. News 28: 257. ♂ ♀.

philodromi (Gahan), n. comb. Ohio. Host: *Philodromus aureolus* (Oliv.).

Tetrastichus philodromi Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 18.
♂ ♀.

Biology: Auten, 1925. Ent. Soc. Amer. Ann. 18: 242.

prionomeri (Girault), n. comb. Tenn. Host: *Odontopus calceatus* Say.
Tetrastichopsis prionomeri Girault, 1916. U. S. Natl. Mus. Proc. 51: 132. ♀.

Genus PAROMPHALOIDOMYIJA Girault

Paromphaloidomyia Girault, 1917. New Chalcid Flies, p. 1.
 Type: *Paromphaloidomyia homeri* Girault. Monob.

homeri Girault. Va.

Paromphaloidomyia homeri Girault, 1917. New Chalcid Flies, p. 1

Genus MELITTOBIA Westwood

Melittobia Westwood, 1847. Ent. Soc. London Trans. 5: Proc. p. xviii, lkv.
 Type: (*Melittobia audouinii* Westwood) = *Cirrospilus acasta*
 Walker. Monob.

Anthophorabia Newport, 1849. Gard. Chron., p. 183.
 Type: (*Anthophorabia retusa* Newport) = *Cirrospilus acasta*
 Walker. Monob.

Aceratoneuromyia Girault, 1917. Insecutor Inscitiae Menstruus 5: 151.
 Type: *Aceratoneuromyia australia* Girault. Monob.

chalybii Ashmead. N. Y., N. J., Pa., Va., La., B. C. Hosts: *Periplaneta americana* (L.); *Saperda candida* F.; *Pikonema alaskensis* (Roh.); *Sphécophaga burra* (Cress.); *Eumenes fraternus* Say; *Chalybion californicum* (Sauss.); *Sceliphron caementarium* (Drury); *Trypoxylon politum* (Say).

Melittobia chalybii Ashmead, 1892. Ent. Soc. Wash. Proc. 2: 231. ♂ ♀.
 Biology: Buckell, 1928. Pan-Pacific Ent. 5: 14-22.—Schmieder, 1933. Biol. Bul. 65: 338-354.—Schmieder, 1938. Biol. Bul. 74: 256-266.—Schmieder, 1939. Ent. News 50: 128-131.—Flanders, 1944. Jour. Econ. Ent. 37: 410.

megachilis (Packard). Vt., N. J., Wis. Hosts: *Monodontomerus* sp.; *Pemphilis* sp.; *Megachile centuncularis* (L.); *Anthophora* sp.; *Ceratina* sp.

Anthophorabia megachilis Packard, 1864. Essex Inst. Proc. 4: 134. ♀.

Melittobia megalochilae Packard, 1905. Spolia Hym., p. 143. Emend.

Chrysocharis aeneus Brues, 1909 (1908). Wis. Nat. Hist. Soc. Bul. 6: 161. ♀.
 Biology: Packard, 1899. Guide to Study of Insects, p. 206.

Genus CRATAEPUS Foerster

Crataepus Foerster, 1878. Naturh. Ver. Rheinlande Verh. 35: 61.
 Type: *Crataepus aquisgranensis* Foerster. Monob.

fletcheri Ashmead. Ont. Hosts: *Orellia florescentiae* (L.); dipterous larvae in *Cirsium arvense*.

Crataepus Fletcherii Ashmead, 1892. Canad. Ent. 24: 309. ♀.

Subfamily ELACHERTINAE

Genus EUPLETRUS Westwood

Euplectrus Westwood, 1832. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 1: 128.

Type: (*Euplectrus maculiventris* Westwood) = [*Pteromalus*] *bicolor* (Swederus). Monob.

Diplectron Dahlbom, 1857. Öfvers. Svenska Vetensk. Akad. Förh. 14: 292 (no species).

Type: *Pteromalus bicolor* Swederus. Desig. by Gahan and Fagan, 1923.

Pachyscapa Howard, 1897 (1896). Linn. Soc. London, Jour., Zool. 26: 159.

Type: *Pachyscapa insularis* Howard. Monob.

Revision: Girault, 1916. Canad. Ent. 48: 265.

bicolor (Swederus). Maine, Mass., N. J. Hosts: *Amathes c-nigrum* (L.); *Epiglaea apiata* Grote.

Pteromalus bicolor Swederus, 1795. Svenska Vetensk. Akad. Handl. 16: 204.
 Biology: Lacroix, 1924. Ent. News 35: 217.—Beckwith, 1929. N. Y. Ent. Soc. Jour. 37: 415.

- catocalae** Howard. N. J., Md., Ill., Mo. Hosts: *Catocala* sp.; geometrid on birch.
Euplectrus catocalae Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 27.
 ♂ ♀.
- comstockii** Howard. Conn. to N. C.; Fla. to Tex. and Kans.; S. Dak., Ariz. Hosts:
Alabama argillacea (Hbn.); *Autographa* sp.; *Heliothis armigera* (Hbn.);
Laphygma frugiperda (A. and S.); *Plathypena scabra* (F.); *Prodenia ornitho-*
galli Guen.; *Trichoplusia ni* (Hbn.); geometrid.
Euplectrus Comstockii Howard, 1880. Canad. Ent. 12: 158. ♂.
 Biology: Schwarz, 1881. Amer. Nat. 15: 61-63.—Howard, 1914 (1913). Ent. Soc.
 Wash. Proc. 15: 161.—Luginbill, 1928. U. S. Dept. Agr. Tech. Bul. 34: 72-
 73.—Bibby, 1942. Jour. Econ. Ent. 35: 943.
- frontalis** Howard. Ont., Que., N. H., N. J., Va., Kans. Hosts: *Amathes c-nigrum*
 (L.); phalaenid larva on walnut; yellow geometrid larva.
Euplectrus frontalis Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 27. ♀.
 Biology: Fyles, 1896. Ent. News 7: 44.
- hircinus** (Say). Ind., Kans.
Eulophus hircinus Say, 1836. Boston Jour. Nat. Hist. 1: 274.
- insularis** (Howard). Fla.
Pachyscapha insularis Howard, 1896. Linn. Soc. London, Jour., Zool. 26: 159.
 ♂.
- junctus** Gahan. Fla. Host: *Isoparce cupressi* (Bdvl.).
Euplectrus junctus Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 30. ♀.
- leucotrophis** Howard. Fla. Hosts: Aretiid larva; phalaenid larva.
Euplectrus leucotrophis Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul.
 5: 26. ♂.
- marginatus** Ashmead. Fla. Host: Phalaenid larva.
Euplectrus (!) marginatus Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc.
 p. xviii. ♂ ♀.
- mellipes** Provancher. Ont., Que. Hosts: *Feralia jocosa* Guen.; *Coleophora laricella*
 (Hbn.).
Euplectrus mellipes Provancher, 1887. Addit. Corr. Faune Ent. Canada
 Hym., p. 207. ♀.
- pachyscapha** Girault. Kans.
Euplectrus pachyscapha Girault, 1917. New Chalcid Flies, p. 2. ♂ ♀.
- plathypenae** Howard. N. J. to Fla., Tex. and Kans. Hosts: *Protoparce sexta*
 (Johan.); *Cirphis unipuncta* (Haw.); *Heliothis armigera* (Hbn.); *Laphygma*
exigua (Hbn.); *L. frugiperda* (A. and S.); *Leucania latiuscula* H.-S.; ?*L.*
multilinea Wlk.; *Peridroma margaritosa* (Haw.); *Plathypena scabra* (F.);
Prodenia ornithogalli Guen.; *P. sunia* (Guen.); *Diatraea saccharalis* (F.).
Euplectrus plathypenae (!) Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul.
 5: 26. ♂ ♀.
 Biology: Vickery, 1929. U. S. Dept. Agr. Tech. Bul. 138: 16-21, 42-45, 55-59.—
 Wilson, 1933. Fla. Ent. 17: 3, 7-12.
- semimarginatus** Girault. Host: *Aphis rumicis* L.
Euplectrus semimarginatus Girault, 1917. Descrip. Hym. Chalcidoid. Vari-
 orum cum Observ. V, p. 1. ♀.

Genus EUPLECTROMORPHA Girault

- Euplectromorpha* Girault, 1913. Queensland Mus. Mem. 2: 276.
 Type: *Euplectromorpha unifasciata* Girault. Orig. desig.

- americana** Girault. Md.
Euplectromorpha americana Girault, 1916. Insector Inscitiae Menstruus
 4: 114. ♂.

Genus DIAULINOPSIS Crawford

- Diaulinopsis* Crawford, 1912. U. S. Natl. Mus. Proc. 43: 182.
 Type: *Diaulinopsis callichroma* Crawford. Monob.

Achrysocharelloidea Girault, 1913. Roy. Soc. So. Australia Trans. 37: 109.
N. syn.

Type: *Achrysocharelloidea pax* Girault. Monob.

albiscapus (Girault), n. comb. Md.

Achrysocharelloidea albiscapus Girault, 1916. Canad. Ent. 48: 336. ♀.

callichroma Crawford. Ind., Fla., Miss., Ariz. Hosts: *Agromyza scutellata* Fall.; *Calycomyza artemisiae* (Kltb.); *Cerodonta dorsalis* Loew; *Liriomyza pusilla* Meig.

Diaulinopsis callichroma Crawford, 1912. U. S. Natl. Mus. Proc. 43: 183.
♂ ♀.

Genus ARDALUS Howard

Ardalus Howard, 1896. Linn. Soc. London, Jour., Zool. 26: 161.

Type: *Ardalus aciculatus* Howard. Desig. by Ashmead, 1904.

Revision: Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 20.

insuetus (Gahan). Fla. Host: *Lerema accius* (A. and S.).

Euplectrus insuetus Gahan, 1914. U. S. Natl. Mus. Proc. 48: 164. ♀.

Biology: Ainslie, 1922. Fla. Ent. 6: 14.

Taxonomy: Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 19-20.

Genus PARAOLINX Ashmead

Paraolinx Ashmead, 1894. Linn. Soc. London, Jour., Zool. 25: 166.

Type: *Paraolinx lineatifrons* Ashmead. Monob.

Leucodesmia Howard, 1895. U. S. Dept. Agr. Insect Life 7: 403.

Type: *Leucodesmia typica* Howard. Monob.

nigriventris (Girault). Va., Fla. Hosts: *Grapholitha molesta* (Busck); *Pyroderces rileyi* (Wlsm.).

Leucodesmia nigriventris Girault, 1916. U. S. Natl. Mus. Proc. 51: 46. ♀.

typica (Howard). Conn., N. J., Fla. Hosts: Coleopterous larva ex stem of *Ambrosia artemisiifoliae*, probably *Dicymolomia julianalis* (Wlkr.); *Laetilia coccidivora* Comst.; ?*Thyridopteryx ephemeraeformis* (Haw.); larva ex fruit cluster of *Rhus*.

Leucodesmia typica Howard, 1895. U. S. Dept. Agr. Insect Life 7: 402.

♂ ♀

Genus STENOMESIUS Westwood

Stenomesius Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 3: 343.

Type: *Stenomesius pulchellus* Westwood. Desig. by Westwood, 1840.

harrisinae Ashmead. N. J., Fla. Host: *Harrisina americana* (Guér.).

Stenomesius harrisinae Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 200. ♀.

Genus MIOTROPIS Thomson

Miotropis Thomson, 1878. Hym. Scand., v. 5, pp. 187, 197.

Type: *Miotropis sulcicristata* Thomson. Desig. by Ashmead, 1904.

Mionotropis Schulz, 1906. Spolia Hym., p. 143. Emend.

Tetrastichomyia Girault, 1916. U. S. Natl. Mus. Proc. 51: 48.

Type: *Miotropis clisiocampae* Ashmead. Monob.

clisiocampae Ashmead. Conn., N. J., Va., W. Va., Ohio, Ill. Hosts: *Achatodes zae* (Harr.); *Malacosoma americanum* (F.); *Diatraea zeacoella* Dyar; *Pyrausta nubilalis* (Hbn.); *Grapholitha molesta* (Busck); *Microplitis gortynae* Riley.

Miotropis clisiocampae Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 341. ♀.

Biology: Balduf, 1929. Ohio Jour. Sci. 29: 227-228.—Proper, 1934. Jour. Agr. Res. 48: 370.

orgyiae (Girault), n. comb. D. C. Host: *Hemerocampa leucostigma* (A. and S.).

Tetrastichomyia orgyiae Girault, 1916. Brooklyn Ent. Soc. Bul. 11: 111.
♀.

silvensis (Girault), n. comb. Md.

Tetrastichomyia silvensis Girault, 1919. Brooklyn Ent. Soc. Bul. 11: 111.
♀.

Genus ELACHERTUS Spinola

Elachertus Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 151.

Type: *Diplolepis lateralis* Spinola. Desig. by Gahan and Fagan, 1923.

Microterus Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 151.

Type: *Diplolepis petiolata* Spinola. Desig. by Gahan and Fagan, 1923.

Elachestus Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 135. Emend.

Elachistus Foerster, 1856. Hym. Stud., v. 2, p. 73. Emend.

Epardalus Girault, 1917. Deser. Hym. Chalcidoid Variorum cum Observ. III, p. 5. N. syn.

Type: *Elachistus cidariae* Ashmead. Orig. desig.

aeneoniger Girault. Ont., N. Y., Ohio. Hosts: *Ancylistis comptana* (Froel.); *Argyrotaenia pinitubana* (Kearf.); *Argyresthia oreasella* Clem.

Elachistus aeneoniger Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 2. ♀.

cacoeciae Howard. N. H., Mass., N. J., Pa., D. C., Va., Mo., Utah. Hosts: *Hyphantria cunea* (Drury); *Heterocampa guttivitta* (Wlkr.); *Schizura unicornis* (A. and S.); *Ancylistis comptana fragariae* (W. and R.); *Archips argyrosbila* (Wlkr.); *A. rosaceana* (Harr.); *Argyrotaenia velutinana* (Wlkr.); *Eulophus orgyiae* (Fitch).

Elachistus cacoeciae Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 28.
♂.

cidariae Ashmead. N. H., Mass. Host: *Lygris diversilineata* (Hbn.).

Elachistus cidariae Ashmead, 1898. Ent. Soc. Wash. Proc. 4: 157. ♀.

Taxonomy: Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 5.

coxalis Howard. Mich., D. C., Calif. Host: *Polychrosis viteana* (Clem.).

Elachistus coxalis Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 28. ♀.

glacialis Ashmead. Alaska.

Elachistus glacialis Ashmead, 1902. Wash. Acad. Sci. Proc. 4: 147. ♂ ♀.

hyphantriae Crawford. N. Y., N. J., Colo. Hosts: *Hyphantria cunea* (Drury); *Hemerocampa plagiata* (Wlkr.).

Elachertus hyphantriae Crawford, 1911. U. S. Natl. Mus. Proc. 39: 622. ♀.

Biology: Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 37, 155.

levana Walker. Fla.

Elachestus Levana Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 27. ♀.

louisianae (Girault), emend, n. comb. La.

Epardalus louisiana Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 5. ♀.

marylandicus Girault. Mass., Conn., N. J., Md. Hosts: *Diacrisia virginica* (F.); *Hyphantria cunea* (Drury).

Elachistus marylandicus Girault, 1916. Brooklyn Ent. Soc. Bul. 11: 112.
♀.

Biology: Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 36, 155.

multidentatus (Girault), n. comb. Fla.

Parentedon multidentatus Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 5. ♀.

pini Gahan. Maine, Vt., Mass., Va., Mich. Hosts: *Dioryctria* sp.; *Rhyacionia frustrana* (Comst.).

Elachertus pini Gahan, 1927. Jour. Agr. Res. 34: 547. ♂ ♀.

Biology: Cushman, 1927. Jour. Agr. Res. 34: 617.

proteoteratis Howard. Conn., N. J., Pa., Mo. Hosts: *Proteoteras aesculana* Riley; *Stenomoma algidella* (Wlkr.).

Elachistus proteoteratis Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 27. ♀.

spilosomatis Howard. N. J. Host: *Diacrisia virginica* (F.).

Elachistus spilosomatis Howard, 1891. U. S. Dept. Agr. Insect Life 4: 195.

viridaeneus (Provancher), n. comb. Ont.

Euplectrus viridaeneus Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 207; errata. ♀.

Genus HYSSOPUS Girault

Hyssopus Girault, 1916. Canad. Ent. 48: 115.

Type: *Hyssopus thymus* Girault. Monob.

Hyssopiscus Ghesquière, 1946. Rev. Zool. Bot. Africanes 34: 370. N. name.

benefactor (Crawford), n. comb. N. Y. Host: *Petrova comstockiana* (Fern.).

Elachertus benefactor Crawford, 1912. U. S. Natl. Mus. Proc. 43: 182. ♀.

evetriae (Girault). Minn., Idaho, Oreg. Hosts: ?*Barbara colfaxiana colfaxiana* (Kearf.); *Barbara colfaxiana taxifoliella* (Busck); *Melissopus latiferreanus* (Wlsm.); *Petrova albicapitana* Busck.

Elachistus evetriae Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 1. ♀.

Biology: Dohanian, 1942. Jour. Econ. Ent. 35: 837, 840.

johannseni (Crawford), n. comb. Maine.

Elachertus johannseni Crawford, 1912. U. S. Natl. Mus. Proc. 43: 181. ♀.

novus Girault. Calif.

Hyssopus novus Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 3. ♀.

rhyacioniae Gahan. Va. Host: *Rhyacionia frustrana* (Comst.).

Hyssopus rhyacioniae Gahan, 1927. Jour. Agr. Res. 34: 546. ♂ ♀.

Biology: Cushman, 1927. Jour. Agr. Res. 34: 617.—Underhill, 1943. Va. Agr. Expt. Sta. Bul. 349: 12.

sanninoideae (Girault). Conn., Va., Ark. Hosts: *Sanninoidea exitiosa* (Say); *Thammosphecia scitula* (Harr.).

Elachistus sanninoideae Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 85. ♂ ♀.

Biology: Underhill, 1935. Jour. Econ. Ent. 28: 396.

thymus Girault. Conn., Va., Nebr., Calif. Hosts: *Dioryctria xanthoebares* Dyar; *Rhyacionia buoliana* (Schiff.); *R. frustrana* (Comst.).

Hyssopus thymus Girault, 1916. Canad. Ent. 48: 115. ♀.

Biology: Slate, 1936. Conn. Agr. Expt. Sta. Bul. 381: 181.—Friend, Plumb, and Hicoek, 1938. Jour. Econ. Ent. 31: 511.

Genus PSEUDOLYNX Girault

Pseudolynx Girault, 1916. Ent. News 27: 152.

Type: *Pseudolynx io* Girault. Orig. desig.

flavimaculata Girault. Minn.

Pseudolynx flavimaculatus Girault, 1916. Ent. News 27: 153. ♀.

io Girault. Mass.

Pseudolynx io Girault, 1916. Ent. News 27: 152. ♀.

marylandia Girault, emend. Md.

Pseudolynx marilandia Girault, 1917. Chalcidoidea Nova Marilandensis [I], p. 1. ♀.

Genus MIROLYNX Girault

Mirolynx Girault, 1916. U. S. Natl. Mus. Proc. 51: 131.

Type: *Mirolynx flavitibiae* Girault. Monob.

flavitibiae Girault. Calif.

Mirolynx flavitibiae Girault, 1916. U. S. Natl. Mus. Proc. 51: 131. ♂ ♀.

Genus GROTIUSOMYIA Girault

Grotiusomyia Girault, 1917. Psyche 24: 95.

Type: *Grotiusomyia flavicornis* Girault. Monob.

flavicornis Girault. D. C., N. C. Host: Pyralid leaf miner on oak.

Grotiosomyia flavicornis Girault, 1917. Psyche 24: 95. ♀.

Taxonomy: Girault, 1918. Ent. News 29: 126.

Genus APTEROLOPHUS Gahan

Apterolophus Gahan, 1919. Ent. Soc. Wash. Proc. 21: 3.

Type: *Apterolophus pulchricornis* Gahan. Monob.

pulchricornis Gahan. N. Y. Host: ?*Proteides clarus* (Cram.).

Apterolophus pulchricornis Gahan, 1919. Ent. Soc. Wash. Proc. 21: 3. ♀

Genus GIRAULTIA Gahan and Fagan

Cirrospilopsis Girault, 1915. Queensland Mus. Mem. 3: 263. Preocc.

Type: *Cirrospilopsis nigrivariegatus* Girault. Orig. desig.

Giraultia Gahan and Fagan, 1923. U. S. Natl. Mus. Bul. 124: 66. N. name.

Type: *Cirrospilopsis nigrivariegatus* Girault. Autob.

fuscipennis (Girault), n. comb. Md.

Cirrospilopsis fuscipennis Girault, 1916. Ent. Soc. Amer. Ann. 9: 293. ♀.

metallicus (Girault), n. comb. Md.

Cirrospilopsis metallicus Girault, 1917. Psyche 24: 100. ♀.

sapientia (Girault), n. comb. D. C.

Cirrospilopsis sapientia Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 13. ♀.

Genus CIRROSPILOIDEUS Ashmead

Cirrospiloideus Ashmead, 1904. Carnegie Mus. Mem. 1: 354, 355.

Type: *Miotropis platynotae* Howard. Monob.

Alophus Ashmead, 1904. Carnegie Mus. Mem. 1: 353, 519. Preocc. N. syn.

Type: *Alophus flavus* Ashmead. Orig. desig.

Alophomyia Ashmead, 1904. Ent. Soc. Wash. Proc. 6: 126. N. name. N. syn.

Diglyphomorphomyia Girault, 1913. Queensland Mus. Mem. 2: 281.

Type: *Diglyphomorphomyia nigriscutellum* Girault. Monob.

Sympiesomorphelleus Girault, 1913. Arch. f. Naturgesch. 79A (6): 75.

Type: *Sympiesomorphelleus suttneri* Girault. Monob.

bicoloriceps (Girault), n. comb. La. Host: *Keiferia glochinella* (Zell.).

Sympiesomorphelleus bicoloriceps Girault, 1919. Ent. Soc. Amer. Ann. 9: 302. ♀.

californicus (Girault), n. comb. Calif.

Sympiesomorphelleus californicus Girault, 1916. Jour. Ent. and Zool. 8: 119. ♀.

johnsoni Girault. Maine, D. C., Ill. Host: ?*Carpocapsa pomonella* (L.).

Cirrospiloideus johnsoni Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 7. ♀.

mediolineatus Girault. Md.

Cirrospiloideus mediolineatus Girault, 1917. Chalcidoidea Nova Marilandensis II, p. 2. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 198, ♀.

nigriceps (Girault). Tex.

Sympiesomorphelleus nigriceps Girault, 1916. U. S. Natl. Mus. Proc. 51: 44. ♀.

nigriprothorax (Girault). Kans.

Sympiesomorphelleus nigriprothorax Girault, 1916. U. S. Natl. Mus. Proc. 51: 131. ♀.

platynotae (Howard). Fla. Host: *Platynota rostrana* (Wlkr.).

Miotropis platynotae Howard, 1885. In Hubbard, Insects Affecting the Orange, p. 217. ♂ ♀.

seminigriventris Girault. Pa., Ohio. Host: *Eurukuttarus confederata* (Grote).

Cirrospiloideus seminigriventris Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 1. ♀.

Genus CIRROSPILUS Westwood

- Cirrospilus* Westwood, 1832. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 1: 128.
Type: *Cirrospilus elegantissimus* Westwood. Monob.
- Pseudiglyphomyia* Girault, 1913. Queensland Mus. Mem. 2: 267.
Type: *Pseudiglyphomyia biguttata* Girault. Orig. desig.
- Atoposomoidea* Howard, 1910. U. S. Dept. Agr. Bur. Ent. Tech. Bul. 19: 9 N. syn.
Type: *Atoposomoidea ogimae* Howard. Monob.
- americanus* (Girault), n. comb. Ohio.
Pseudiglyphomyia americana Girault, 1916. U. S. Natl. Mus. Proc. 51: 43, 45, 48. ♀.
- cinctithorax* (Girault). Maine, Ill., Wis. Hosts: *Coleophora pruniella* Clem.; *C. salmani* Heinr.; *Phyllocnistis populiella* Chamb.; *Phyllonorycter tremuloidiella* (Braun); *Bucculatrix canadensisellea* Chamb.; *Heterarthrus nemoratus* (Fall.); ?*Apanteles melanoscelus* (Ratz.); *Meteorus versicolor* (Wesm.).
Pseudiglyphomyia cinctithorax Girault, 1916. U. S. Natl. Mus. Proc. 51: 45. ♀.
- Biology: Proper, 1934. Jour. Agr. Res. 48: 366.—Doner, 1936. Ent. Soc. Amer. Ann. 29: 226.
- columbiae* (Girault), emend., n. comb. D. C.
Pseudiglyphomyia columbia Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, pp. 6, 7. ♀.
- coptodiscae* (Girault). New England, Ky. Hosts: *Coptodisca splendoriferella* (Clem.); ?*Apanteles melanoscelus* (Ratz.).
Pseudiglyphomyia coptodiscae Girault, 1916. Canad. Ent. 48: 266. ♂ ♀.
- eunapius* Walker. Fla.
Cirrospilus Eunapius Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 27. ♀.
- flavicinctus* Riley. Maine to D. C., Mo., Kans. and north to Minn.; Wash. Hosts: *Archips semifera* (Wlkr.); *Coptodisca splendoriferella* (Clem.); *Coleophora malivorella* Riley; *C. pruniella* Clem.; *C. salmani* Heinr.; *Bucculatrix pomifoliella* Clem.; ?*Tischeria malifoliella* Clem.; *Heterarthrus nemoratus* (Fall.); ?*Apanteles melanoscelus* (Ratz.).
Cirrospilus flavicinctus Riley, 1883. In Lintner, First Ann. Rpt. Injurious Ins. N. Y., p. 159. ♂ ♀.
- Cirrospilus flavomaculatus* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 341. ♀.
- Biology: [Christensen], 1934. Wis. Agr. Expt. Sta. Bul. 428: 101.—Doner, 1936. Ent. Soc. Amer. Ann. 29: 233-234.
- flavifacies* (Girault), n. comb. Calif.
Pseudiglyphomyia flavifacies Girault, 1916. U. S. Natl. Mus. Proc. 51: 43. ♀.
- flavoviridis* Crawford. Utah, Nev. Hosts: *Agromyza parvicornis* Loew; *A. pusilla* Meig.; *A. scutellata* Fall.; *Cerodonta femoralis* Meig.
Cirrospilus flavoviridis Crawford, 1913. U. S. Natl. Mus. Proc. 45: 317. ♂ ♀.
- giraulti* Peck, n. name. U. S. Host: *Bucculatrix* sp.
Pseudiglyphomyia pulchra Girault, 1916. U. S. Natl. Mus. Proc. 51: 45. ♀.
Preocc. by Masi, 1911.
- inimicus* Gahan. Ill. Host: *Gambrus extrematis* (Cress.).
Cirrospilus inimicus Gahan, 1934. Ent. Soc. Wash. Proc. 36: 123. ♂ ♀.
Biology: Marsh, 1938. N. Y. Ent. Soc. Jour. 46: 27-29.
- marylandi* Girault. Conn., Md., N. C. Hosts: *Coptodisca* sp.; ?*Apanteles melanoscelus* (Ratz.).
Cirrospilus marilandi Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 4. ♀.
- Cirrospilus marylandi* Britton, 1920. Conn. State Geol. and Nat. Hist. Survey Bul. 31: 324. Emend.
- marylandicus* (Girault), emend. n. comb. Md.
Pseudiglyphomyia marilandica Girault, 1917. Psyche 24: 91. ♀.

- niger** Howard. N. J. Hosts: *Vanessa atalanta* (L.); *Eulophus* sp.
Cirrospilus niger Howard, 1889. In Scudder, Butterflies of Eastern U. S. and Canada, p. 1872. ♂ ♀.
- nigrivariiegata** (Girault). Ind., Iowa, Kans., S. Dak. Hosts: *Callisto geminatella* (Pack.); *Tischeria malifoliella* Clem.
Pseudiglyphomyia nigrivariiegata Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 7. ♀.
- ocellatus** Girault. Que., Conn., Ill. Host: *Bucculatrix canadensisella* Chamb.
Cirrospilus ocellatus Girault, 1917. U. S. Natl. Mus. Proc. 53: 446. ♀.
- ovisugosus** Crosby and Matheson. N. Y. Host: *Poecilocapsus lineatus* (F.).
Cirrospilus ovisugosus Crosby and Matheson, 1915. Canad. Ent. 47: 181. ♂ ♀.
- pictus** (Nees). Ont., Que., Maine. Hosts: *Coleophora laricella* (Hbn.). *Fenusia pusilla* (Klug); *Heterarthrus nemoratus* (Fall.).
Eulophus pictus Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 165. ♂ ♀.
 Biology: Dowden, 1941. U. S. Dept. Agr. Tech. Bul. 757: 8-9, 37-41. ♀.
 Taxonomy: Ferrière, 1933. In Thorpe, Bul. Ent. Res. 24: 289-290.
- pulcheria** Girault. Kans.
Cirrospilus pulcheria Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 8. ♀.
 Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 195.
- purpureus** Ashmead. Fla.
Cirrospilus purpureus Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 133. ♀.
- unguttatipennis** (Girault), n. comb. Calif.
Pseudiglyphomyia ungtuttatipennis Girault, 1916. Jour. Ent. and Zool. 8: 120. ♀.

Genus ZAGRAMMOSOMA Ashmead

- Hippocephalus** Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VII. Preoce.
 Type: *Hippocephalus multilineatus* Ashmead. Monob.
- Zagrammosoma** Ashmead, 1904. Carnegie Mus. Mem. 1: 354. N. name.
- Zagrammatosoma** Schulz, 1906. Spolia Hym., p. 142. Emend.
- Atoposoma** Masi, 1907. Lab. Zool. Gen. e. Agr. Portici Bol. 1: 276.
 Type: *Atoposoma variegatum* Masi. Monob.
- americanum** Girault. Colo.
Zagrammosoma americana Girault, 1916. U. S. Natl. Mus. Proc. 51: 125, 126. ♀.
- centrolineatum** Crawford. Calif. Hosts: *Cameraria mediadorsella* (Braun); *Gracilaria ?alnivorella elongella* (L.).
Zagrammosoma centrolineata Crawford, 1913. U. S. Natl. Mus. Proc. 45: 256. ♀.
- flavolineatum** Crawford. Colo., Calif. Host: *Gnorimoschema operculella* (Zell.).
Zagrammosoma flavolineata Crawford, 1913. U. S. Natl. Mus. Proc. 45: 255. ♀.
- interlineatum** Girault. D. C.
Zagrammosoma interlineata Girault, 1916. U. S. Natl. Mus. Proc. 51: 125. ♀.
- mirum** Girault. Calif.
Zagrammosoma mira Girault, 1916. Jour. Ent. and Zool. 8: 119. ♀.
- multilineatum multilineatum** (Ashmead). Md., D. C., S. C., W. Va., Fla., Ohio, Ind., La., Kans. Hosts: ?*Microrhopala xerene* (Newm.); ?*Exoteleia pinifoliella* (Chamb.); *Callisto geminatella* (Pack.); *Phyllocnistis magnoliella* Ashm.; ?*Cameraria hamadryadella* (Clem.); *Lithocolletis* sp.; ?*L. ostensackenella* (Fitch); *Tischeria malifoliella* Clem.; *Agromyza parvicornis* Loew; *A. pusilla* Loew; *A. scutellata* Fall.; *Phytomyza aquilegiae* Hardy.
Hippocephalus multilineatus Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VII. ♂ ♀.
 Biology: Phillips, 1914. Jour. Agr. Res. 2: 27.

- multilineatum puniceum** Girault. D. C., Ill. Host: *Tischeria malifoliella* Clem.
Zagrammosoma multilineata var. *punicea* Girault, 1911. Arch. f. Natur-
 gesch. 77 (1), sup. 2: 123. ♀.
- nigrolineatum** Crawford. Maine, Calif. Hosts: ?*Aleyrodes* sp.; *Argyresthia thuiella*
 (Pack.).
Zagrammosoma nigrolineata Crawford, 1913. U. S. Natl. Mus. Proc. 45:
 257. "♀" = ♂.
- sanguineum** Girault. Colo.
Zagrammosoma sanguinea Girault, 1916. U. S. Natl. Mus. Proc. 51: 133.
 ♀.

Genus STENOMESIOIDEUS Ashmead

- Stenomesioideus* Ashmead, 1904. Carnegie Mus. Mem. 1: xi (emend.), 355
 (*Stenomesioidea*), 389 (*Stenomesioideus*).
 Type: *Stenomesioideus melleus* Ashmead. Monob.
- Stenomesioidea* Girault, 1916. U. S. Natl. Mus. Proc. 51: 43.
 Type: *Stenomesioidea mellea* Girault. Monob.
- melleus** Ashmead. No. Amer.
Stenomesioideus melleus Ashmead, 1904. Carnegie Mus. Mem. 1: xi, 355.
 ♀.
- Stenomesioidea mellea* Girault, 1916. U. S. Natl. Mus. Proc. 51: 44. ♀.

Subfamily ENTEDONTINAE

Genus ASTICHUS Foerster

- Astichus* Foerster, 1856. Hym. Stud., v. 2, pp. 78, 80.
 Type: *Euderus arithmeticus* Foerster. Monob.
- arizonensis** Ashmead. Ariz.
Astichus arizonensis Ashmead, 1888. Canad. Ent. 20: 101. ♂.
- auratus** Ashmead. Fla. Host: Gall of *Neuroterus minutissimus* Ashm.
Astichus auratus Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 200. ♀.
- pulchrilineatus** Gahan. Va., ?N. Y. Hosts: *Brachycis brevicollis* Casey; *B.* sp.;
Ceracis sp.
Astichus pulchrilineatus Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 28.
 ♂ ♀.

Genus EUOPHTHALMOMYIA Ashmead

- Euophthalmomyia* Ashmead, 1904. Carnegie Mus. Mem. 1: 339, 340.
 Type: *Euophthalmomyia pallidipes* Ashmead. Monob.
- pallidipes** Ashmead. D. C.
Euophthalmomyia pallidipes Ashmead, 1904. Carnegie Mus. Mem. 1: 339,
 375. ♀.

Genus OMPHALE Haliday

- Omphale* Haliday, 1833. Ent. Mag. 1: 339.
 Type: *Omphale salicis* Haliday. Monob.
- Smaragdites* Westwood, 1833. Mag. Nat. Hist. 6: 419.
 Type: (*Smaragdites admirabilis* Westwood) = *Omphale salicis*
 Haliday. Monob.
- bicincta** Ashmead. W. Va., Fla. Host: ?*Chalepus dorsalis* Thunb.
Omphale bicincta Ashmead, 1888. Canad. Ent. 20: 103. ♂.

Genus HUBBARDIELLA Ashmead

- Hubbardiella* Ashmead, 1904. Carnegie Mus. Mem. 1: 339, 340.
 Type: *Hubbardiella arizonensis* Ashmead. Monob.
- Miromphalomyia* Girault, 1916. Entomologist 49: 249.
 Type: (*Miromphalomyia perilampoides* Girault) = *Hubbardiella*
arizonensis Ashmead. Monob.

arizonensis Ashmead. Ariz.

Hubbardiella arizonensis Ashmead, 1904. Carnegie Mus. Mem. 1: 339, 378.

♀.

Miromphalomyia perilampoides Girault, 1916. Entomologist 49: 250. ♀.

Genus CLOSTERO CERUS Westwood

Closterocerus Westwood, 1833. Mag. Nat. Hist. 6: 419.

Type: *Closterocerus trifasciatus* Westwood. Monob.

Revision: Crawford, 1912. U. S. Natl. Mus. Proc. 43: 175.

cinctipennis Ashmead. Que., Conn., N. J., D. C., Fla., Mo., Iowa. Hosts: *Brachys aerosus* Melsh.; *B. ovatus* Web.; *Cameraria hamadryadella* (Clem.); *C. ulmella* (Chamb.); *Bucculatrix canadensisella* Chamb.; *Nepticula gossypii* F. and L.; *Caliroa cerasi* (L.); *Neodiprion rugifrons* Midd.; *N. swainei* Midd.

Closterocerus cinctipennis Ashmead, 1888. Canad. Ent. 20: 104. ♂.

Biology: Webster, 1911. Ent. Soc. Amer. Ann. 4: 185.—Weiss and Nicolay, 1918. Psyche 25: 128–130.—Schedl, 1939. Seventh Internatl. Kong. Ent. Verh. 3, pp. 2066–2090.

tau Girault. Calif.

Closterocerus tau Girault, 1917. Psyche 24: 101. ♀.

tricinctus (Ashmead). Ont., Maine to Va.; Mich., Ind., Iowa, Kans. Hosts: *Microrhopala xerene* (Newm.); *Cosmopteryx* sp. in *Carex vesicaria*; *Recurvaria thujaella* Kearf.; *Argyresthia thuiella* (Pack.); *Coptodisca splendoriferella* (Clem.); *Cameraria guttifinitella* (Clem.); *Phyllocnistis populiella* Chamb.; *Lithocolletis* sp. on sycamore; *L. lucetiella* Clem.; *L. tremuloidiella* Braun; *Tischeria malifoliella* Clem.; *Agromyza melampyga* Loew; *A. parvicornis* Loew; *Phytomyza aquilegiae* Hardy; *P. ilicis* Curtis; *P. obscurella* Fall.

Pleurotropis tricincta Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VIII. ♀.

utahensis californicus Girault. Calif.

Closterocerus utahensis var. *californicus* Girault, 1916. U. S. Natl. Mus. Proc. 51: 46. ♀.

utahensis cincinnatus Girault. Ohio. Host: Cynipid.

Closterocerus utahensis cincinnatus Girault, 1916. U. S. Natl. Mus. Proc. 51: 47. ♂.

utahensis utahensis Crawford. Conn., Md., Utah, Ariz., Calif. Hosts: *Symydobius chrysolepis* Swain; *Bucculatrix thurberiella* Busck; *Agromyza parvicornis* Loew; *A. scutellata* Fall.; *Liriomyza pusilla* Meig.; *Phytomyza aquilegiae* Hardy; *Fenusa pusilla* (Klug).

Closterocerus utahensis Crawford, 1912. U. S. Natl. Mus. Proc. 43: 175. ♀.

Biology: Clancy, 1946. Jour. Econ. Ent. 39: 328.

winnemanae Crawford. Md. Host: *Winnemana argei* Cwfd.

Closterocerus winnemanae Crawford, 1912. U. S. Natl. Mus. Proc. 43: 176. ♂ ♀.

Genus EPRHOPALOTUS Girault

Ephopalotus Girault, 1916. U. S. Natl. Mus. Proc. 51: 49.

Type: *Ephopalotus purpureithorax* Girault. Monob.

purpureithorax Girault. U. S. Host: *Cynips* sp. from gall of *Cincticornia pilulae* Walsh.

Ephopalotus purpureithorax Girault, 1916. U. S. Natl. Mus. Proc. 51: 49. ♀.

Genus EMERSONELLA Girault

Emersonella Girault, 1916. Soc. Ent. 31: 36.

Type: *Emersonella lemae* Girault. Monob.

Revision: Girault, 1922. No. Amer. Spp. of *Emersonella* and *Entedon*. One page.

lemae Girault. D. C., Va. Egg host: *Lema trilineata* (Oliv.).

Emersonella lemae Girault, 1916. Soc. Ent. 31: 36. ♂ ♀.

Biology: Chittenden, 1924. Ent. Soc. Wash. Proc. 26: 46.

- niveipes* Girault. N. Y., D. C. Host: Eggs of *Chelymormpha cassidea* (F.).
Emersonella niveipes Girault, 1917. Descr. Hym. Chalcidoid. Variorum
 cum Observ. III, p. 3. ♀.

Genus EUDERUS Haliday

- Euderus* Haliday, 1844 (1843). Ent. Soc. London Trans. 3: 298.
 Type: *Entedon amphis* Walker. Monob.
- Secodella* Girault, 1913. Arch. f. Naturgesch. 79A (6): 48.
 Type: *Secodella lineata* Girault. Monob.
- Omphalomorpha* Girault, 1913. Arch. f. Naturgesch. 79A (6): 103.
 Type: *Omphalomorpha viridis* Girault. Monob.
- Allomphale* Silvestri, 1914. Lab. Zool. Gen. e Agr. Portici Bol. 9: 217.
 Type: *Allomphale cavasolae* Silvestri. Monob.
- Revisions: Crawford, 1915. Ent. Soc. Wash. Proc. 17: 142 (*Secodella*).—Girault, 1924.
 Insecutor Insectiae Menstruus 12: 94.
- acrobasis* (Crawford), n. comb. Ga., Fla., Idaho. Hosts: *Acrobasis caryae* Grote;
A. juglandis (LeB.); *Carpocapsa pomonella* (L.).
Secodella acrobasis Crawford, 1915. Ent. Soc. Wash. Proc. 17: 143. ♂ ♀.
 Biology: Wakeland, 1929. Jour. Econ. Ent. 22: 985.
- amphis* (Walker). Ont. Host: *Coleophora laricella* (Hbn.).
Entedon Amphis Walker, 1839. Monog. Chalciditum, v. 1, p. 106. ♀.
 Taxonomy: Graham, 1944. Ent. Soc. Ontario Ann. Rpt. 74: 49.
- argyresthiae* (Crawford). N. Y., Minn., Wash. Hosts: *Cylindrocopturus furnissi*
 Buch.; *Argyresthia alternatella* Kearf.
Secodella argyresthiae Crawford, 1915. Ent. Soc. Wash. Proc. 17: 100. ♂ ♀.
 Biology: Furniss, 1942. Jour. Econ. Ent. 35: 858.
- crawfordi* Peck, n. name. No. Amer.
Secodella viridis Crawford, 1915. Ent. Soc. Wash. Proc. 17: 144. ♂ ♀.
 Preoc. by Girault, 1913.
- cushmani* (Crawford), n. comb. Pa., Wis., Calif. Hosts: *Polychrosis viteana*
 (Clem.); *Anarsia lineatella* Zell.; *Argyresthia thuiella* (Pack.); *Coleophora*
pruniella Clem.
Secodella cushmani Crawford, 1915. Ent. Soc. Wash. Proc. 17: 142. ♂ ♀.
 Biology: Keifer and Jones, 1933. Calif. Dept. Agr. Monthly Bul. 22: 388.
- elongatus* Ashmead. Maine, N. H., Conn., Fla. Hosts: *Attelabus rhois* Boh.
Euderus elongatus Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 201. ♀.
 Biology: Frost, 1908. Psyche 15: 29.
- herillus* (Walker). Fla. Host: *Desmia funeralis* (Hbn.).
Entedon (Euderus) Herillus Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 23.
 ♀.
- lividus* (Ashmead), n. comb. N. H., N. J., D. C., Va., Fla., Ill., Calif. Hosts:
Ceutorhynchus rapae Gyll.; *Anarsia lineatella* Zell.; *Monoptilota pergratialis*
 (Hulst).
Oxyomorpha (!) livida Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 135. ♀.
 Biology: Duruz, 1923. Calif. Agr. Expt. Sta. Bul. 355: 436-437.—Lamiman, 1937.
 Calif. Agr. Expt. Sta. Expt. Cir. 103: 75.
- marylandicus* Girault, emend. Md.
Euderus marilandicus Girault, 1917. Chalcidoidea Nova Marilandensis II,
 p. 1. ♀.
- multilineatus* (Girault), n. comb. U. S.
Secodes multilineatus Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 85. ♀.
- rugosus rubriscapus* (Girault), n. comb. Md.
Secodella rugosus var. *rubriscapus* Girault, 1916. Soc. Ent. 31: 36. ♀.
- rugosus rugosus* (Crawford), n. comb. N. Y.
Secodella rugosus Crawford, 1915. Ent. Soc. Wash. Proc. 17: 143. ♀.
- subopacus* (Gahan). Ont., Va., Ohio, La., Calif. Hosts: *Cylindrocopturus eatoni*
 Buch.; *Grapholitha molesta* Busck; *Rhyacionia buoliana* (Schiiff.); *R. frustrana*
 (Comst.).
Secodella subopaca Gahan, 1917. Jour. Agr. Res. 34: 548. ♂ ♀.
 Biology: Cushman, 1927. Jour. Agr. Res. 34: 617.

Genus CHRYSOCHARIS Foerster

Chrysocharis Foerster, 1856. Hym. Stud., v. 2, pp. 79, 82.

Type: *Chrysocharis femoralis* Foerster. Desig. by Ashmead, 1904.

Omphalchrysocharis Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 3.

Type: *Omphalchrysocharis orientalis* Girault. Orig. desig.

Species of this genus attack lepidopterous and dipterous leaf miners.

ainsliei Crawford. Conn., Wis., Utah, Ariz., Calif., Idaho, Wash. Hosts: *Coleophora pruniella* Clem.; *Agromyza parvicornis* Loew; *A. pusilla* Meig.; *A. scutellata* Fall.

Chrysocharis ainsliei Crawford, 1912. U. S. Natl. Mus. Proc. 43: 174. ♂ ♀. Biology: Webster and Parks, 1913. Jour. Agr. Res. 1: 79-80.

compressicornis Ashmead. Ohio. Host: ?Galls of *Aulax flavicornis* Ashm. [nom. nud.] on *Lactuca*.

Chrysocharis compressicornis Ashmead, 1894. Cincinnati Soc. Nat. Hist. Jour. 17: 53. ♀.

gemma (Walker). B. C. Host: *Phytomyza ilicis* (Curt.).

Entedon gemma Walker, 1839. Monog. Chalciditum, v. 1, p. 53. ♂.

Biology: Cameron, 1939. Bul. Ent. Res. 30: 178-186.—Downes and Anderson, 1940. Jour. Econ. Ent. 33: 948.

laricinellae (Ratzeburg). Maine, Vt., N. H., Mass., N. Y. Hosts: *Coleophora laricella* (Hbn.); *Fenusa pusilla* (Klug); *F. ulmi* Sund.; *Heterarthrus nemoratus* Fall.

Entedon laricinellae Ratzeburg, 1848. Ichn. d. Forstins., v. 2, p. 161. ♂. Biology: Thorpe, 1933. Bul. Ent. Res. 24: 277-280.—Dowden, 1941. U. S. Dept. Agr. Tech. Bul. 757: 9-11, 44-49.—Graham, 1949. Ent. Soc. Ontario Ann. Rpt. 79: 45-50.

Taxonomy: Ferrière, 1933. In Thorpe, Bul. Ent. Res. 24: 290.

livida Ashmead. N. Y., Fla., Ill., Mich. Hosts: *Lecanium corni* Bouché; *Oberea ulmicola* Chitt.

Chrysocharis lividus Ashmead, 1894. Linn. Soc. London, Jour., Zool. 25: 175. ♂ ♀.

Taxonomy: Forbes, 1908. Ill. State Ent. Rpt. 24: 128-129.

mallochi Gahan. Conn., Ill. Host: *Agromyza felti* Mall.

Chrysocharis (!) *mallochi* Gahan, 1917. U. S. Natl. Mus. Proc. 53: 213. ♂ ♀.

orientalis (Girault), n. comb. N. H.

Omphalchrysocharis orientalis Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 3. ♀.

oscinidis Ashmead. Kans. Host: Dipterous mines in cottonwood leaves.

Chrysocharis oscinidis Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VIII. ♂.

Taxonomy: Girault, 1916. U. S. Natl. Mus. Proc. 51: 42.

pallipes (Gahan). Conn., Md., Ohio. Hosts: *Rhynchaenus pallicornis* (Say); *Phytophaga destructor* (Say); *Phytomyza aquilegiae* Hardy; *Fenusa pusilla* (Klug).

Derostenus pallipes Gahan, 1917. U. S. Natl. Mus. Proc. 53: 214. ♀.

Taxonomy: Gahan, 1932. Ent. Soc. Amer. Ann. 25: 748.

parksii Crawford. N. Y., Utah, Ariz., Calif., Idaho. Hosts: *Agromyza parvicornis* Loew; *A. pusilla* Meig.; *A. texana* Mel.; *Cerodonta femoralis* Meig.; *Phytomyza aquilegiae* Hardy; *P. chrysanthemi* (Kowarz); *P. obscurella* Fall.

Chrysocharis parksii Crawford, 1912. U. S. Natl. Mus. Proc. 43: 173. ♂ ♀. Biology: Webster and Parks, 1913. Jour. Agr. Res. 1: 79-80.

petiolata (Girault), n. comb. D. C. Host: Chloropid on daisy.

Omphalchrysocharis petiolatus Girault, 1918. Ent. News 29: 131. ♂ ♀.

thomsoni (Crawford), n. comb. Ind. Host: *Agromyza angulata* Loew.

Entedon thomsoni Crawford, 1913. U. S. Natl. Mus. Proc. 45: 316. ♂ ♀.

viridis Provancher. Ont.

Chrysocharis viridis Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 209. ♀.

Genus ACHRYSOCHAROIDES Girault

Achrysocharoides Girault, 1913. Roy. Soc. So. Australia Trans. 37: 72.

Type: *Chrysocharis sarcophagus* Girault. Monob.

Neoderostenus Girault, 1913. Queensland Mus. Mem. 2: 144. N. syn.

Type: *Neoderostenus australiensis* Girault. Monob.

bipunctatus (Girault), n. comb. Maine, Md. Host: *Lithocolletis tremuloidiella* Braun.

Neoderostenus bipunctatus Girault, 1916. Canad. Ent. 48: 409. ♀.

guizoti Girault. Ind.

Achrysocharoides guizoti Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 11. ♀.

titiani Girault. Ind.

Achrysocharoides titiani Girault, 1916. U. S. Natl. Mus. Proc. 51: 42. ♀.

Genus RHICNOPELTOMYIA Girault

Rhcnopeltomyia Girault, 1913. Queensland Mus. Mem. 2: 174.

Type: *Rhcnopeltomyia washingtoni* Girault. Orig. desig.

achrysocharoides Girault. D. C.

Rhcnopeltomyia achrysocharoides Girault, 1916. U. S. Natl. Mus. Proc. 51: 39. ♀.

belisarii Girault. East. U. S.

Rhcnopeltomyia belisarii Girault, 1917. New Chalcid Flies, p. 4.

carlylei carlylei Girault. Md.

Rhcnopeltomyia carlylei Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 6. ♀.

carlylei poeta Girault. Md.

Rhcnopeltomyia carlylei var. *poeta* Girault, 1920. U. S. Natl. Mus. Proc. 58: 197. ♀.

marylandensis Girault. Md.

Rhcnopeltomyia marylandensis Girault, 1916. U. S. Natl. Mus. Proc. 51: 39. ♀.

marylandi Girault. Md.

Rhcnopeltomyia marylandi Girault, 1917. New Chalcid Flies, pp. 4, 5.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 196. ♀.

scutellata Girault. D. C.

Rhcnopeltomyia scutellata Girault, 1916. U. S. Natl. Mus. Proc. 51: 40. ♀.

viridiscutellum Girault. D. C.

Rhcnopeltomyia viridiscutellum Girault, 1916. U. S. Natl. Mus. Proc. 51: 40. ♀.

Genus RHICNOPELTOIDEA Girault

Rhcnopeltoidea Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 3.

Type: *Rhcnopeltoidea amsterdamensis* Girault. Monob.

amsterdamensis Girault. Maine, N. Y., Ind. Hosts: *Cameraria corylisella* (Chamb.); *C. guttifinitella* (Clem.); *C. picturatella* Braun.

Rhcnopeltoidea amsterdamensis Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 3. ♀.

Genus CARLYLEIA Girault

Carlyleia Girault, 1917. Ent. News 28: 20.

Type: *Carlyleia marylandica* Girault. Monob.

marylandica Girault, emend. Md.

Carlyleia marilandica Girault, 1917. Ent. News 28: 20. ♀.

Genus **CHRYSOCHAROMYIA** Girault

Chrysocharomyia Girault, 1915. Queensland Mus. Mem. 3: 207.

Type: *Chrysocharomyia elongata* Girault. Orig. desig.

eleganta Girault. Md.

Chrysocharomyia eleganta Girault, 1917. Ent. News 28: 21. ♀.

elegantissima Girault. N. Y. Host: *Phytomyza obscurella* Fall.

Chrysocharomyia elegantissima Girault, 1917. Deser. Stellarum Nov., p. 20.
♀.

occidentalis Girault. Calif.

Chrysocharomyia occidentalis Girault, 1916. U. S. Natl. Mus. Proc. 51: 41.
♀.

omari Girault. Pa.

Chrysocharomyia omari Girault, 1917. Deser. Hym. Chalcidoid. Variorum
cum Observ. III, p. 9. ♀.

splendidissima Girault. Pa.

Chrysocharomyia splendidissima Girault, 1917. Deser. Stellarum Nov.,
p. 20. ♀.

Genus **PARACHRYSOCHARIS** Girault

Parachrysocharis Girault, 1913. Queensland Mus. Mem. 2: 177.

Type: *Parachrysocharis javensis* Girault. Monob.

semiflava Girault. Tex.

Parachrysocharis semiflava Girault, 1917. Canad. Ent. 49: 129. ♂ ♀.

Genus **ACHRYSOCHARIS** Girault

Achrysocharis Girault, 1913. Arch. f. Naturgesch. 79A (6): 104.

Type: *Achrysocharis bifasciatus* Girault. Monob.

aemilia Girault. Fla. Host: Itonidid on *Eugenia buxifolia*.

Achrysocharis aemilia Girault, 1917. New Chalcid Flies, p. 3. ♀.

athanasii Girault. Md.

Achrysocharis athanasii Girault, 1917. Deser. Hym. Chalcidoid. Variorum
cum Observ. III, p. 3. ♀.

divina Girault. Md.

Achrysocharis divina Girault, 1917. Ent. News 27: 22. ♀.

donna Girault. N. Y. Host: *Taphrocerus gracilis* (Say).

Achrysocharis donna Girault, 1917. Deser. Stellarum Nov., p. 22. ♀.

kansensis Girault. Minn., Kans. Host: *Sofus pilicornis* (Holmg.).

Achrysocharis (!) kansensis Girault, 1916. U. S. Natl. Mus. Proc. 51: 42. ♀.

partifuscipennis Girault. Md.

Achrysocharis partifuscipennis Girault, 1916. Ent. Soc. Amer. Ann. 9:
294. ♀.

Genus **ACHRYSOCHARELLA** Girault

Achrysocharella Girault, 1913. Queensland Mus. Mem. 2: 171.

Type: *Achrysocharella dubia* Girault. Orig. desig.

Wolfiella Krausse, 1917. Ztschr. f. Forst u. Jagdw. 49: 29.

Type: *Wolfiella ruforum* Krausse. Monob.

acuminaticornis Girault. D. C.

Achrysocharella acuminaticornis Girault, 1916. U. S. Natl. Mus. Proc. 51:
50. ♀.

acuminativentris Girault. D. C.

Achrysocharella acuminativentris Girault, 1917. Deser. Hym. Chalcidoid.
Variorum cum Observ. III, p. 6. ♀.

americana Girault. D. C.

Achrysocharella americana Girault, 1916. Ent. Soc. Amer. Ann. 9: 295.

obscurinotata Girault. Md.

Achrysocharella obscurinotata Girault, 1916. Ent. Soc. Amer. Ann. 9: 306.
♀.

partiaeneiceps Girault. Md.

Achrysocharella partiaeneiceps Girault, 1917. New Eulophidae, p. 1. ♀.

pulchrella Girault. D. C.

Achrysocharella pulchrella Girault, 1917. Psyche 24: 94. ♀.

Genus DEROSTENUS Westwood

Derostenus Westwood, 1833. Mag. Nat. Hist. 6: 495.

Type: *Derostenus gemmeus* Westwood. Monob.

Revision: Crawford, 1912. U. S. Natl. Mus. Proc. 43: 179.

agromyzae Crawford. Ind. Hosts: *Agromyza angulata* Loew; *A. pusilla* Meig.;
A. scutellata Fall.

Derostenus agromyzae Crawford, 1913. U. S. Natl. Mus. Proc. 45: 314, 315.
♂ ♀.

arizonensis Crawford. Utah, Ariz., Calif.

Derostenus arizonensis Crawford, 1913. U. S. Natl. Mus. Proc. 45: 315.
♂ ♀.

Biology: Webster and Parks, 1913. Jour. Agr. Res. 1: 80.

diastatae (Howard). Conn. to Fla. and Kans. Hosts: *Agromyza angulata* Loew;
A. parvicornis Loew; *A. pusilla* Meig.; *A. scutellata* Fall.; *Diastrata* sp.
mining corn ears; dipterous leaf miner of *Panicum dichostomiflorum*; *Fenusa*
pusilla (Klug).

Entedon diastatae Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 246.
♂ ♀.

Biology: Phillips, 1914. Jour. Agr. Res. 2: 26-27.

fullawayi Crawford. Conn., Va., La., S. Dak. Hosts: *Argyresthia thuiella* (Pack.);
Agromyza parvicornis Loew; *A. pusilla* Meig.; *Fenusa pusilla* (Klug).

Derostenus fullawayi (!) Crawford, 1913. U. S. Natl. Mus. Proc. 46: 348. ♀.
Achrysocharis camilli Girault, 1917. New Chalcid Flies, p. 5. N. syn.

Derostenus fullawayi Glick, 1939. U. S. Dept. Agr. Tech. Bul. 673: 47. Emend.
Biology: Underhill, 1943. Va. Agr. Expt. Sta. Bul. 349: 22.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 53: 196.

leucopus Ashmead. Ohio, Kans. Host: Beech leaf miner.

Derostenus leucopus Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p.
VIII. ♀.

pictipes Crawford. Md., S. C., Ind., Kans., Colo., Utah. Hosts: *Agromyza coquil-*
letii Mall.; *A. pusilla* Meig.; *A. scutellata* Fall.; *Phytomyza aquilegiae*
Hardy; *Hordeum* leaf miner.

Derostenus pictipes Crawford, 1912. U. S. Natl. Mus. Proc. 43: 180. ♂ ♀.

punctiventris Crawford. Ind., Wyo., Utah. Hosts: *Agromyza parvicornis* Loew;
A. pusilla Meig.; *A. scutellata* Fall.

Derostenus punctiventris Crawford, 1912. U. S. Natl. Mus. Proc. 43: 180.
♀.

Biology: Phillips, 1914. Jour. Agr. Res. 2: 28.

silvia (Girault), n. comb. Md.

Achrysocharella silvia Girault, 1917. Two New Achrysocharellae, p. 1. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 53: 197.

variipes Crawford. Md., Ind. Hosts: *Agromyza pusilla* Meig.; *Phytomyza aquil-*
egiae Hardy; leaf roller of *Rubus allegheniensis*.

Derostenus variipes Crawford, 1913. U. S. Natl. Mus. Proc. 45: 315. ♀.

Taxonomy: Gahan, 1914. U. S. Natl. Mus. Proc. 48: 164.

Genus LOPHOCOMUS Haliday

Lophocomus Haliday, 1844 (1843). Ent. Soc. London Trans. 3: 297.

Type: *Cirrospilus anaitis* Walker. Monob.

verticillatus Ashmead. Kans.

Lophocomus verticillatus Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VIII. ♂.

Genus HORISMENUS Walker

Horismenus Walker, 1843. Ann. Mag. Nat. Hist. 11: 117.

Type: *Horismenus cleodora* Walker. Monob.

Holcopelte Foerster, 1856. Hym. Stud., v. 2, pp. 78, 81.

Type: *Elachistus obscurus* Foerster. Monob.

Holcopelta Schulz, 1906. Spolia Hym., p. 141. Emend.

Pseudomphale Schrottky, 1909. Soc. Cient. Argentina An. 67: 209.

Type: *Pseudomphale opsiphanis* Schrottky. Monob.

ancylae (Girault), n. comb. Va. Host: *Anchylopera nubeculana* Clem.

Pseudomphale ancylae Girault, 1916. Ent. News 27: 223. ♂ ♀.
Biology: Leach, 1916. U. S. Dept. Agr. Bul. 435: 11.

atroscapus (Girault), n. comb. Fla. Host: ?*Tetralopha subcanalis* (Wlkr.).

Pseudomphale atroscapus Girault, 1917. Deser. Stellarum Nov., p. 20. ♀

depressus Gahan. Calif. Host: *Stator pruininus* (Horn).

Horismenus depressus Gahan, 1930. U. S. Natl. Mus. Proc. 77 (8): 8. ♂ ♀.

euplectri (Howard). Conn., N. J., Fla., Ala. Host: *Euplectrus comstocki* How.

Elachistus euplectri Howard, 1885. In Riley, U. S. Dept. Agr. Ent. Comn. Rpt. 4: App. p. 108. ♂ ♀.

flavipes (Ashmead). Fla.

Elachristus (!) *flavipes* Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 133. ♀.

floridanus (Ashmead). Tenn., N. C., Fla. Host: *Apanteles congregatus* (Say).

Holcopelte floridana Ashmead, 1888. Canad. Ent. 20: 102. ♀.

fraternus (Fitch). Wis., N. Y., N. J., Fla., La., Tex., Kans., Iowa. Hosts: *Coleophora pruniella* Clem.; *Callisto geminata* (Pack.); *Cameraria caryaefoliella* (Clem.); *Tischeria malifoliella* Clem.

Trichogramma? *fraterna* Fitch, 1856. Country Gentleman 7: 235.

Taxonomy: Packard, 1890. U. S. Dept. Agr. Ent. Comn. Rpt. 5: 265.

haemon (Walker). Fla., Kans.

Tetrastichus haemon Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 28. ♀.

lixivorus Crawford. Maine, Tex. Hosts: *Lixus musculus* Say; *L. scrobicollis* Boh.; *Phyllocnistis populiella* Chamb.

Horisemus (!) *lixivorus* Crawford, 1907. N. Y. Ent. Soc. Jour. 15: 180. ♂ ♀.

Biology: Pierce, 1910. Jour. Econ. Ent. 3: 453.

microgaster (Ashmead). Maine to W. Va. and Ohio; Ga., Ill., Mo., Tex., Kans., Iowa. Hosts: *Apion decoloratum* Smith; *Ceratonia catalpae* Bdl.; *Celama sorghiella* (Riley); *Pterophorus periscelidactylus* Fitch; *Ancyliis comptana fragariae* (W. and R.); *Acleris minuta* (Rob.); *Dichomeris marginella* (F.); *Coleophora malivorella* Riley; *Phyllocnistis populiella* Chamb.; *Apanteles congregatus* (Say); *A. glomeratus* (L.); *A. solitarius* (Ratz.); *Microplitis ceratoniae* Riley; *Microgaster* sp.; *Oncophanes americanus* (Weed); *Chorinaeus* sp.; *Catolaccus aeneoviridis* (Gir).

Holcopelte microgaster Ashmead, 1888. Canad. Ent. 20: 102. ♂.

Pediobioidea cyanea Girault, 1911. Canad. Ent. 43: 407.

Biology: Proper, 1934. Jour. Agr. Res. 48: 365.

Taxonomy: Girault, 1911. Canad. Ent. 43: 407, 409-411.

missouriensis (Ashmead). N. C., Ga., Mo. Host: *Amblycerus robiniae* (F.).

Holcopelte missouriensis Ashmead, 1888. Canad. Ent. 20: 101. ♀.

nitens (Howard), n. comb. D. C. Host: Egg bag of *Epeira* sp.

Holcopelte nitens Howard, 1892. Ent. Soc. Wash. Proc. 2: 298. ♂ ♀.

popenoei (Ashmead). D. C., Mo., Kans. Hosts: *Tischeria malifoliella* Clem.

Heterospilus sp.

Holcopelte Popenoei Ashmead, 1888. Canad. Ent. 20: 101. ♀.

productus (Ashmead). N. Mex. Host: *Mimosestes amicus* (Horn).

Holcopelte producta Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 342. ♂ ♀.

sardus (Walker). No. Amer.

Entedon (Horismenus) Sardus Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 23. ♀.

texanus (Girault). Conn., Md., Va., Ala., Mo., Iowa, Kans., Tex., N. Mex., Ariz.
Hosts: *Phytophaga destructor* (Say); *Eumetopiella rufipes* Macq.; *Meromyza americana* (Fitch).

Pseudomphale texana Girault, 1917 (1916). Insector Inscitiae Menstruus 4: 120. ♀.

Biology: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 128-131.

violaceus (Ashmead). Ind., Fla., Tex., Kans. Hosts: *Callisto geminatella* (Pack.); *Cameraria caryaefoliella* (Clem.); *Tischeria malifoliella* Clem.; tinea larva in woolly galls of *Andricus flocci* Walsh.

Holcoppelte violacea Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 200. ♀.

Genus PLEUROTROPIS Foerster

Pleurotropis Foerster, 1856. Hym. Stud., v. 2, pp. 78, 82 (no species).

Type: *Pleurotropis isomera* Foerster. Included by Foerster, 1861.

Pseudacrias Girault, 1913. Arch. f. Naturgesch. 79A (6): 104.

Type: *Pseudacrias micans* Girault. Monob.

Pseudacriasoides Girault, 1917. Deser. Stellarum Nov., p. 9.

Type: *Pleurotropis utahensis* Crawford. Monob.

Epipleurotropis Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 7.

Type: *Epipleurotropis longfellowi* Girault. Monob.

Revision: Crawford, 1912. U. S. Natl. Mus. Proc. 43: 177-179.

albipes (Provancher), n. comb. Ont.

Holcoppelte albipes Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 210. ♂.

albitarsis (Ashmead). N. H., Mass., N. J., Va. Hosts: *Apanteles congregatus* (Say); ?*Alegina annulata* Ashm.; ?*Gelis tenellus* (Say); *Eupteromalus nidulans* (Thoms.).

Entedon albitarsis Ashmead, 1888. Canad. Ent. 20: 102, 103. ♂ ♀.

Taxonomy: Girault, 1924. Insector Inscitiae Menstruus 12: 94.

benefica Gahan. Ont., N. Y., Pa., Md., W. Va., Va., west. Canada. Hosts: *Phytophaga destructor* (Say); *Cephus cinctus* Nort.; *C. pygmaeus* (L.); *C. tabidus* (F.).

Pleurotropis benefica Gahan, 1921. Ent. Soc. Wash. Proc. 23: 117. ♂ ♀.

Biology: Salt, 1931. Bul. Ent. Res. 22: 482, 534-541.—Udine, 1941. U. S. Dept. Agr. Cir. 607: 7.

Taxonomy: Gahan, 1932. Ent. Soc. Amer. Ann. 25: 751.—Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 131.

bucculatricis Gahan. Que., Maine, Conn. Hosts: *Phyllocnistis populiella* Chamb.; *Bucculatrix canadensisella* Chamb.

Pleurotropis bucculatricis Gahan, 1927. Psyche 34: 171. ♂ ♀.

kansensis Girault. Kans.

Pleurotropis kansensis Girault, 1918. Ent. News 29: 128. ♀.

lithocolletidis (Ashmead). Maine, Conn., Va., N. C., Ind., Ill., Kans. Hosts: Probably *Anthonomus nigrinus* Boh.; *Argyresthia thuiella* (Pack.); *Cameraria guttifinitella* (Clem.); *Lithocolletis* larva on *Helianthus grosse-serratus*; *Agromyza platyptera* Thos.; *Phytomyza ilicis* (Curt.).

Entedon lithocolletidis Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VIII. ♂ ♀.

longa Girault. Ind. Host: ?*Harmolita* sp.

Pleurotropis longus Girault, 1916. Canad. Ent. 48: 342. ♀.

longfellowi (Girault). Maine, Pa. Host: *Cameraria aceriella* (Clem.).

Epipleurotropis longfellowi Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 7. ♀.

metallica (Nees). P. E. I., N. Y. to Va., Ill. and Mich., Oreg., Wash. Hosts: *Phytophaga destructor* (Say); *Oscinella* sp.

- Eulophus metallicus* Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 176.
♂ ♀.
- Entedon Epigonus* Walker, 1839. Monog. Chalciditum, v. 1, p. 112. ♂ ♀.
- Semiotellus* (?) *nigripes* Lindeman, 1887. Soc. Imp. Nat. Moscou Bul. (2) 1: 179, 185, 192. ♂ ♀.
- Biology: Hill, Pinckney and Udine, 1939. U. S. Dept. Agr. Tech. Bul. 689: 4-6, 10-15.
Taxonomy: Riley, 1893. U. S. Dept. Agr. Insect Life 6: 133.—Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 132-138.—Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 9, 11-13.
- nawai* (Ashmead). New England. Hosts: *Grapholitha molesta* (Busck); *Apanteles melanoscelus* (Ratz.); *A. solitarius* (Ratz.); *Dibrachys cavus* (Wlkr.); *Eupteromalus nidulans* (Thom.).
- Derostenus nawai* Ashmead, 1904. N. Y. Ent. Soc. Jour. 12: 160. ♂ ♀.
- Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 12, 31-32.—Proper, 1934. Jour. Agr. Res. 48: 362-375.—Haeussler, 1940. U. S. Dept. Agr. Tech. Bul. 728: 33.
- nigra* (Ashmead). Ill., Fla.
Closterocerus niger Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 232. ♂.
- perdubia* (Girault). Utah.
Amestocharis perdubius Girault, 1917. Descr. Stellarum Nov., p. 8. ♀.
- phyllotretae* Riley. Mo. Host: *Phyllotreta zimmermanni* (Crotch).
Pleurotropis phyllotretae Riley, 1885. U. S. Dept. Agr. Ann. Rpt. for 1884, p. 307. ♂ ♀.
- quercicola* (Ashmead). Que., Ill., Kans. Hosts: Tineid larvae in oak apple gall; gall of *Amphibolips inanis* O. S.; *A. spongifica* (O. S.).
Asecodes quercicola Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VIII. ♂ ♀.
- rugosithorax* Crawford. Ind., Utah. Hosts: *Agromyza angulata* Loew; *A. pusilla* Meig.; *A. scutellata* Fall.; *A. sp.* in alfalfa.
Pleurotropis rugosithorax Crawford, 1912. U. S. Natl. Mus. Proc. 43: 179.
♂ ♀.
- Biology: Webster and Parks, 1913. Jour. Agr. Res. 1: 82, 84.
- sexdentata* (Girault). Mass., N. J., Ohio, N. C., Kans. Hosts: *Trichoplusia ni* (Hbn.); *Anchyliis comptana* (Froel.); *A. comptana fragariae* (W. and R.); *?Gnorimoschema gallaesolidaginis* (Riley); *G. salinaris* Busck.
Pseudacris sexdentatus Girault, 1916. Soc. Ent. 31: 36. ♀.
- Biology: Patterson, 1915. Biol. Bul. 29: 340-341.
- singularis* (Howard), n. comb. D. C. Host: *Cameraria hamadryadella* (Clem.).
Chrysocharis singularis Howard, 1891. U. S. Dept. Agr. Insect Life 4: 194.
Biology: Howard, 1882. Amer. Nat. 16: 61.
- splendens* (Cook and Davis.) Mich. Hosts: *Heterocampa manteo* (Dbldy.); *Symmerista albifrons* (A. and S.).
Derostenus splendens Cook and Davis, 1891. Mich. Agr. Expt. Sta. Bul. 73: 13. ♂ ♀.
- tarsalis* (Ashmead). N. H. to N. C.; Ill., La., Kans., Calif., Oreg., Wash. Hosts: *Magdalis aenescens* Lec.; *Plagioderia versicolora* (Laich.); *[?]Pseudogaurax anchora* (Loew); *Sphinx* sp.; *Hemerocampa vetusta* (Bdvl.); *Apanteles lacticolor* Vier.; *A. melanoscelus* (Ratz.); *Gelis tenellus* (Say); *Dimmockia incongrua* (Ashm.); *D. pallipes* Mues.; *Eupelmella vesicularis* (Retz.); *Eupelmus spongipartus* Foerst.; *Cheiopachus colon* (L.); *Dibrachys cavus* (Wlkr.); *Dinotiscus* sp.; *Eupteromalus nidulans* (Thoms.); *Habrocytus phycidis* Ashm.; *Schizonotus sieboldi* (Ratz.); *Eurytoma appendigaster* (Swed.); smoke tree leaf roller.
Holcopelte tarsalis Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 341. ♂ ♀.
Asecodes albitarsis Ashmead, 1888. Canad. Ent. 20: 103. ♀. Preocc.
Pleurotropis ashmeadi Crawford, 1912. U. S. Natl. Mus. Proc. 43: 177. N. name.
- Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 12, 31.—Proper 1934. Jour. Agr. Res. 48: 361-370.—Marsh, 1937. Ecology 18: 108-111.—Dowden, 1939. Jour. Agr. Res. 58: 591.
- Taxonomy: Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 26.

testaceipes Crawford. S. C.

Pleurotropis testaceipes Crawford, 1914. Insecutor Inscitiae Menstruus 2: 37. ♀.

utahensis Crawford. Man., Mont., N. Dak., Utah. Hosts: *Agromyza parvicornis* Loew; *Cephus cinctus* Nort.

Pleurotropis utahensis Crawford, 1913. U. S. Natl. Mus. Proc. 45: 316. ♂ ♀. Biology: Ainslie, 1929. U. S. Dept. Agr. Tech. Bul. 157: 19-20.—Neilson, 1949. Canad. Ent. 81: 174-180.

Taxonomy: Phillips, 1914. Jour. Agr. Res. 2: 28.—Gahan, 1921. Ent. Soc. Wash. Proc. 23: 113-117.

wilderi (Howard). Que., N. Y., D. C., S. C., Calif. Hosts: *Coccygomimus aquilonia* (Cress.); *Tromatobia rufopectus* (Cress.); *Aranea solitaria* (Emert.); *Argiope aurantia* (Lucas).

Mestocharis wilderi Howard, 1892. Ent. Soc. Wash. Proc. 2: 298. ♂ ♀.

williamsoni (Girault), n. comb. Ill. Host: *Physocephala sagittaria* (Say).

Mestocharis williamsoni Girault, 1911. N. Y. Ent. Soc. Jour. 19: 179. ♂ ♀.

Genus ENTEDON Dalman

Entedon Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 136, 181.

Type: *Entedon cyanellus* Dalman. Desig. by Ashmead, 1904.

Eriglyptus Crawford, 1907. N. Y. Ent. Soc. Jour. 15: 179.

Type: *Eriglyptus robustus* Crawford. Monob.

Entedonella Girault, 1913. Queensland Mus. Mem. 2: 154.

Type: *Entedonella magnifica* Girault. Monob.

Revision: Girault, 1922. No. Amer. Spp. of *Emersonella* and *Entedon*, one page.

aphidiphagus Ashmead. Fla. Host: *Macrosiphum solanifolii* (Ashm.).

Entedon aphidiphagus Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 201. ♀.

bigeloviae Ashmead. Kans., N. Mex., Ariz., Utah, Oreg. Host: *Aciurina bigeloviae* (Ckll.).

Entedon bigeloviae Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 342. ♀.

columbianus Ashmead. D. C.

Entedon columbiana Ashmead, 1888. Canad. Ent. 20: 103. ♀.

damastes (Walker). Fla.

Closterocerus Damastes Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 22. ♀.

leucogramma (Ratzeburg). N. Y., N. C. Hosts: *Scolytus multistriatus* (Marsh.); *S. rugulosus* (Ratz.).

Ichneumon (Elachestus) Leucogramma Ratzeburg, 1884. Forst.-Ins. d. Wald. Preuss., v. 3, p. 28. ♂.

leucopus (Ashmead), n. comb. Fla.

Pleurotropis leucopus Ashmead, 1888. Canad. Ent. 20: 102. ♀.

occidentalis Girault. Utah, Calif., Oreg.

Entedon occidentalis Girault, 1916. U. S. Natl. Mus. Proc. 51: 48. ♀.

robustus (Crawford). D. C. Host: *Anthonomus nigrinus* Boh.

Eriglyptus robustus Crawford, 1907. N. Y. Ent. Soc. Jour. 15: 180. ♂ ♀.

tachypterelli Gahan. N. Y., Colo. Hosts: *Tachypterellus consors cerasi* List; *T. quadrigibbus* (Say).

Entedon tachypterelli Gahan, 1931. Wash. Acad. Sci. Proc. 21: 38. ♂ ♀. Biology: List, 1932. Colo. Agr. Expt. Sta. Bul. 385: 59, 61-62.—Hammar, 1936. N. Y. State Agr. Expt. Sta. Tech. Bul. 240: 44-45.

washingtoni Girault. D. C.

Entedon washingtoni Girault, 1917 (1916). Insecutor Inscitiae Menstruus 4: 109. ♀.

Genus PARACRIAS Ashmead

Paracrias Ashmead, 1904. Carnegie Mus. Mem. 1: 343, 344, 510.

Type: *Paracrias laticeps* Ashmead. Monob.

Euplectrentedon Girault, 1917. Speciosissima Genera Nova Eulophidorum, p. 3. N. syn.

Type: *Euplectrentedon mirus* Girault. Monob.

mirus (Girault), n. comb. Iowa.

Euplectrentedon mirus Girault, 1917. Speciosissima Genera Nova Eulophidorum, p. 3. ♀.

Genus EMERSONOPSIS Girault

Emersonopsis Girault, 1917. Canad. Ent. 49: 110.

Type: *Entedon arizonensis* Ashmead. Monob.

Revision: Girault, 1924. Insecutor Inscitiae Menstruus 12: 93.

arizonensis (Ashmead). Ariz.

Entedon arizonensis Ashmead, 1888. Canad. Ent. 20: 103. ♀.

cupreicollis (Ashmead). Kans.

Entedon cupreicollis Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VIII. ♂ ♀.

Genus ACRIAS Walker

Acrias Walker, 1847. Ann. Mag. Nat. Hist. 20: 29.

Type: *Acrias nileus* Walker. Monob.

nileus Walker. Fla.

Acrias Nileus Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 29. ♀.

Genus NESOMYIA Ashmead

Nesomyia Ashmead, 1904. Carnegie Mus. Mem. 1: 344.

Type: *Nesomyia albipes* Ashmead. Monob.

cimbicis Brues. Wis. Host: *Cimex americana* Leach.

Nesomyia cimbicis Brues, 1909 (1908). Wis. Nat. Hist. Soc. Bul. 6: 162. ♀.

Biology: Girault, 1912. Ent. News 23: 81-82.

Family ELASMIDAE

Revision: Girault, 1918. No. Amer. Hym. Elasmidae, pp. 1-4.

Genus ELASMUS Westwood

Elasmus Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 3: 343.

Type: *Eulophus stbellatus* Fonscolombe. Monob.

Aneure Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 194.

Type: *Aneure nuda* Nees. Desig. by Gahan and Fagan, 1923.

Cyclopleura Cameron, 1913 (1912). Indian Forest Rec. 4: 96.

Type: *Cyclopleura fumipennis* Cameron. Desig. by Gahan and Fagan, 1923.

albicoxa Howard. N. J., Ind., Mo., Kans. Hosts: ?*Basilarchia archippus* (Cram.); *Callisto geminatella* (Pack.); ?*Microgaster* sp.

Elasmus albicoxa Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 30. ♂.

Biology: Howard, 1892. U. S. Dept. Agr. Insect Life 4: 253.

apanteli Gahan. Ind., Tenn., Tex. Hosts: *Apanteles marginiventris* (Cress.); *Meteorus laphygmae* Vier.

Elasmus apanteli Gahan, 1913. U. S. Natl. Mus. Proc. 46: 438. ♀.

aspidiscae Girault. D. C. Host: *Coptodisca splendoriferella* (Clem.).

Elasmus aspidiscae Girault, 1917 (1916). Insecutor Inscitiae Menstruus 4: 117. ♀.

atratus Howard. Conn., D. C., Ohio. Hosts: *Apanteles delicatus* How.; *A. hyphantriae* Riley; *A. melanoscelus* (Ratz.); *A. solitarius* (Ratz.); *A. sp.*; *Meteorus hyphantriae* Riley; *Campoplex validus* (Cress.); *Phobocampe pallipes* (Prov.).

Elasmus atratus Howard, 1897. U. S. Dept. Agr. Div. Ent. Tech. Ser. 5: 40, 56. ♂ ♀.

Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 29.—Balduf, 1929. Ohio Jour. Sci. 29: 237.—Proper, 1934. Jour. Agr. Res. 48: 365.

Morphology: Snodgrass, 1910. U. S. Natl. Mus. Proc. 39: 65.

borrowi Girault. D. C.

Elasmus borrowi Girault, 1917 (1916). Insecutor Inscitiae Menstruus 4: 117.
♀.

floridensis Girault. Fla.

Elasmus floridensis Girault, 1917. Soc. Ent. 31: 42. ♀.

marylandicus Girault. Conn., Md. Host: Larva ex stem of *Ambrosia artemisiifolia*.

Elasmus marylandicus Girault, 1915. Ent. Soc. Amer. Ann. 8: 281. ♀.

meteori Ashmead. Ill. Hosts: *Apanteles canarsiae* Ashm.; *Meteorus vulgaris* (Cress.).

Elasmus meteori Ashmead, 1898. Ent. Soc. Wash. Proc. 4: 128. ♂ ♀.

missouriensis Girault. Mo.

Elasmus missouriensis Girault, 1917 (1916). Insecutor Inscitiae Menstruus 4: 117. ♀.

mordax Girault. Md., D. C. Host: *Cameraria guttifnitella* (Clem.).

Elasmus mordax Girault, 1917 (1916). Insecutor Inscitiae Menstruus 4: 114.
♀.

nigripes Howard. N. J., Mo. Host: *Porphyrosela desmodiella* (Clem.).

Elasmus nigripes Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 30. ♂.
Biology: Howard, 1892. U. S. Dept. Agr. Insect Life 4: 253.

pulex Girault. Md.

Elasmus pulex Girault, 1916. Soc. Ent. 31: 43. ♀

Elasmus daedalus Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 8. ♀. N. syn.

pullatus Howard. Ohio, Mo., Kans. Hosts: ?*Hyphantria cunea* (Drury); ?*Tischeria malifoliella* Clem.

Elasmus pullatus Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 30. ♂.
Biology: Howard, 1892. U. S. Dept. Agr. Insect Life 4: 253.

setosiscutellum Crawford. Va., La., Tex., Wis., Nebr., Kans., Calif. Hosts: *Rhyacionia frustrana* (Comst.); *Anarsia lineatella* Zell.; *Coleophora malivorella* Riley; *C. pruniella* Clem.; tephritid seed maggot from iron weed.

Elasmus setosiscutellatus Crawford, 1910 (1909). Ent. Soc. Wash. Proc. 11: 206. ♂ ♀.

tischeriae Howard. N. J., D. C., Va., Kans. Host: *Tischeria solidaginifoliella* Clem.

Elasmus tischeriae Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 30. ♀.

varius Howard. N. H., Mo. Hosts: Probably *Gracillaria rhoifoliella* Chamb.; *Apanteles hyphantriae* Riley; *Meteorus hyphantriae* Riley; *Rogas stigmator* (Say); *Hyposoter fugitivus* (Say); *Phobocampe clisiocampae* (Weed).

Elasmus varius Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 29. ♂.
Biology: Howard, 1892. U. S. Dept. Agr. Insect Life 4: 253.—Fiske, 1903. N. H. Agr. Expt. Sta. Tech. Bul. 6: 182, 228.

zigzag Girault. Fla.

Elasmus zigzag Girault, 1917. Descr. Stellarum Nov., p. 16. ♀.

Family THYSANIDAE

The Nearctic host records for this family include only Homoptera or chalcid parasites of Homoptera.

Revision: Girault, 1913. U. S. Natl. Mus. Proc. 45: 189–233 (Signiphorinae).

Genus THYSANUS Walker

Thysanus Walker, 1840 (1839). Ann. Nat. Hist. 4: 234.

Type: *Thysanus ater* Haliday. Monob.

Triphasius Foerster, 1856. Hym. Stud., v. 2, pp. 83, 84. N. name.

Plastocharis Foerster, 1856. Hym. Stud., v. 2, p. 145. N. name.

Thysanus Walker, 1872. Notes on Chalcid., v. 7, p. 114. Emend.

Signiphora Ashmead, 1880. Orange Insects, p. 29, 30.

Type: *Signiphora flavopalliatu*s Ashmead. Monob.

Neosigniphora Rust, 1913. Ent. News 24: 164.

Type: *Neosigniphora nigra* Rust. Monob.

Matritia Mercet, 1916. Soc. Españ. Hist. Nat. Bol. 16: 523, 525.

Type: *Signiphora (Matritia) conjugalis* Mercet. Monob.

Revision: Girault, 1913. U. S. Natl. Mus. Proc. 45: 193-233 (*Signiphora*).

aleyrodis (Ashmead), n. comb. Pa., Calif. Hosts: *Aleuroplatus coronatus* (Quaint.); *Chrysomphalus aonidium* (L.); *C. dictyospermi* (Morg.).

Signiphora aleyrodis Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 409, 412. ♀.

aspidioti (Ashmead). Va.

Signiphora aspidioti Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 412. ♀.

citrifolii (Ashmead), n. comb. Fla. Hosts: *Aleuroplatus coronatus* (Quaint.); *A. gelatinosus* (Ckll.); *Aleyrodes* sp. on *Quercus agrifolia*; *Macrosiphum solanifolii* (Ashm.).

Signiphora Citrifolii Ashmead, 1880. Orange Insects, p. 66. ♀.

coquilletti (Ashmead). N. Y., Calif. Hosts: *Aspidiotus* sp.; *Diaspis boisduvali* Sign.

Signiphora coquilletti Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 412. ♀.

dactylopii (Ashmead). D. C., N. Mex. Hosts: *Phenacoccus cevaliae* Ckll.; *Pseudococcus ephedrae* (Coq.).

Signiphora dactylopii Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 410. ♀.

elongatus (Girault). Va., S. Dak., Calif. Hosts: *Coccus hesperidum* (L.); *Pseudococcus comstocki* (Kuw.); coccid on *Muehlenbergia*; *Tetrastichus minutus* (How.); *Acerophagus notativentris* (Gir.); *Achrysochagus modestus* Timb.; *Anagyris yuccae* (Coq.); *Clausenia purpurea* (Ishii); *Pseudoleptomastix squammulata* Gir.; *Zarhopalus corvinus* Gir.

Neosigniphora elongata Girault, 1916. Psyche 23: 41. ♀.

Biology: Clausen, 1924. Calif. Univ. Pubs., Ent. 3: 257-266, 281-284.—Clancy, 1944. Jour. Econ. Ent. 37: 451.

Taxonomy: Timberlake, 1924. Calif. Univ. Pubs., Ent. 3: 246-248.

flavellus (Girault), n. comb. Fla. Host: *Aspidiotus lataniae* Sign.

Signiphora flavella Girault, 1913. U. S. Natl. Mus. Proc. 45: 214. ♀.

Signiphora basilica Girault, 1913. U. S. Natl. Mus. Proc. 45: 215. ♀. N. syn.

*flavopalliatu*s (Ashmead), n. comb. Ga., Fla., La., Calif. Hosts: *Aleyrodes* sp.; *Aonidiella aurantii* (Mask.); *A. citrina* (Coq.); *Aspidiotus camelliae* Sign.; *A. lataniae* Sign.; *Chionaspis* sp. on *Magnolia*; *Chrysomphalus dictyospermi* (Morg.); *Lepidosaphes beckii* (Newm.); *L. gloverii* (Pack.); *Pseudoaonidia duplex* (Ckll.).

*Signiphora flavopalliatu*s Ashmead, 1880. Orange Insects, p. 29. ♀.

*Signiphora flavo-palliatu*s Ashmead, 1880. Orange Insects, p. 31.

louisianae Dozier. La. Host: *Aspidiotus lataniae* Sign.

Thysanus louisianae Dozier, 1933. Ent. Soc. Wash. Proc. 35: 100. ♂.

merceti (Malenotti), n. comb. La. Host: *Chrysomphalus dictyospermi* (Morg.).

Signiphora merceti Malenotti, 1916. Redia 12: 181. ♀.

Biology: Cressman, 1933. Jour. Econ. Ent. 26: 704.

Taxonomy: Malenotti, 1916. Soc. Españ. de Hist. Nat. Bol. 16: 529.

mexicanus (Ashmead), n. comb. Calif. Host: *Aspidiotus hederæ* (Vallot).

Signiphora mexicana Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 411. ♀.

niger (Ashmead). N. Y. to Va.; Ill., Calif. Hosts: *Aspidiotus perniciosus* Comst.; *Coccus hesperidum* L.; *Pseudococcus adonidum* (L.); *P. comstocki* (Kuw.); *Saissetia oleae* (Bern.); *Aphycus lounsburyi* How.; *Clausenia purpurea* Ishii; *Leptomastidea abnormis* (Gir.).

Signiphora nigra Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 410. ♀.

Biology: Clancy, 1944. Jour. Econ. Ent. 37: 451.—Compere, 1925. Calif. Univ. Pubs., Ent. 3: 296.

Taxonomy: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 242, 332-334.

nigrellus (Girault), n. comb. Tex. Host: *Chrysomphalus tenebricosus* (Comst.).

Signiphora nigrella Girault, 1913. U. S. Natl. Mus. Proc. 45: 215. ♂.

- occidentalis** (Howard), n. comb. Calif. Hosts: *Aleyrodes* sp.; *Aonidiella aurantii* (Mask.); *A. citrina* (Coq.); *Aspidiotus juglans-regiae* Comst.; *A. lataniae* Sign.; *Lepidosaphes gloveri* (Pack.).
Signiphora occidentalis Howard, 1894. U. S. Dept. Agr. Insect Life 6: 233.
 ♂ ♀.
- pulcher** (Girault). N. J. to Va. and Ill. Hosts: *Aspidiotus perniciosus* Comst.; *A. wuae* Comst.; *A. sp.* on cherry (?*forbesi* Johns.); *A. sp.* on currant; *Aulacaspis rosae* (Bouché); *Chionaspis americana* Johns.; *Lecanium nigrofasciatum* Perg.; *Pseudaulacaspis pentagona* (Targ.).
Signiphora pulchra Girault, 1913. U. S. Natl. Mus. Proc. 45: 215. ♂ ♀.
Signiphora nigrita Girault, 1913. U. S. Natl. Mus. Proc. 45: 215.
- thoreauini** (Girault), n. comb. Calif. Host: *Aspidiotus hederæ* (Vallot).
Signiphora thoreauini Girault, 1916. Psyche 23: 41. ♀.
- townsendi** (Ashmead). D. C., Tex. Hosts: *Aleyrodes* sp.; *Aspidiotus lataniae* Sign.; *A. perniciosus* Comst.; *Pseudaulacaspis pentagona* (Targ.).
Signiphora townsendi Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 412. ♀.
- unifasciatus** (Ashmead). Ga., Fla. Host: *Ceropsylla sideroxyli* Riley.
Signiphora unifasciata Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 410. ♀.

Family EUTRICHOSOMATIDAE Peck, New Family

Genus EUTRICHOSOMA Ashmead

- Eutrichosoma* Ashmead, 1899. Ent. Soc. Wash. Proc. 4: 204 (no species).
 Type: *Eutrichosoma mirabile* Ashmead. Included by Ashmead, 1904.
- albipes** Crawford. Tex. Hosts: *Auleutes tenuipes* (Lec.); *Smicronyx tychoides* (Lec.).
Eutrichosoma albipes Crawford, 1908 (1907). Ent. Soc. Wash. Proc. 9: 158.
 ♂ ♀.
- Biology: Pierce, 1910. Jour. Econ. Ent. 3: 453.
- mirabile** Ashmead. Mont.
Eutrichosoma mirabile Ashmead, 1904. Carnegie Mus. Mem. 1: 291, 375. ♀.
 Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 315.

Family TANAOSTIGMATIDAE Peck, New Family

Genus TANAOSTIGMODES Ashmead

- Tanaostigmodes* Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 9, 18.
 Type: *Tanaostigmodes howardii* Ashmead. Orig. desig.
 Revision: Crawford, 1911. U. S. Natl. Mus. Proc. 40: 442.
- albiclava** Girault. Ariz.
Tanaostigmodes (!) *albiclavus* Girault, 1917. Deser. Stellarum Nov., p. 4. ♀.
- howardii** Ashmead. Ariz., Calif. Hosts: Galls on *Acacia greggi*, *Mimosa biuncifera*, and *Prosopis* sp.
Tanaostigmodes howardii Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 19. ♀.
- slossonae** Crawford. Fla.
Tanaostigmodes slossonae Crawford, 1911. U. S. Natl. Mus. Proc. 40: 442.
 ♂ ♀.
- tychii** Ashmead. Calif. Host: *Tychius semisquamosus* Lec.
Tanaostigmodes tychii Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 19. ♀.

Family ENCYRTIDAE

- Revisions: Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 323-412.—Girault, 1915. Queensland Mus. Mem. 4: 120-128, 179-183.—Mereet, 1921. Fauna Ibérica, Himer., Encirtidos, pp. 1-732. —Timberlake, 1923. Ent. Soc. Wash. Proc. 25: 57-60.

Subfamily ENCYRTINAE

Genus TINEOPHOCTONUS Ashmead

Tineophoctonus Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 328, 351.

Type: *Phaenodiscus armatus* Ashmead. Orig. desig.

armatus (Ashmead). Fla.

Phaenodiscus armatus Ashmead, 1888. Ent. Amer. 4: 17. ♀.

tineaevorus (Ashmead). Fla. Host: Tineid larva in gall of *Andricus pattoni* (Bass.).

Leptomastix tineaevara Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 191. ♀.

Taxonomy: Ashmead, 1888. Ent. Amer. 4: 16.

Genus LEPTOMASTIX Foerster

Leptomastix Foerster, 1856. Hym. Stud., v. 2, pp. 34, 37 (no species).

Type: *Leptomastix histrio* Mayr. Included by Mayr, 1875.

Stenoterys Thomson, 1876 (1875). Hym. Scand., v. 4, pp. 115, 128.

Type: *Stenoterys orbitalis* Thomson. Monob.

Calocerinella Girault, 1913. Wis. Nat. Hist. Soc. Bul. 11: 46.

Type: *Calocerinella trifasciatus* Girault. Monob.

dactylopii Howard. Que., D. C., La., Calif., Wash. Hosts: *Phenacoccus gossypii* Tns. and Ckll.; *P. solani* Ferris; *Pseudococcus adonidum* (L.); *P. citri* (Risso); *P. comstocki* (Kuw.); *P. maritimus* (Ehrh.); *P. gahani* Green.

Leptomastix dactylopii Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 23.

♂ ♀.

Biology: Flanders, 1939. In Howard, Calif. Univ. Pubs., Ent. 7: 58.—Watson, 1939.

Citrus Grower (Fla.) 1 (17): 11.—Bess, 1939. Ent. Soc. Amer. Ann. 32: 202-206.

—McLeod, 1940 (1939). Ent. Soc. Ontario Ann. Rpt. 70: 65-66.—Clancy,

1944. Jour. Econ. Ent. 37: 450.—Maple, 1947. Calif. Univ. Pubs.,

Ent. 8: 115.

Taxonomy: Compere, 1939. Calif. Univ. Pubs., Ent. 7: 57-58.

Genus ANAGYRUS Howard

Anagyrus Howard, 1896. U. S. Natl. Mus. Proc. 18: 638.

Type: *Anagyrus greeni* Howard. Monob.

Epidinocarsis Girault, 1913. Arch. f. Naturgesch. 79A (6): 83.

Type: *Epidinocarsis tricolor* Girault. Monob.

Revisions: Timberlake, 1924. Calif. Univ. Pubs., Ent. 3: 224-231.—Compere, 1947.

Calif. Univ. Pubs., Ent. 8: 20-22.

clauseni Timberlake. Calif. Host: *Pseudococcus maritimus* (Ehrh.).

Anagyrus clauseni Timberlake, 1924. Calif. Univ. Pubs., Ent. 3: 225. ♀.

fusciventris (Girault). Calif. Host: *Pseudococcus adonidum* (L.).

Epidinocarsis fusciventris Girault, 1915. Queensland Mus. Mem. 4: 144. ♀.

Biology: Flanders, 1940. Jour. Econ. Ent. 33: 757-758.—Flanders, 1940. Calif.

Citrog. 25: 154.

nigritus (Howard). Calif. Host: *Dactylopius* sp. on *Artemisia*.

Aphyus nigritus Howard, 1898. U. S. Natl. Mus. Proc. 21: 243. ♀.

pallidipes Ashmead. D. C., La.

Anagyrus pallidipes Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 354. ♂.

pseudococci (Girault). Calif. Host: *Pseudococcus citri* (Risso).

Epidinocarsis pseudococci Girault, 1915. Entomologist 48: 185. ♂ ♀.

Biology: Flanders, 1939. Jour. Econ. Ent. 32: 889.

pulcher (Ashmead). Conn., Fla.

Dinocarsis pulcher Ashmead, 1888. Ent. Amer. 4: 17. ♀.

putonophilus Compere. Calif. Hosts: *Puto ambigua* (Full.); *P. yuccae* (Coq.).

Anagyrus putonophilus Compere, 1947. Calif. Univ. Pubs., Ent. 8: 20, 22. ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 45, 57-59.

- thyridopterygis** (Ashmead). N. J., Fla. Host: Recorded from *Thyridopteryx ephemeraeformis* (Haw.), but probably from an associated coccid.
Dinocarsis thyridopterygis Ashmead, 1886. Canad. Ent. 18: 97. ♀.
- townsendi** (Howard). N. Mex. Host: ?*Phenacoccus* sp. on cotton.
Aphycus townsendi Howard, 1898. U. S. Natl. Mus. Proc. 21: 243. ♀.
- yuccae** (Coquillett). Hosts: *Pseudococcus crawii* (Coq.); *P. maritimus* (Ehrh.); ?*P.* sp. on grapes; *Puto yuccae* (Coq.); *Achrysoophagus modestus* Timb.
Blastothrix yuccae Coquillett, 1890. West. Amer. Scientist 7: 44. ♀.
Epidinocarsis subalbicornis Girault, 1916. Psyche 16: 44. ♀.
Anagyrus ferrisi Compere, 1926. Calif. Univ. Pubs., Ent. 4: 18. ♂ ♀.
 Biology: Clausen, 1924. Calif. Univ. Pubs., Ent. 3: 256-266, 274-276.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 55, 59.
 Taxonomy: Gahan, 1949. Hawaii. Ent. Soc. Proc. 13: 359-360.
 Morphology: Maple, 1937. Ent. Soc. Amer. Ann. 30: 146.

Genus COMPERIA Gomes

- Comperia** Gomes, 1942 (1941). Esc. Nac. Agron. Rio de Janeiro Bol. 2: 41.
 Type: *Dicarnosis merceti* Compere. Monob.
- merceti** (Compere). Fla., Tex. Hosts: *Blatella germanica* (L.); *Supella supellectilium* (Serv.).
Dicarnosis merceti Compere, 1938. Bul. Ent. Res. 29: 317. ♀.
Comperia merceti var. *falsicornis* Gomes, 1942 (1941). Esc. Nac. Agron. Rio de Janeiro Bol. 2: 43. ♂ ♀. N. syn.

Genus APOANAGYRUS Compere

- Apoanagyrus** Compere, 1947. Calif. Univ. Pubs., Ent. 8: 18.
 Type: *Apoanagyrus californicus* Compere. Monob.
- californicus** Compere. Calif. Host: *Pseudococcus solani* (Ckll.).
Apoanagyrus californicus Compere, 1947. Calif. Univ. Pubs., Ent. 8: 18.
 ♂ ♀.
 Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 63-66.

Genus PSEUDLEPTOMASTIX Girault

- Pseudleptomastix** Girault, 1915. Ent. Soc. Amer. Ann. 8: 272.
 Type: *Pseudleptomastix squammulatus* Girault. Monob.
- squammulata** Girault. Calif. Hosts: *Amonostherium lichtensioides* (Ckll.); *Pseudococcus maritimus* (Ehrh.).
Pseudleptomastix squammulatus Girault, 1915. Ent. Soc. Amer. Ann. 8: 272. ♀.
Paraleptomastrix (!) *notatus* Girault, 1917. Entomologist 50: 38. ♀.
Pseudleptomastix flatulescens Compere, 1926. Calif. Univ. Pubs., Ent. 4: 22. ♂ ♀.
 Biology: Clausen, 1924. Calif. Univ. Pubs., Ent. 3: 257-266, 277-279.—Maple 1947. Calif. Univ. Pubs., Ent. 8: 112-113.
 Taxonomy: Timberlake, 1924. Calif. Univ. Pubs., Ent. 3: 232-235.—Compere, 1947. Calif. Univ. Pubs., Ent. 8: 17.

Genus ECTROMATOPSIS Compere

- Ectromatopsis** Compere, 1947. Calif. Univ. Pubs., Ent. 8: 13.
 Type: *Ectromatopsis americana* Compere. Orig. desig.
- americana** (Howard). N. Mex., Calif. Host: *Phenacoccus solani* Ferris.
Ectroma americanum Howard, 1898. U. S. Natl. Mus. Proc. 21: 248. ♀.
Ectromatopsis americana Compere, 1947. Calif. Univ. Pubs., Ent. 8: 13, 15.
 Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 78-80.

Genus HENICOPYGUS Ashmead

- Henicopygus** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 329, 355.
 Type: *Henicopygus subapterus* Ashmead. Monob.

subapterus Ashmead. Tex., Colo.

Henicopygus subapterus Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 356. ♀.
Biology: Brues and Melander, 1903. Biol. Bul. 5: 21.

Genus CALOCERINUS Howard

Calocerinus Howard, 1892. U. S. Natl. Mus. Proc. 15: 362, 368.

Type: *Tetracnemus floridanus* Ashmead. Monob.

floridanus (Ashmead). Fla.

Tetracnemus (!) *floridanus* Ashmead, 1885. Amer. Ent. Soc. Trans 12: Proc.
p. xviii. ♂.

Taxonomy: Girault, 1917. Descr. Stellarum Nov., p. 7.

Genus TETRALOPHIDEA Ashmead

Tetralophidea Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 327, 348.

Type: *Tetralophidea bakeri* Ashmead. Monob.

bakeri Ashmead. Colo.

Tetralophidea bakeri Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 348. ♂.

Genus ANUSIA Foerster

Anusia Foerster, 1856. Hym. Stud., v. 2, p. 32 (no species).

Type: *Anusia nasicornis* Foerster. Desig. by Gahan and Fagan,
1923.

neomexicana Ashmead. N. Mex., Calif. Host: *Amonostherium lichtenioides*
(Ckll.).

Anusia neomexicana Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 355. ♀.

xerophila Brues. Tex.

Anusia xerophila Brues, 1906. Ent. News 17: 61. ♂ ♀.

Genus MEROMYZOBIA Ashmead

Meromyzobia Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 328, 349.

Type: *Erycynus maculipennis* Ashmead. Orig. desig.

americana (Ashmead). Fla.

Prionomastix americana Ashmead, 1888. Ent. Amer. 4: 16. ♂.

bifasciata (Ashmead). Colo.

Homalotylus bifasciatus (!) Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 28. ♀.

flava Ashmead. D. C.

Meromyzobia flava Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 350. ♂.

flavicincta (Ashmead). Fla.

Choreia flavicincta Ashmead, 1888. Ent. Amer. 4: 17. ♀.

maculipennis (Ashmead). N. J., Ohio. Hosts: *Anthracophaga ingrata* (Will.);

Meromyza americana Fitch.

Erycynus maculipennis Ashmead, 1893. Ohio Agr. Expt. Sta. Tech. Ser. Bul.
1: 162. ♂.

unifasciata Ashmead. Miss.

Meromyzobia unifasciata Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 350. ♀.

Genus TETRACNEMUS Westwood

Tetracnemus Westwood, 1837. Mag. Nat. Hist. 1: 258.

Type: *Tetracnemus diversicornis* Westwood. Monob.

Charitopus Foerster, 1856. Hym. Stud., v. 2, p. 31 (no species).

Type: *Charitopus fulviventris* Foerster. Included by Foerster!
1860.

Diversicornia Mercet, 1916. Soc. Españ. Hist. Nat. Bol. 16: 371.

Type: *Diversicornia pinicola* Mercet. Monob.

- peregrinus** Compere. Calif. Host: *Pseudococcus adonidum* (L.).
Tetracnemus peregrinus Compere, 1939. Calif. Univ. Pubs., Ent. 7: 59.
 ♂ ♀.
 Biology: Flanders, 1940. Jour. Econ. Ent. 33: 757.—Flanders, 1944. Jour. Econ. Ent. 37: 308, 309.—DeBach, 1949. Ecology 30: 16–24.
- pretiosus** Timberlake. Calif. Hosts: *Pseudococcus adonidum* (L.); *P. gahani* Green.
Tetracnemus pretiosus Timberlake, 1929. Calif. Univ. Pubs., Ent. 5: 5.
 ♂ ♀.
 Biology: Compere and Smith, 1932. Hilgardia 6: 585, 601–605, 609–617.—Quayle, 1932. Calif. Agr. Expt. Sta. Bul. 542: 51.—Clancy, 1934. Calif. Univ. Pubs., Ent. 6: 231–248.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 114–115.—DeBach, 1949. Ecology 30: 16–24.

Genus HABROLEPOIDEA Howard

- Habrolepoidea* Howard, 1894. Linn. Soc. London, Jour., Zool. 25: 89.
 Type: *Habrolepoidea glauca* Howard. Monob.
- Zarhopaloides* Girault, 1915. Queensland Mus. Mem. 4: 99.
 Type: *Zarhopaloides axillaris* Girault. Orig. desig.
- depressa** Girault. Ill. Host: *Megacyllene robiniae* (Forst.).
Habrolepoidea depressa Girault, 1916. Canad. Ent. 48: 343. ♂ ♀.
- perplexa** Girault. Pa.
Habrolepoidea perplexa Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 8. ♀.
 Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 185. ♀.
- tarsalis** Girault. Ind.
Habrolepoidea tarsalis Girault, 1916. Canad. Ent. 48: 344. ♀.

Genus TETRALOPHIELLUS Ashmead

- Tetralophiellus* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 330, 357.
 Type: *Tetralophiellus brevicollis* Ashmead. Monob.
- brevicollis** Ashmead. Fla.
Tetralophiellus brevicollis Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 357.
 ♂.

Genus TETRACLADIA Howard

- Tetracladia* Howard, 1892. U. S. Natl. Mus. Proc. 15: 367.
 Type: *Tetracladia texana* Howard. Desig. by Ashmead, 1900.
- gracilis** Howard. Fla.
Tetracladia gracilis Howard, 1892. U. S. Natl. Mus. Proc. 15: 368. ♂.
- texana** Howard. Tex.
Tetracladia texana Howard, 1892. U. S. Natl. Mus. Proc. 15: 367. ♂.

Genus TETRACNEMOPSIS Ashmead

- Tetracnemopsis* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 330, 358.
 Type: *Tetracnemus westwoodi* Cockerell. Monob.
- westwoodi** (Cockerell). Colo. Host: *Phenacoccus minimus* Tinsley.
Tetracnemus Westwoodi Cockerell, 1898. Canad. Ent. 30: 224. ♂ ♀.

Genus PENTACNEMUS Howard

- Pentacnemus* Howard, 1892. U. S. Natl. Mus. Proc. 15: 362, 366.
 Type: *Pentacnemus bucculatricis* Howard. Monob.
- bucculatricis** Howard. Ont., Maine, N. Y., Conn., Va., Mo. Hosts: *Recurvaria thujaella* Kearf.; *Argyresthia thujaella* (Pack.).
Pentacnemus bucculatricis Howard, 1892. U. S. Natl. Mus. Proc. 15: 366.
 ♂ ♀.
 Biology: Underhill, 1943. Va. Agr. Expt. Sta. Bul. 349: 22.

Genus LEPTOMASTIDEA Mercet

Leptomastidea Mercet, 1916. Soc. Espan. Hist. Nat. Bol. 16: 112.

Type: *Leptomastidea aurantiaca* Mercet. Monob.

Tanaomastix Timberlake, 1918. Calif. Univ. Pubs., Ent. 1: 362.

Type: *Paraleptomastix abnormis* Girault. Orig. desig.

Revision: Mercet, 1924. Soc. Espan. Hist. Nat. Bol. 24: 252-258.

abnormis (Girault). Que., N. Y., Ill., Fla., La., Calif. Hosts: *Phenacoccus gossypii* Tns. and Ckl.; *Pseudococcus citri* (Risso); *P. kraunthiae* (Kuw.).

Paraleptomastix abnormis Girault, 1915. Entomologist 48: 184. ♀.

Biology: Smith, 1917. Jour. Econ. Ent. 10: 262-268.—Armitage, 1920. Calif. Dept. Agr., Monthly Bul. 9: 446.—Compere and Smith, 1932. Hilgardia 6: 610-611.—McLeod, 1940 (1939). Ent. Soc. Ontario Ann. Rpt. 70: 65-66.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 91-93.

claripennis (Timberlake). Calif. Host: *Pseudococcus ryani* (Coq.).

Tanaomastix claripennis Timberlake, 1918. Calif. Univ. Pubs., Ent. 1: 363, 365. ♀.

Genus HABROLEOPTERYX Ashmead

Habroleopteryx Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 330, 359.

Type: *Psilophrys pulchripennis* Ashmead. Monob.

marylandia Girault, emend. Md.

Habroleopteryx marilandia Girault, 1917. Chalcidoidea Nova Marilandensis I, p. 1. ♀.

pulchripennis aeneiscapus Girault. Fla.

Habroleopteryx pulchripennis var. *aeneiscapus* Girault, 1916. Ent. News 27: 225. ♀.

pulchripennis pulchripennis (Ashmead). Fla.

Psilophrys pulchripennis Ashmead, 1888. Ent. Amer. 4: 16. ♀.

Taxonomy: Girault, 1916. Ent. News 27: 225.

Genus CLAUSENIA Ishii

Clausenia Ishii, 1923. Japan Dept. Agr. and Com., Imp. Plant Quar. Sta. Bul. 3: 98, 100.

Type: *Clausenia purpurea* Ishii. Monob.

purpurea Ishii. Ont., Conn., Va. Host: *Pseudococcus comstocki* (Kuw.).

Clausenia purpurea Ishii, 1923. Japan Dept. Agr. and Com., Imp. Plant Quar. Sta. Bul. 3: 100. ♂ ♀.

Biology: Cox, 1940. Jour. Econ. Ent. 33: 446.—Clancy, 1944. Jour. Econ. Ent. 37: 450-451.—Haeussler and Clancy, 1944. Jour. Econ. Ent. 37: 503.—Hough, Clancy, and Pollard, 1945. Jour. Econ. Ent. 38: 423-425.

Morphology: Flanders, 1942. Ent. Soc. Amer. Ann. 35: 252, 262.

Genus ENCYRTUS Latreille

Encyrtus Latreille, 1809. Gen. Crust. Ins., v. 4, p. 31.

Type: *Chrysis infidus* Rossi. Desig. by Latreille, 1810.

Eucomys Foerster, 1856. Hym. Stud., v. 2, pp. 32, 34.

Type: *Encyrtus swederi* Dalman. Orig. desig.

Comys Foerster, 1856. Hym. Stud., v. 2, pp. 144, 145. N. name.

Howardia Dalla Torre, 1897. Wien. Ent. Ztg. 16: 86. Preocc.

Type: *Bothriothorax peckhami* Ashmead. Monob.

Howardiella Dalla Torre, 1898. Cat. Hym., v. 5, p. 228. N. name.

albicoxa (Ashmead). Fla. Hosts: *Pseudococcus adonidum* (L.); *P. citri* (Risso).

Comys albicoxa Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xvi. ♂ ♀.

atys (Girault), n. comb. N. Y.

Eucomys atys Girault, 1917. Descrip. Hym. Chalcidoid. Variorum cum Observ. V, p. 2. ♀.

barbatus Timberlake. Calif.

- Encyrtus barbatus* Timberlake, 1919. Hawaii. Ent. Soc. Proc. 4: 209. ♂ ♀.
Biology: Ishii, 1932. Japan Dept. Agr. and Com., Imp. Agr. Expt. Sta. Bul. 3: 181, 187-188, 194.
- bicolor** (Howard). Ont., N. Y., N. J., D. C., Ohio, Mich., La., Kans., Colo., Calif.
Hosts: *Coccus hesperidum* L.; *Lecanium corni* Bouché; *L. fletcheri* Kkll.
Comys bicolor Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, pp. 350, 362. ♂ ♀.
Biology: Hubbard, 1885. Insects Affecting the Orange, p. 52.—Craw, 1894. Calif. State Bd. Hort. Bien. Rpt. 4: 97.
- californicus** (Girault). Calif. Hosts: *Lecanium corni* Bouché; *L. quercifex* Fitch.
Eucomys californicus Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 2. ♀.
Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.
- cycanocephalus** Dalman. Europe, ?Ont. Hosts: *Lecanium caryae* Fitch; *L. corni* Bouché.
Encyrtus cycanocephalus Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 344. ♀.
Biology: Jarvis, 1911 (1910). Ent. Soc. Ontario Ann. Rpt. 41: 75.
- fuscus** (Howard). Ont., Que., N. Y., Mass., Conn., N. J., Ohio, Ala., Kans., Calif.
Hosts: *Lecanium corni* Bouché; *L. nigrofasciatum* Perg.; *L. pruinatum* Coq.; *L. ssp.* on laurel-leaved oak, on *Heteromeles* and on *Quercus nigra*; *Pulvinaria vitis* (L.); *Saissetia hemisphaerica* (Targ.).
Comys fuscus Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 363. ♂ ♀.
Chiloneurus maculatipennis Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 203. ♀.
Biology: Isaac, 1905. Calif. State Commr. Hort. Bien. Rpt. 1: 99.—Smith, 1915. Calif. State Comm. Hort. Monthly Bul. 4: 269.
Taxonomy: Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 360.
- infelix** (Embleton). N. Y. Host: *Saissetia hemisphaerica* (Targ.).
Comys infelix Embleton, 1902. Ent. Soc. London Trans., p. 223. ♀.
Biology: Maple, 1937. Ent. Soc. Amer. Ann. 30: 144, 148-151.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 82-83, 86-87.
Taxonomy: Embleton, 1904. Linn. Soc. London, Trans., Zool. (2) 9: 231-254.
- infidus** (Rossi). Europe, ?No. Amer.
Chrysis? infidus Rossi, 1790. Fauna Etrusca, v. 2, p. 80.
Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 84, 87-88.
Taxonomy: Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 360.
- kansensis** (Girault), n. comb. Kans.
Eucomys kansensis Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 2, ♀.
- lecaniorum** (Mayr). Europe, ?No. Amer.
Comys Lecaniorum Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien, Verh. 25: 740. ♀.
Taxonomy: Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 360.
- marylandicus alpinus** (Girault). N. Y.
Eucomys marilandicus var. *alpinus* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 2. ♀.
- marylandicus marylandicus** (Girault). Maine, Md., N. C.
Eucomys marilandicus Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 2. ♀.
Encyrtus marylandicus Gahan, Crosby and Leonard, 1928. N. Y. (Cornell) Agr. Expt. Sta. Mem. 101: 979. Emend.
- peckhamii** (Ashmead). N. C., Wis. Host: *Lecanium corni* Bouché.
Bothriothorax Peckhamii Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 132. ♂ ♀.
Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 183.
- scutellatus** (Swederus). Europe, ?Ont., ?Kans. Host: *Lecanium caryae* Fitch.
Pteromalus Scutellatus Swederus, 1795. Svenska Vetensk. Akad. Handl. 16: 218.
Taxonomy: Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, pp. 559, 562.

Genus **PSILOPHRYS** Mayr

Psilophrys Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien, Verh. 25: 727.

Type: *Encyrtus longicornis* Walker. Monob.

armata Ashmead. Fla.

Psilophrys armatus Ashmead, 1888. Ent. Amer. 4: 16. ♂ ♀.

Genus **PARAPSILOPHRYS** Howard

Parapsilophrys Howard, 1898. U. S. Natl. Mus. Proc. 21: 232.

Type: *Parapsilophrys gelechia* Howard. Monob.

gelechia Howard. Wyo. Host: *Gelechia* sp. on cottonwood.

Parapsilophrys gelechia Howard, 1898. U. S. Natl. Mus. Proc. 21: 233.

♂ ♀.

Genus **PSILOPHRYOIDEA** Compere

Psilophryoidea Compere, 1928. Calif. Univ. Pubs., Ent. 4: 214.

Type: *Psilophryoidea comesor* Compere. Monob.

comesor Compere. Calif. Host: *Kermes cockerelli* Ehrh.

Psilophryoidea comesor Compere, 1928. Calif. Univ. Pubs., Ent. 4: 214. ♀.

Genus **PARALITOMASTIX** Mercet

Paralitomastix Mercet, 1921. Fauna Iberica, Himen., Encirtidos, pp. 70, 438.

Type: *Encyrtus varicornis* Nees. Monob.

pyralidis (Ashmead). Ont., Mich., Md., D. C., Fla., Utah. Calif. Hosts: *Anarsia lineatella* Zell.; *Trichotape flavocostella* Clem.; *T. setosella* Clem.

Eucyrtus (!) *pyralidis* Ashmead, 1888. Ent. Amer. 4: 15. ♀.

Copidosoma variegatum Howard, 1888. U. S. Dept. Agr. Insect Life 1: 197.

♀.

Biology: Pack, 1930. Utah Agr. Expt. Sta. Bul. 216: 15-16.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 109.

Taxonomy: Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 366.

Genus **COPIDOSOMA** Ratzeburg

Copidosoma Ratzeburg, 1844. Ichn. d. Forstins., v. 1, table facing p. 40, p. 157.

Type: *Copidosoma bouchéanum* Ratzeburg. Monob.

Berecyntus Howard, 1898. U. S. Natl. Mus. Proc. 21: 237. Preocc.

Type: *Berecyntus bakeri* Howard. Monob.

Litomastix Thomson, 1875. Hym. Scand., v. 4, pp. 118, 171. N. syn.

Type: *Encyrtus chalconotus* Dalman. Desig. by Ashmead, 1900.

Copidosomopsis Girault, 1915. Queensland Mus. Mem. 4: 94.

Type: *Copidosomopsis perminutus* Girault. Monob.

Paracopidosomopsis Girault, 1916. Psyche 23: 49. N. syn.

Type: (*Berecyntus floridanus* Ashmead) = *Copidosoma truncatellum* (Dalm.). Monob. and orig. desig.

Verdunia Mercet, 1917. Soc. Espan. Hist. Nat. Bol. 17: 203.

Type: *Verdunia gloriosa* Mercet. Monob.

Litomastiellus Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, p. 443. N. syn.

Type: *Litomastix (Litomastiellus) claviger* Mercet. Present desig.

Limastotix Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, p. 443. N. syn.

Type: *Litomastix (Limastotix) hispanicus* Mercet. Monob.

Neocopidosoma Ishii, 1923. Japan Dept. Agr. and Com., Imp. Plant Quar. Sta. Bul. 3: 101.

Type: *Neocopidosoma komabae* Ishii. Monob.

Berecyntisus Ghesquière, 1946. Rev. Zool. Bot. Africaines 34: 368. N. name. N. syn.

Arrhenoclavus Doutt, 1948. Pan-Pacific Ent. 24: 145. N. syn.

Type: *Copidosoma koehleri* Blanchard. Monob.

- bakeri arizonensis** (Girault), n. comb. Ariz. Host: *Chorizagrotis* sp.
Berecynthus bakeri var. *arizonensis* Girault, 1916. Psyche 23: 49. ♀.
- bakeri bakeri** (Howard), n. comb. Ont., Mass., Colo., Utah. Hosts: *Chorizagrotis auxiliaris* (Grote); *Sidemia devastator* (Brace).
 ?*Litomastix auricollis* Thomson, 1875. Hym. Scand., v. 4, p. 175. ♂ ♀.
Berecynthus bakeri Howard, 1898. U. S. Natl. Mus. Proc. 21: 238. ♀.
 Biology: Gibson, 1915. Canada Dept. Agr. Ent. Branch Bul. 10: 11.—Snow, 1925. Jour. Econ. Ent. 18: 606.
- bakeri euxoae** (Strickland), n. comb. Alta., Kans., N. Mex. Hosts: *Chorizagrotis auxiliaris* (Grote); *Feltia subgothica* (Haw.).
Berecynthus bakeri var. *euxoae* [Strickland], 1916. Canada Dept. Agr. Ent. Branch Bul. 13: 21. ♀.
 Taxonomy: Girault, 1917. Descr. Stellarum Nov., p. 18.
- bakeri gemma** (Girault). Ont., Sask. Hosts: *Agrotis venerabilis* Wlkr.; *Chorizagrotis thanatologia* Dyar; *Euxoa detersa* (Wlkr.); *E. flavicollis* (Smith); *E. tristicula* (Morr.); *Feltia ducens* Wlkr.; *Crymodes devastator* (Brace).
Berecynthus bakeri var. *gemma* Girault, 1916. Psyche 23: 49. ♂ ♀.
 Biology: King and Atkinson, 1928. Ent. Soc. Amer. Ann. 21: 174.
- celaenae** Howard. Que., Conn., Ohio, Ind., Mo., Miss. Hosts: *Euxoa scolastica* McD.; *Lacinipolia renigera* (Steph.).
Copidosoma celaenae Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 11. ♀.
- gelechia** *gelechia* Howard. N. H. to N. C.; Ont., Minn., Mo., Kans., Ariz. Hosts: *Epiblema scudderiana* (Clem.); *Gnorimoschema asterella* (Kell.); *G. gallaesolidaginis* (Riley); *G. salinaris* Busek.
Copidosoma gelechiae Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 10. ♂ ♀.
- Psilophrys hyalinipennis* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 21. ♂. N. syn.
Psilophrys pallipes Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. V. ♀. Preoc.
Psilophrys pallidipes Schulz, 1906. Spolia Hym., p. 146. Emend.
 Biology: Patterson, 1919. Jour. Hered. 10: 346.—Barber, 1938. N. Y. Ent. Soc. Jour. 46: 169–171, 174–175.
 Morphology: Leiby, 1922. Jour. Morphology 37: 195–285.
- gelechia** *sagum* Girault. Ont.
Copidosoma gelechiae var. *saga* Girault, 1920. U. S. Natl. Mus. Proc. 58: 188. ♂ ♀.
- geniculatum** (Dalman). Mass., N. Y., Conn. Host: *Rhyacionia buoliana* (Schiff.).
Encyrtus geniculatus Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 361. ♂.
 Biology: Dowden, 1934. Ent. Soc. Amer. Ann. 27: 600.
 Taxonomy: Mayr, 1875. Zool.-Bot. Gesell. Wien Verh. 25: 734–737.
- intermedium** Howard. N. J., Mo., Kans. Host: *Gnorimoschema gallae-asterella* (Kell.).
Copidosoma intermedium Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 12. ♂ ♀.
- lymani** Howard. Ont. Host: *Anacampsis lupinella* Busek.
Copidosoma Lymani Howard, 1907. Canad. Ent. 39: 103. ♀.
- melanoceram** (Ashmead). D. C., N. C., Kans., Iowa. Host: *Feltia subgothica* (Haw.).
Liothorax melanocera Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 363. ♀.
- truncatellum** (Dalman). Que. to Fla., west to Tex. and Ariz. Hosts: *Anomis erosa* Hbn.; *Autographa* sp.; *Prodenia ornithogalli* Guen.; *Trichoplusia ni* (Hbn.); *Zeuzera pyrina* (L.).
Encyrtus truncatellus Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 168
Berecynthus floridanus Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 365. ♀.
 Biology: Silvestri, 1937. Harvard Univ., Mus. Compar. Zool. Bul. 81: 472–487.
 Taxonomy: Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, pp. 456–457.
- turni** (Packard). N. H., Conn., N. J. Host: *Papilio glaucus* (L.).
Encyrtus turni Packard, 1881. Boston Soc. Nat. Hist. Proc. 21: 32. ♂ ♀.

Taxonomy: Howard, 1889. *In* Scudder, Butterflies of Eastern U. S. and Canada, pp. 1872, 1888.

vagum Howard. Que., N. J., Mo., Host: *Filitima pseudoacaciella* (Chamb.).

Copidosoma vagum Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 11.
♂ ♀.

Copidosoma n. sp. (*nanellae* Amer. authors, not Silvestri). Maine, N. Y. Conn., Oreg. Hosts: *Eucordylea huntella* Keif.; *Ezoitelesia pinifoliella* (Chamb.); *Recurvaria thujaella* Kearf.

Taxonomy: Gahan, 1930. U. S. Natl. Mus. Proc. 77 (8): 7.

Genus SCEPTROPHORUS Foerster

Sceptrophorus Foerster, 1856. Hym. Stud., v. 2, pp. 34, 38.

Type: *Encyrtus sceptriger* Foerster. Desig. by Ashmead, 1900.

marylandicus Girault, emend. Md.

Sceptrophorus marilandicus Girault, 1917. Ent. News 28: 256. ♀.

Genus CERCHYSIUS Westwood

Cerchysius Westwood, 1832. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 1: 127.

Type: (*Encyrtus urocerus* Dalman) = *Encyrtus subplanus* Dalman. Desig. by Westwood, 1840.

Revision: Girault, 1918. Ent. News 29: 65.

elasmoceri Ashmead. D. C., Va. Host: *Monophylla terminata* (Say).

Cerchysius elasmoceri Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 379. ♀.

flaccus (Walker). Fla.

Encyrtus (Cerchysius) Flaccus Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 21. ♀.

hubbardii Ashmead. Calif. Host: *Vrittella hubbardi* Schwarz [*nomen nudum*] infesting stems of *Allewroffia occidentalis*.

Cerchysius hubbardii Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 380. ♀.

marylandicus Girault, emend. Md.

Cerchysius marilandicus Girault, 1917 (1916). Insecutor Inscitiae Menstruus 4: 119. ♀.

pallipes (Provancher). Ont.

Copidosoma pallipes Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 205. ♀.

Copidosoma pallidipes Dalla Torre, 1898. Cat. Hym., v. 5, p. 243. Emend.

Genus BAEOCHARIS Mayr

Baeocharis Mayr, 1875. Zool.-Bot. Gesell. Wien Verh. 25: 767.

Type: *Baeocharis pascuorum* Mayr. Monob.

Sphaeropisthus Thomson, 1875. Hym. Scand., v. 4, pp. 116, 131.

Type: *Sphaeropisthus pascuorum* Thomson. Monob.

annulicornis (Ashmead). Fla.

Sphaeropisthus annulicornis Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 369. ♂.

auriceps (Ashmead). Fla.

Sphaeropisthus auriceps Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 369. ♀.

Genus CHESTOMORPHA Ashmead

Chestomorpha Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 335, 343, 370.

Type: *Chestomorpha biformis* Ashmead. Monob.

biformis Ashmead. N. Mex.

Chestomorpha biformis Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 370. ♀.

Genus **AENASIVS** Walker

Aenasius Walker, 1846. Ann. Mag. Nat. Hist. 17: 181.

Type: *Encyrtus (Aenasius) hyettus* Walker. Monob.

Revision: Compere, 1937. Hawaii. Ent. Soc. Proc. 9: 383-404.

maplei Compere. Calif. Host: *Puto yuccae* (Coq.).

Aenasius maplei Compere, 1937. Hawaii. Ent. Soc. Proc. 9: 384, 390, 397.

♂ ♀.
Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 55-57.

Genus **CHALCASPIIS** Howard

Chalcaspis Howard, 1895. U. S. Natl. Mus. Proc. 17: 606.

Type: *Chalcaspis pergandei* Howard. Monob.

arizonensis Girault. Ariz.

Chalcaspis arizonensis Girault, 1915. Ent. Soc. Amer. Ann. 8: 280. ♀.

pergandei Howard. Mass., D. C., S. Dak.

Chalcaspis pergandei Howard, 1895. U. S. Natl. Mus. Proc. 17: 606. ♀.

phenacocci (Ashmead). N. Mex., Calif. Host: *Phenacoccus cevaliae* Ckll.

Blepyrus phenacocci Ashmead, 1902. Canad. Ent. 34: 301. ♂ ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.

Genus **BOTHRIENCYRTUS** Timberlake

Bothriencyrtus Timberlake, 1919 (1918). Hawaii. Ent. Soc. Proc. 4: 185, 212.

Type: *Bothriothorax planiformis* Howard. Orig. desig.

planiformis (Howard). Calif.

Bothriothorax planiformis Howard, 1895. U. S. Natl. Mus. Proc. 17: 611. ♀.

Genus **BOTHRIOTHORAX** Ratzeburg

Bothriothorax Ratzeburg, 1844. Ichn. d. Forstins., v. 1, table facing p. 40; p. 208.

Type: (*Bothriothorax altensteinii* Ratzeburg) = *Encyrtus clavicornis* Dalman. Monob.

Trimorphocerus Dahlbom, 1857. Öfvers. Svenska Vetensk. Akad. Förh. 14: 293 (no species).

Type: (*Bothriothorax altensteinii* Ratzeburg) = *Encyrtus clavicornis* Dalman. Desig. by Gahan and Fagan, 1923.

Revision: Howard, 1895. U. S. Natl. Mus. Proc. 17: 607-611.

californicus Howard. Calif. Hosts: *Scaeva pyrastris* (L.); *Syrphus nitens* Zett.; *S. opinator* O. S.

Bothriothorax californicus Howard, 1895. U. S. Natl. Mus. Proc. 17: 609. ♀.

Biology: Kamal, 1926. Jour. Econ. Ent. 19: 726-728.

faridi Kamal. Calif. Host: *Syrphus opinator* O. S.

Bothriothorax faridi Kamal, 1926. Canad. Ent. 58: 283. ♂ ♀.

Biology: Kamal, 1939. Egypt Min. Agr. Tech. and Sci. Serv. Ent. Sect. Bul. 207: 33, 46, 48.

flaviscapus Girault. U. S. Host: Syrphid.

Bothriothorax flaviscapus Girault, 1915. Ent. Soc. Amer. Ann. 8: 276. ♂ ♀.

macroglenes Ashmead. Kans.

Bothriothorax macroglenes Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 4: App. p. V. ♀.

nigripes Howard. N. Mex., Calif. Host: *Eupeodes volucris* O. S.

Bothriothorax nigripes Howard, 1895. U. S. Natl. Mus. Proc. 17: 611. ♀.

Biology: Kamal, 1939. Egypt Min. Agr. Tech. and Sci. Serv. Ent. Sect. Bul. 207: 33, 46, 48.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 70-71.

noveboracensis Howard. N. H., N. Y., N. J.

Bothriothorax noveboracensis Howard, 1895. U. S. Natl. Mus. Proc. 17: 609.

♀.

peculiaris Howard. N. H., N. J., Va., Ill., Wis. Hosts: *Metasyrphus wiedemanni* Johns.; *Syrphus rectus* O. S.; *S. ribesii* (L.).

Bothriothorax peculiaris Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 20. ♂ ♀.

rotundiformis Howard. Calif.

Bothriothorax rotundiformis Howard, 1895. U. S. Natl. Mus. Proc. 17: 610. ♀.

virginiensis Howard. Va.

Bothriothorax virginiensis Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 20. ♀.

Genus PENTELICUS Howard

Pentelicus Howard, 1895. U. S. Natl. Mus. Proc. 17: 606, 611.

Type: *Pentelicus aldrichi* Howard. Monob.

aldrichi Howard. S. Dak.

Pentelicus aldrichi Howard, 1895. U. S. Natl. Mus. Proc. 17: 612. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 183.

Genus BLEPYRUS Howard

Blepyrus Howard, 1898. U. S. Natl. Mus. Proc. 21: 233.

Type: *Blepyrus mexicanus* Howard. Desig. by Ashmead, 1900.

Coccophoctonus Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 337, 344, 375.

Type: (*Coccophagus dactylopii* Ashmead) = *Blepyrus mexicanus* Howard. Monob.

insularis (Cameron). Tex. Host: *Ferrisiana virgata* (Ckll.).

Encyrtus? insularis Cameron, 1886. In Blackburn and Cameron, Manchester

Lit. Phil. Soc. Mem. (3) 10: 243. "♂" = ♀.

Blepyrus texanus Howard, 1898. U. S. Natl. Mus. Proc. 21: 235. ♀.

Taxonomy: Timberlake, 1922. Hawaii. Ent. Soc. Proc. 5: 170-173.

saccharicola Gahan. Fla., La. Host: *Pseudococcus* sp. on sugarcane.

Blepyrus saccharicola Gahan, 1942. U. S. Natl. Mus. Proc. 92: 47. ♂ ♀.

Genus HEMAENASIUS Ashmead

Hemaenasius Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 336, 374.

Type: *Hemaenasius confusus* Ashmead. Monob.

Hemiaenasius Schulz, 1906. Spolia Hym., p. 146. Emend.

confusus Ashmead. D. C.

Hemaenasius confusus Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 374. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 183.

Genus TRICHOMASTHUS Thomson

Trichomasthus Thomson, 1875. Hym. Scand, v. 4, pp. 131, 134.

Type: *Encyrtus cyaneus* Dalman. Desig. by Gahan and Fagan, 1923.

cyanifrons (Dalman). Va. Host: *Lecanium corni* Bouché.

Encyrtus cyanifrons Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 159.

Taxonomy: Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, pp. 369-372.

Genus DISCODES Foerster

Discodes Foerster, 1856. Hym. Stud., v. 2, pp. 32, 34, 144.

Type: *Encyrtus aeneus* Dalman. Orig. desig.

Phaenodiscus Foerster, 1856. Hym. Stud., v. 2, p. 144. N. name.

arizonensis (Howard), n. comb. Colo., N. Mex., Ariz.

Phaenodiscus arizonensis Howard, 1898. U. S. Natl. Mus. Proc. 21: 248. ♀.

unicolor (Ashmead), n. comb. Fla.

Aphycus unicolor Ashmead, 1888. Ent. Amer. 4: 15. ♀.

Genus EURYRHOPALUS Howard

Euryrhopalus Howard, 1898. U. S. Natl. Mus. Proc. 21: 237.

Type: *Euryrhopalus schwarzi* Howard. Monob.

Synaspidia Timberlake, 1923. Hawaii. Ent. Soc. Proc. 5: 397.

Type: *Synaspidia pretiosa* Timberlake. Monob.

Revision: Gahan, 1942. U. S. Natl. Mus. Proc. 92: 49.

schwarzi Howard. Fla.

Euryrhopalus schwarzi Howard, 1898. U. S. Natl. Mus. Proc. 21: 237. ♀.

Taxonomy: Gahan, 1942. U. S. Natl. Mus. Proc. 92: 49.

Genus RHYTIDOTHORAX Ashmead

Rhytidothorax Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 337, 344, 377.

Type: *Rhytidothorax marlatti* Ashmead. Monob.

marlatti Ashmead. Kans.

Rhytidothorax marlatti Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 377. ♀.

Genus HOMALOTYLUS Mayr

Homalotylus Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien Verh. 25: 752.

Type: *Encyrtus flaminus* Dalman. Desig. by Ashmead, 1900.

Nobrimus Thomson, 1875. Hym. Scand., v. 4, pp. 116, 137.

Type: *Encyrtus flaminus* Dalman. Desig. by Timberlake, 1919.

Mendozaniella Brèthes, 1913. Buenos Aires Mus. Nac. Hist. Nat. An. 24: 97.

Type: *Mendozaniella mirabilis* Brèthes. Monob.

Hemaenasoidea Girault, 1916. Ent. Soc. Amer. Ann. 9: 307.

Type: *Hemaenasoidea oculata* Girault. Monob.

Revision: Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 133.

affinis Timberlake. Calif. Host: *Hyperaspis osculans* Lec.

Homalotylus affinis Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 165. ♀.

albitarsus Gahan. Md. Hosts: *Lecanium? nigrofasciatum* Perg. on peach; coccinellid.

Homalotylus albitarsus Gahan, 1910. Canad. Ent. 42: 206. ♀.

cockerelli Timberlake. Tex. Hosts: ?*Dactylopius confusus* (Ckll.); *Pseudococcus* sp.; ?*Hyperaspidium trimaculatus* (L.).

Homalotylus cockerelli Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 163.

♂ ♀.

flaminus (Dalman). La.

Encyrtus flaminus Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 340.

♂.

Taxonomy: Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, pp. 519-522, 712.

hyperaspidis Timberlake. Utah, Calif. Host: *Hyperaspis undulata* (Say).

Homalotylus hyperaspidis Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 167.

♂ ♀.

punctifrons Timberlake. Fla.

Homalotylus punctifrons Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 169.

♀.

terminalis californicus Girault. Mass., Md., D. C., S. C., Utah, Calif. Hosts: *Adalia bipunctata* (L.); *Coccinella novemnotata* Hbst.; *C. quinquenotata* Kby.; *C. transversoguttata* Fald.; *Hippodamia convergens* Guér.; *Disonycha* sp.

Homalotylus obscurus var. *californicus* Girault, 1915. Ent. Soc. Amer. Ann. 8: 274. ♀.

terminalis terminalis (Say). N. Y., Mass., N. J., Pa., Del., Ind., Ill., Fla., La., Tex. Hosts: *Coleomegilla maculata* (Deg.); *C. sp.*; *Cycloneda sanguinea* (L.); *C. sanguinea immaculata* (F.); *Chilocorus similis* (Rossi); *Coccinella novemnotata* Hbst.; *C. sanguinea* (L.); *Hippodamia convergens* Guér.; *Neomysia pullata* (Say); *Psyllobora viginti-maculata* (Say); *Scymnus* sp.

Serlion (?) terminalis Say, 1828. Contrib. Maclur. Lyc. Phila. 1: 80.

Eutelus ? scymnae Shimer, 1869. Amer. Ent. Soc. Trans. 2: 385. ♂.

Homalotylus obscurus Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 22.

♀.

Genus ANISOTYLUS Timberlake

Anisotylus Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 170.

Type: *Homalotylus similis* Ashmead. Orig. desig.

pallentipes Timberlake. Ariz.

Anisotylus pallentipes Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 175. ♀.

similis similis (Ashmead). Fla. Host: *Scymnus cervicalis* Muls.

Homalotylus similis Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 190.

similis texanus Timberlake. Tex. Host: *Hyperaspis bigeminata* (Rand.).

Anisotylus similis subsp. *texanus* Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 173. ♀.

similis utahensis Timberlake. Utah, Calif. Hosts: *Scymnus americanus* Muls.; *S. lacustris* Lec.

Anisotylus similis utahensis Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 174. ♂ ♀.

Genus AGENIASPIS Dahlbom

Ageniaspis Dahlbom, 1857. Öfvers. Svenska Vetensk. Akad. Forh. 14: 293 (no species).

Type: *Encyrtus fuscicollis* Dalman. Desig. by Ashmead, 1904.

Holcothorax Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien Verh. 25: 691.

Type: *Encyrtus (Holcothorax) testaceipes* Ratzeburg. Desig. by Gahan and Fagan, 1923.

bucculatricis (Howard). Ont., N. Y., N. J., D. C., Ohio, Mo. Hosts: *Bucculatrix pomifoliella* Clem.; galls of *Rhabdophaga cornuta* Walsh and *R. siliqua* Walsh.

Encyrtus bucculatricis Howard, 1883. In Lintner, Injurious Insects N. Y. Ann. Rpt. 1: 160. ♀.

Genus PRIONOMITUS Mayr

Prionomitus Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien Verh. 25: 701.

Type: (*Encyrtus chlorinus* Dalman)=*Encyrtus mitratus* Dalman. Monob.

mitratus (Dalman). Utah.

Encyrtus mitratus Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 352. ♀.

tiliaris (Dalman). Europe. ?No. Amer.

Encyrtus tiliaris Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 171.

Genus THYSANOMASTIX Perkins

Thysanomastix Perkins, 1907. Hawaii. Sugar Planters' Assoc. Expt. Sta. Div. Ent. Bul. 4: 55.

Type: *Thysanomastix koebelei* Perkins. Monob.

koebelei Perkins. Ariz. Host: *Cuerna lateralis* (F.).

Thysanomastix koebelei Perkins, 1907. Hawaii. Sugar Planters' Assoc. Expt. Sta. Div. Ent. Bul. 4: 55. ♀.

Genus PSYLLAEPHAGUS Ashmead

Psyllaephagus Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 339, 345, 382.

Type: *Encyrtus pachypsyllae* Howard. Orig. desig.

arbuticola Gahan and Waterston. Calif. Host: *Euphyllura arbuti* Schwarz.

Psyllaephagus arbuticola Gahan and Waterston, 1926. Bul. Ent. Res. 16: 373. ♂ ♀.

pachypsyllae (Howard). Md., N. C., Kans. Host: *Pachypsylla celtidis-gemma* (Riley).

Encyrtus pachypsyllae Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 15. ♂ ♀.

solus (Howard). Fla. Host: *Trioxa magnoliae* (Ashm.).

Encyrtus solus Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 15. ♀.
Taxonomy: Gahan and Waterston, 1926. Bul. Ent. Res. 16: 375.

trioziphagus (Howard). Md., N. C., Ohio. Hosts: *Trioxa diospyri* (Ashm.).

Encyrtus trioziphagus Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 14. ♂ ♀.
Biology: Eddy, 1927. Ohio Jour. Sci. 27: 196-197.

Genus MICROTERYS Thomson

Microterys Thomson, 1875. Hym. Scand., v. 4, pp. 118, 155.

Type: *Encyrtus sylvius* Dalman. Desig. by Ashmead, 1900.
Revision: Compere, 1926. Calif. Univ. Pubs., Ent. 4: 39-44 (Calif.).

bolus (Walker). Ont. Host: ?*Coccus* sp. on willow twigs.

Encyrtus Bolus Walker, 1844. Ann. Mag. Nat. Hist. (1) 14: 17. ♀.

cincticornis Ashmead. N. H., Mass., Ill. Host: *Kermes pubescens* Bogue.

Microterys cincticornis Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 390.

claripennis Compere. Calif. Host: *Lecanium corni* Bouché.

Microterys claripennis Compere, 1928. Calif. Univ. Pubs., Ent. 4: 216. ♂ ♀.

dubiosus (Dalla Torre). Calif. Host: *Icerya purchasi* Mask.

Encyrtus dubius Howard, 1889. U. S. Dept. Agr. Insect Life 1: 270. ♂.
Preoce.

Encyrtus dubiosus Dalla Torre, 1898. Cat. Hym., v. 5, p. 257. N. name.

flavus (Howard). Ont., N. J., Ohio, Ill., Fla., Calif. Hosts: *Coccus hesperidum* L.;
C. pseudomagnoliarum (Kuw.); *Lecanium corni* Bouché; *L. fletcheri* Ckll.;
Pulvinaria vitis (L.); *Saissetia hemisphaerica* (Targ.).

Encyrtus flavus Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 367.
♂ ♀.

Biology: Isaac, 1905. Calif. State Commr. Hort. Bien. Rpt. 1: 99, 102.—Timberlake,
1913. Jour. Econ. Ent. 6: 295.—Maple, 1947. Calif. Univ. Pubs., Ent.
8: 98-100, 102-103.

fuscicornis (Howard). Md., Minn. Host: *Toumeyella numismaticum* (P. and McD.).

Encyrtus fuscicornis Howard, 1885. U. S. Dept. Agr. Div. Ent. Bul. 5: 13. ♀.

interpunctus (Dalman). Europe, Greenland, ?No. Amer.

Encyrtus interpunctus Dalman, 1820. Svenska Vetensk. Akad. Handl.
41: 157. ♀.

lachni (Ashmead). Fla. Host: *Lachnus australis* Ashm.

Homalotylus lachni Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 132. ♀.

lunatus (Dalman). Europe, ?No. Amer.

Encyrtus lunatus Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 156. ♀.

marginatus Ashmead. N. Mex.

Microterys marginatus Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 392. ♀.

mazzinini Girault. Calif. Host: *Physokermes insignicola* (Craw).

Microterys mazzinini Girault, 1917. Descr. Stellarum Nov., pp. 12, 13.
♂ ♀.

montinus (Packard). N. H. Host: ?*Lecanium* sp.

Encyrtus Montinus Packard, 1874. In Hitchcock and Huntington, Geol. of
N. H., v. 1, p. 347. ♀.
Taxonomy: Howard, 1888. Ent. Soc. Wash. Proc. 1: 91.

physokermis Compere. Calif. Host: *Physokermes insignicola* (Craw).

Microterys physokermis Compere, 1926. Calif. Univ. Pubs., Ent. 4: 43. ♀.

speciosissimus Girault. Ill. Host: *Kermes pubescens* Bogue.

Microterys speciosissimus Girault, 1911. Canad. Ent. 43: 175. ♀.

sublestus (Howard). Conn., Fla. Hosts: ?*Lecanium* sp. on *Pinus palustris*, L. sp.

Encyrtus sublestus Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 12. ♂.

sylvius (Dalman). Europe, ?No. Amer.

Encyrtus sylvius Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 154. ♀.
Taxonomy: Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, pp. 394-397. ♂ ♀.

tessellatus (Dalman). Greenland.

Encyrtus tessellatus Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 342.

♀.

Taxonomy: Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, pp. 420-423. ♂ ♀.

titiani Girault. Calif. Host: *Lecanium corni* Bouché.

Microterys titiani Girault, 1917. Descr. Stellarum Nov., p. 13. ♂ ♀.

Biology: DeBach, 1939. Jour. Econ. Ent. 32: 728.

xanthopsis Compere. Calif. Hosts: *Lecanium corni* Bouché; *L. persicae* (F.).

Microterys xanthopsis Compere, 1926. Calif. Univ. Pubs., Ent. 4: 41. ♀.

yolandae Compere. Calif. Host: *Kermes cockerelli* Ehrh.

Microterys yolandae Compere, 1926. Calif. Univ. Pubs., Ent. 4: 39. ♀.

Genus EPIENCYRTUS Ashmead

Epiencyrtus Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 340, 346, 396.

Type: *Encyrtus thyreodontis* Ashmead. Orig. desig.

artaceae (Howard). Fla.

Encyrtus artaceae Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 252.

♂ ♀.

Taxonomy: Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 397.

thyreodontis (Ashmead). Mass. Host: *Thyreodon atricolor* (Oliv.).

Encyrtus thyreodontis Ashmead, 1898. Ent. Soc. Wash. Proc. 4: 156. ♀.

Biology: Dimmock, 1898. Ent. Soc. Wash. Proc. 4: 149.

Genus ISODROMUS Howard

Isodromus Howard, 1887. U. S. Dept. Agr. Ann. Rpt. for 1886, p. 488.

Type: *Isodromus iceryae* Howard. Monob.

Parataneostigma Girault, 1915. Ent. Soc. Amer. Ann. 8: 275.

Type: (*Parataneostigma nigriaxillae* Girault) = *Isodromus iceryae* Howard. Monob.

Revision: Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 176-190.

The true hosts of this genus are probably Chrysopidae.

atriventris Ashmead. Ont., Que., Mass., Va., Fla. Host: *Chrysopa lateralis* Guér.

Isodromus atriventris Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 379. ♀.

iceryae Howard. Md., D. C., N. C., S. C., Fla., La., Mo., Kans., Calif. Hosts: *Sympherobius angustus* (Banks); *S. californicus* (Banks); *Chrysopa californica* Coq.; *C. lateralis* Guér.; *C. rufilabris* Burm.; ?*Saissetia oleae* (Bern.).

Isodromus iceryae Howard, 1887. U. S. Dept. Agr. Ann. Rpt. for 1886, p. 488.

♀.

Parataneostigma nigriaxillae Girault, 1915. Ent. Soc. Amer. Ann. 8: 275.

♀.

Isodromus pulcher Girault, 1917. Descr. Stellarum Nov., p. 16. ♀.

Biology: Riley, 1889. U. S. Dept. Agr. Ann. Rpt. for 1888, pp. 85-86.—Clancy, 1946. Calif. Univ. Pubs., Ent. 7: 426-432.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 90.

niger Ashmead. Mass., D. C., Wis., Utah, Calif. Hosts: *Sympherobius angustus* (Banks); *Chrysopa californica* Coq.; *C. majuscula* Banks; *C. oculata* Say.

Isodromus niger Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 379. ♀.

Biology: Clancy, 1946. Calif. Univ. Pubs., Ent. 7: 418-426.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 91-92.

puncticeps (Howard). D. C., Va., Fla., Calif. Hosts: *Chrysopa* sp.

Encyrtus puncticeps Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 14.

♀.

Aphycus chrysopae Ashmead, 1888. Ent. Amer. 4: 15. ♀.

Genus NEOCOCCIDENCYRTUS Compere

Neococcidencyrtus Compere, 1928. Calif. Univ. Pubs., Ent. 4: 209.

Type: *Neococcidencyrtus alula* Compere. Monob.

alula Compere. Calif. Host: *Diaspis zamiae* Morg.

Neococcidencyrtus alula Compere, 1928. Calif. Univ. Pubs., Ent. 4: 213.

♂ ♀.

Genus COCCIDENCYRTUS Ashmead

Coccidencyrtus Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 339, 345, 383.

Type: *Encyrtus ensifer* Howard. Monob.

ensifer (Howard). Mass., Maine, Fla. Hosts: *Aspidiotus corticalis* Riley; *A. juglans-regiae* Comst.; *A. perniciosus* Comst.; *Targionia dearnessi* Ckll.

Encyrtus ensifer Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 13. ♂ ♀.

Taxonomy: Girault, 1915. Ent. Soc. Amer. Ann. 8: 284.—Compere, 1928. Calif. Univ. Pubs., Ent. 4: 212.

ochraceipes Gahan. N. Y. Host: *Diaspis boisduwali* Sign.

Coccidencyrtus ochraceipes Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 18.

♀.

Genus BOTHRIO CRAERA Timberlake

Bothriocraera Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 567.

Type: *Bothriocraera flavipes* Timberlake. Monob.

flavipes Timberlake. Utah. Host: Mealybug on *Elymus*.

Bothriocraera flavipes Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 568.

♂ ♀.

Genus PSEUDAPHYCUS Clausen

Pseudaphycus Clausen, 1915. Calif. Agr. Expt. Sta. Bul. 258: 41.

Type: *Pseudaphycus angelicus* Howard. Monob.

Revision: Gahan, 1946. U. S. Natl. Mus. Proc. 96: 311-327.

Neartic host records of this genus refer only to pseudococcine scale insects.

abstrusus Gahan. Va. Host: *Pseudococcus comstocki* (Kuw.).

Pseudaphycus abstrusus Gahan, 1946. U. S. Natl. Mus. Proc. 96: 313, 316.

♂ ♀.

alveolatifrons Gahan. N. J. Host: *Pseudococcus comstocki* (Kuw.).

Pseudaphycus alveolatifrons Gahan, 1946. U. S. Natl. Mus. Proc. 96: 314, 326. ♂ ♀.

angelicus (Howard). Que., Calif. Hosts: *Phenacoccus gossypii* Tns. and Ckll.; *Pseudococcus adonidum* (L.); *P. gahani* Green; *P. maritimus* (Ehrh.); *P. ryani* (Cocq.); *P. sp.* on *Artemisia californica*; *P. sp.* on passion flowers.

Aphycus angelicus Howard, 1898. U. S. Natl. Mus. Proc. 21: 245. ♀.

Biology: Flanders, 1940. Jour. Econ. Ent. 33: 756-758.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 110-111.—Haeussler and Clancy, 1944. Jour. Econ. Ent. 37: 504-509.

Taxonomy: Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 573-574. ♂ ♀.

graminicola Timberlake. N. Mex., Utah. Hosts: *Trionymus utahensis* (Ckll.); pseudococcine coccid on *Elymus condensatus*.

Pseudaphycus graminicola Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 570.

♂ ♀.

limatulus Gahan. Md. Host: *Phenacoccus sp.* on *Andropogon sp.*

Pseudaphycus limatulus Gahan, 1946. U. S. Natl. Mus. Proc. 96: 313, 324.

♂ ♀.

malinus Gahan. Ont., Conn., N. J., Del., Va., Ohio. Host: *Pseudococcus comstocki* (Kuw.).

Pseudaphycus malinus Gahan, 1946. U. S. Natl. Mus. Proc. 96: 313, 317.

♂ ♀.

meracus Gahan. Va. Host: *Ferrisiana virgata* (Ckll.).

Pseudaphycus meracus Gahan, 1946. U. S. Natl. Mus. Proc. 96: 314, 325.

♂ ♀.

meritorius Gahan. Va. Host: *Ferrisiana virgata* (Ckll.).

Pseudaphycus meritorius Gahan, 1946. U. S. Natl. Mus. Proc. 96: 312, 314.

♂ ♀.

- mundus** Gahan. Va., Ga., Fla., La. Hosts: *Phenacoccus gossypii* Tns. and Ckll.; *Pseudococcus adonidum* (L.); *P. boninsis* (Kuw.); *P. comstocki* (Kuw.).
Pseudaphycus mundus Gahan, 1946. U. S. Natl. Mus. Proc. 96: 313. ♂ ♀.
 Biology: Bynum, 1938. La. Agr. Expt. Sta. Bul. 298: 27-29 (*terryi*).—Clancy and Pollard, 1947. Jour. Econ. Ent. 40: 579.
- prosopidis** Timberlake. N. Mex. Host: *Pseudococcus prosopidis* (Ckll.).
Pseudaphycus prosopidis Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 571. ♀.
- websteri** Timberlake. Ill., Ind. Hosts: *Pseudococcus maritimus* (Ehrh.); ?mealybug on stem of *Elymus virginicus*.
Pseudaphycus websteri Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 572. ♀.

Genus ACEROPHAGUS E. A. Smith

- Acerophagus** E. A. Smith, 1880. No. Amer. Ent. 1: 83.
 Type: *Acerophagus coccois* Smith. Monob.
- Rhypoideus** Howard, 1898. U. S. Natl. Mus. Proc. 21: 235.
 Type: *Rhypoideus citrinus* Howard. Monob.
- Revisions: Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 574-579.—Timberlake, 1918. Calif. Univ. Pubs., Ent. 1: 347-351.
- citrinus** (Howard). Calif., Nev. Hosts: ?*Aspidiotus perniciosus* Comst.; ?*Aulacaspis rosae* (Bouché).
Rhypoideus citrinus Howard, 1898. U. S. Natl. Mus. Proc. 21: 235. ♀.
- coccois** Smith. Mass., N. J., Pa., Ill. Hosts: *Phenacoccus acericola* King; *Pulvinaria vitis* (L.).
Acerophagus coccois Smith, 1880. No. Amer. Ent. 1: 84. ♀.
 Biology: Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 361.
- erii** Timberlake. Utah. Host: *Amonostherium lichensioides* (Ckll.).
Acerophagus erii Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 577. ♂ ♀.
- fasciipennis** Timberlake. Calif. Host: *Pseudococcus crawii* (Coq.).
Acerophagus fasciipennis Timberlake, 1918. Calif. Univ. Pubs., Ent. 1: 347, 351. ♂ ♀.
 Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 54, 109.
- gutierreziae** Timberlake. N. Mex. Host: *Pseudococcus gutierreziae* (Ckll.).
Acerophagus gutierreziae Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 577. ♂ ♀.
- notativentris** (Girault). Calif. Hosts: *Pseudococcus maritimus* (Ehrh.); *P.* sp. on grape; *P.* sp.
Pseudaphycus notativentris Girault, 1917. Deser. Hym. Chalcidoid Variorum cum Observ. III, p. 10. ♂ ♀.
 Biology: Clausen, 1924. Calif. Univ. Pubs., Ent. 3: 256-266, 271-274.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 54.
- pallidus** Timberlake. Calif. Hosts: *Phenacoccus gossypii* Tns. and Ckll.; *P. solani* Ferris; *Pseudococcus eriogoni* (Ehrh.); *P. maritimus* (Ehrh.).
Acerophagus pallidus Timberlake, 1918. Calif. Univ. Pubs., Ent. 1: 348. ♂ ♀.
 Biology: Flanders, 1944. Jour. Econ. Ent. 37: 312.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 54-55, 109.
- texanus** (Howard). Tex. Host: *Ferrisiana vtrgata* (Ckll.).
Aphycus texanus Howard, 1898. U. S. Natl. Mus. Proc. 21: 245. ♀.

Genus CIRRHENCYRTUS Timberlake

- Cirrhencyrtus** Timberlake, 1918. Univ. Calif. Pubs., Ent. 1: 360, 362.
 Type: *Pseudococcobius ehrhorni* Timberlake. Monob.
- ehrhorni** (Timberlake). Calif. Hosts: *Pseudococcus ryani* (Coq.); *P. sequoiae* (Colm.).
Pseudococcobius ehrhorni Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 564. ♀.
 Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.
 Taxonomy: Timberlake, 1918. Calif. Univ. Pubs., Ent. 1: 360, 362.

Genus AENASIOIDEA Girault

Aenasioidea Girault, 1911. Canad. Ent. 43: 171.

Type: *Aenasioidea latiscapus* Girault. Monob.

Revision: Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 579-585.

armitagei Compere. Calif. Host: ?*Kermes* on native oak.

Aenasioidea armitagei Compere, 1926. Calif. Univ. Pubs., Ent. 4: 30. ♀.

kermicola Timberlake. Utah, Calif. Hosts: *Kermes galliformis* Riley; *K. nigropunctata* Ehrh. and Ckll.

Aenasioidea kermicola Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 583.
♂ ♀.

latiscapus Girault. Ill. Host: *Kermes pubescens* Bogue.

Aenasioidea latiscapus Girault, 1911. Canad. Ent. 43: 173. ♀.

pulchella (Howard). N. Y., N. J., Okla. Hosts: *Kermes pubescens* Bogue; *K. sp.* on *Quercus velutina*.

Aphycus pulchellus Howard, 1898. U. S. Natl. Mus. Proc. 21: 242. ♀.

trimblei Dozier. Pa. Host: *Lecanium quercifex* Fitch.

Aenasioidea trimblei Dozier, 1935. Ent. Soc. Wash. Proc. 37: 183. ♂ ♀.

Genus APHYCUS Mayr

Aphycus Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien Verh. 25: 695.

Type: *Encyrtus apicalis* Dalman. Desig. by Ashmead, 1900.

Pseudococcobius Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 563.

Type: *Aphycus terryi* Fullaway. Orig. desig.

Metaphycus Mercet, 1917. Soc. Españ. Hist. Nat. Bol. 17: 129, 138.

Type: *Metaphycus zebratus* Mercet. Monob.

Euaphycus Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, p. 197.

Type: *Encyrtus hederaceus* Westwood. Desig. by Mercet, 1925.

Melanaphycus Compere, 1947. Calif. Univ. Pubs., Ent. 8: 1. N. syn.

Type: *Pseudococcobius fumipennis* Timberlake. Orig. desig.

Erythrphycus Compere, 1947. Calif. Univ. Pubs., Ent. 8: 7. N. syn.

Type: *Erythrphycus argyrocomus* Compere. Orig. desig.

Revisions: Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 587-639.—Compere, 1947. Calif. Univ. Pubs., Ent. 8: 1-13.

Neartic host records refer either to coccids or to chalcidoid parasites of coccids.

alberti Howard. Calif. Host: *Coccus hesperidum* (L.).

Aphycus alberti Howard, 1898. U. S. Natl. Mus. Proc. 21: 242, 247. ♂ ♀.

Biology: Timberlake, 1913. Jour. Econ. Ent. 6: 294-295.

Taxonomy: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 94-95.

annulipes (Ashmead), n. comb. Ont., Fla. Hosts: *Lecanium corni* Bouché; *L. nigro-fasciatum* Perg.; *L. sp.* on *Quercus nigra*.

Coccophagus annulipes Ashmead, 1882. Canad. Ent. 14: 37. ♀.

apicalis (Dalman). Europe; ?No. Amer.

Encyrtus apicalis Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 153.

Taxonomy: Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, pp. 228-231.

argyrocomus (Compere), n. comb. Calif. Host: *Eriococcus* sp. on croton, asters, and *Ericameria* sp.

Erythrphycus argyrocomus Compere, 1947. Calif. Univ. Pubs., Ent. 8: 8.
♂ ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 84-86, 88.

bifasciatus (Timberlake), n. comb. N. H. Host: *Phenacoccus* sp. on apple.

Pseudococcobius bifasciatus Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 566. ♂ ♀.

Taxonomy: Compere, 1939. Calif. Univ. Pubs., Ent. 7: 61.

brunneus Howard. N. Y., N. J. Host: *Aulacaspis rosae* (Bouché).

Aphycus brunneus Howard, 1885. U. S. Dept. Agr. Div., Ent. Bul. 5: 17, 31, 36. ♀.

Aphycus bruneus Dalla Torre, 1898. Cat. Hym., v. 5, p. 251. Emend.

- californicus** Howard. Pa., Md., Calif. Host: *Lecanium nigrofasciatum* Perg.
Aphycus californicus Howard, 1898. U. S. Natl. Mus. Proc. 21: 245. ♀.
- calvus** (Compere). Calif.
Erythrephyucus calvus Compere, 1947. Calif. Univ. Pubs., Ent. 8: 11. ♀.
- ceroplastis** Howard. ?Fla., N. Mex. Hosts: ?*Ceroplastes floridensis* Comst.; *C. irregularis* Ckll.; *C.* sp. on *Artemisia*.
Aphycus ceroplastis Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 18. ♂ ♀.
- clauseni** (Timberlake), n. comb. Calif. Hosts: *Amonostherium lichtensioides* (Ckll.); ?*A.* sp. on cactus; *Eriococcus adenosomae* Ehrh.; *E. palustris* Dodds.
Pseudococcobius clauseni Timberlake, 1918. Calif. Univ. Pubs., Ent. 1: 358. ♂.
- Biology: Dodds, 1923. Jour. Ent. and Zool. 15: 5.
- cockerelli** Howard. N. Mex. Host: *Lecanium* sp. on osage orange.
Aphycus cockerelli Howard, 1898. U. S. Natl. Mus. Proc. 21: 243. ♀.
- coquilletti** Howard. Utah, Calif. Host: *Pulvinaria bigeloviae* Ckll.
Aphycus coquilletti Howard, 1898. U. S. Natl. Mus. Proc. 21: 244. ♀.
- eriococci** Timberlake. Utah, Calif. Host: *Eriococcus quercus* (Comst.).
Aphycus eriococci Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 631. ♀.
- eruptor** Howard. Va., Fla. Host: ?*Ceroplastes* sp.
Aphycus eruptor Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 364. ♂ ♀.
- Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.
- flammeus** (Compere), n. comb. Calif. Host: *Lecanium quercifex* Fitch.
Metaphycus flammeus Compere, 1947. Calif. Univ. Pubs., Ent. 8: 13. ♀ ♂.
- Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 95.
- flavus** Howard. N. Y., Md., Fla., Tex. Hosts: *Coccus pseudomagnoliarum* (Kuw.); *Lepidosaphes gloverii* (Pack.); *Pulvinaria acericola* (W. and R.); *Tachardia* sp.; *Toumeyella liriodendri* (Gmel.).
Aphycus flavus Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 365. ♀.
- fumipennis** (Timberlake), n. comb. Calif. Hosts: *Eriococcus* sp.; *Phenacoccus solani* Ferris; *Pseudococcus solani* (Ckll.).
Pseudococcobius fumipennis Timberlake, 1918. Calif. Univ. Pubs., Ent., p. 356. ♂ ♀.
- Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 93-94.
- fuscipennis** Howard. Calif. Host: *Lecanium corni* Bouché.
Aphycus fuscipennis Howard, 1898. U. S. Natl. Mus. Proc. 21: 241. ♀.
- Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.
Taxonomy: Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 597-599.
- hederaceus** (Westwood). Europe, ?N. Y. Host: *Pulvinaria acericola* (W. and R.).
Encyrtus hederaceus Westwood, 1837. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 10: 441. ♀.
- Taxonomy: Howard, 1900. U. S. Dept. Agr. Div. Ent. Bul. 22 (n. s.): 23.—Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, pp. 203-204. ♂ ♀.
- helvolus** Compere. Calif. Hosts: *Coccus hesperidum* (L.); *C. pseudomagnoliarum* (Kuw.); *Lecanium corni* Bouché; *Saissetia hemisphaerica* (Targ.); *S. nigra* (Nietn.); *S. oleae* (Bern.).
Aphycus helvolus Compere, 1926. Calif. Univ. Pubs., Ent. 4: 25. ♂ ♀.
- Biology: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 242, 274.—Flanders, 1942. Jour. Econ. Ent. 35: 690-698.—Woglum, LaFollette, Landon, and Lewis, 1947. Jour. Econ. Ent. 40: 819.
Morphology: Flanders, 1942. Ent. Soc. Amer. Ann. 35: 253, 262-265.
- howardi** Cockerell. N. Mex., Calif. Hosts: *Eriococcus tinsleyi* Ckll.; *E.* sp. on *Ericameria*.
Aphycus Howardi Cockerell, 1898. Canad. Ent. 30: 276. ♀.
- Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 94-97.
Taxonomy: Compere, 1947. Calif. Univ. Pubs., Ent. 8: 12.
- immaculatus** Howard. Calif. Host: *Aonidiella aurantii* (Mask.).
Aphycus immaculatus Howard, 1894. U. S. Dept. Agr. Insect Life 6: 235. ♂.

- johnsoni** Howard, Ont., Que., Pa., Ill. Hosts: *Kermes* on ash; *Lecanium corni* Bouché; *L. nigrofasciatum* Perg.
Aphycus johnsoni Howard, 1898. U. S. Natl. Mus. Proc. 21: 244. ♀.
- kincaidi** (Timberlake). Wash. Host: *Lecanium coryli* (L.).
Metaphycus kincaidi Timberlake, 1929. Pan-Pacific Ent. 6: 43. ♂ ♀.
- kingi** Timberlake. Kans. Host: *Pulvinaria* sp.
Aphycus kingi Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 613. ♀.
- lecanii** Howard. Calif. Hosts: *Lecanium corni* Bouché; *L. pubescens* Ehrh.; *L. quercifex* Fitch; *Physokermes insignicola* (Craw.).
Aphycus lecanii Howard, 1898. U. S. Natl. Mus. Proc. 21: 242. ♀ (♂ mis-det.).
 Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.
- lounsburyi** Howard. Mass., Calif. Hosts: *Saissetia oleae* (Bern.); *Cheiloneurus inimicus* Comp.
Aphycus lounsburyi Howard, 1898. U. S. Natl. Mus. Proc. 21: 244. ♀.
 Biology: Clausen, 1942. Jour. Econ. Ent. 35: 748.—Flanders, 1942. Ent. Soc. Amer. Ann. 35: 252, 262.—Flanders, 1942. Jour. Econ. Ent. 35: 696.—Flanders, 1943. Jour. Econ. Ent. 36: 922-925.—Flanders, 1944. Jour. Econ. Ent. 37: 409.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 95, 97-99. Woglum, LaFollette, Landon, and Lewis, 1947. Jour. Econ. Ent. 40: 819.
 Morphology: Compere, 1947. Calif. Univ. Pubs., Ent. 8: 8-9.
 Taxonomy: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 275-292.
- luteolus** Timberlake. Calif. Hosts: *Coccus hesperidum* L.; *C. pseudomagnoliarum* (Kuw.); *Lecanium corni* Bouché; *Saissetia oleae* (Bern.).
Aphycus luteolus Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 636. ♂ ♀.
 Biology: Flanders, 1942. Jour. Econ. Ent. 35: 263.—Flanders, 1942. Jour. Econ. Ent. 35: 832-833.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 96, 99-100.—Woglum, LaFollette, Landon, and Lewis, 1947. Jour. Econ. Ent. 40: 819-820.
 Taxonomy: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 274-275.
- maculipennis** Timberlake. Mass. Host: *Lecanium corni* Bouché.
Aphycus maculipennis Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 593. ♂ ♀.
- maculipes** Howard. Ont., Mass., S. C., Ohio, Ill. Hosts: *Coccus hesperidum* L.; *Lecanium corni* Bouché; *L.* sp. on *Quercus nigra*; *L.* sp.
Aphycus maculipes Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 18, 41. ♂ ♀.
Aphycus flaviceps Howard, 1898. U. S. Natl. Mus. Proc. 21: 246. ♀.
- matteolus** (Compere). Calif.
Erythrphycus matteolus Compere, 1947. Calif. Univ. Pubs., Ent. 8: 10. ♂.
- mexicanus** Howard. Pa., La. Hosts: *Ceroplastes cirripediformis* Comst.
Aphycus mexicanus Howard, 1898. U. S. Natl. Mus. Proc. 21: 247. ♀.
- oregonensis** Howard. Oreg. Hosts: *Pulvinaria* sp. on Oregon flowering currant; *P.* sp. on *Ribes*.
Aphycus oregonensis Howard, 1898. U. S. Natl. Mus. Proc. 21: 246. "♀" = ♂.
- physokermis** Timberlake. Calif. Host: *Physokermes insignicola* (Craw).
Aphycus physokermis Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 606. ♂ ♀.
- psyllidis** (Compere), n. comb. Calif. Host: *Paratrioza cockerelli* (Sulc).
Metaphycus psyllidis Compere, 1944. Pan-Pacific Ent. 19: 71. ♂ ♀.
- pulvinariae** Howard. Widespread in U. S. and Canada. Hosts: *Lecanium corni* Bouché; *L. fletcheri* Ckll.; *L. nigrofasciatum* Perg.; *L.* sp. on Japanese persimmon; *L.* sp. on wild goose plum; *Pulvinaria acericola* (W. and R.); *P. vitis* (L.); *P.* sp. on plum; *P.* sp. on willow; *Saissetia nigra* (Nietn.).
Aphycus pulvinariae Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 238. ♀.
- punctipes** (Dalman). Europe; ?No. Amer.
Encyrtus punctipes Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 154,

- rileyi** Timberlake. Ont., N. Y., Ohio, Mo., Tex. Hosts: *Lecanium corni* Bouché; *L. sp.* on Japanese persimmon.
Aphycus rileyi Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 600. ♂ ♀.
- schwarzi** Timberlake. Ariz.
Aphycus schwarzi Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 599. ♀.
- similis** Timberlake. Tex. Host: *Lecanium sp.* on Japanese persimmon.
Aphycus similis Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 605. ♀.
 Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.
- stanleyi** (Compere), n. comb. Calif. Hosts: *Coccus hesperidum* L.; *C. pseudomagnoliarum* (Kuw.); *Eucalymnatus tessellatus* (Sign.); *Saissetia oleae* (Bern.).
Metaphycus stanleyi Compere, 1940. Bul. Ent. Res. 31: 10, 11, 20. ♂ ♀.
 Biology: Flanders, 1940. In Compere, Hilgardia 13: 418.—Flanders, 1942. Jour. Econ. Ent. 35: 833.
 Taxonomy: Compere, 1940. Hilgardia 13: 417–419.
- stomachosus** Girault. Mass. to Va. and Ill. Host: *Lecanium nigrofasciatum* Perg.
Aphycus stomachosus Girault, 1909. Psyche 16: 77. ♂ ♀.
- subfasciatus** Timberlake. Kans. Host: *Lecanium corni* Bouché.
Aphycus subfasciatus Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 601. ♂ ♀.

Genus APHYCOIDEUS Williams

- Aphycoides* Williams, 1916. Psyche 23: 153.
 Type: *Aphycoides io* Williams. Monob.
- io** Williams. Mass. Host: *Malacosoma americanum* (F.).
Aphycoides io Girault (!) Williams, 1916. Psyche 23: 153.
Aphycoides io Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 5.

Genus BLASTOTHRIX Mayr

- Blastothrix* Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien Verh. 25: 697.
 Type: *Encyrtus sericeus* Dalman. Desig. by Ashmead, 1900.
- Anagyropsis* Girault, 1917. Insecutor Inscitiae Menstruus 5: 136.
 Type: *Anagyrus purpureus* Girault. Orig. desig.
- adjutabilis** Howard. Va., Fla. Hosts: *Lecanium* spp. on *Crataegus*, on Japanese persimmon, and on oak.
Blastothrix adjutabilis Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 365. ♀.
- incerta** Howard. Fla. Hosts: ?*Lecanium sp.* on mesquite.; *L. sp.*
Blastothrix incerta Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 366. ♂.
- longipennis** Howard. Ont., N. Y., Mass., D. C., Mich., Wis., Minn., N. Mex., Calif., B. C. Hosts: *Kermes pubescens* Bogue; *Lecanium corni* Bouché; *L. fletcheri* Ckll.; *L. pruinatum* Coq.; *L. quercifex* Fitch.
 ?*Encyrtus sericeus* Dalman, 1820. Svenska Vetensk. Akad. Handl. 357. ♀.
Blastothrix longipennis Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 366. ♀.
 Biology: Glendenning, 1931. Brit. Columbia Ent. Soc. Proc. 28: 30–31.—Lyne, 1934. Calif. Dept. Agr. Monthly Bul. 23: 232.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 67–68.
 Taxonomy: Girault, 1915. Ent. Soc. Amer. Ann. 8: 274.
- sericea** (Dalman). Que., N. H., ?Conn., Pa., La., B. C. Hosts: *Kermes sp.* on ash; *Lecanium coryli* (L.); *L. nigrofasciatum* Perg.; ?*Baccha fascipennis* Wied.
Encyrtus sericeus Dalman, 1820. Svenska Vetensk. Akad. Handl. 357. ♀.
 ?*Blastothrix longipennis* Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 366. ♀.
 Biology: Silvestri, 1919. Lab. Zool. e Agr. Portici Bol. 13: 163–173.—Glendenning, 1933. Canad. Ent. 65: 169–171.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 68–69.
 Taxonomy: Girault, 1915. Ent. Soc. Amer. Ann. 8: 274.—Silvestri, 1919. Lab. Zool. e Agr. Portici Bol. 13: 163–173.—Mercet, 1921. Fauna Ibérica, Himen. Encirtidos, pp. 249–251.

Genus **OOENCYRTUS** Ashmead

Ooencyrtus Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 338, 345, 381.

Type: *Encyrtus clisiocampae* Ashmead. Orig. desig.

Schedius Howard, 1910. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 19: 2.

Type: *Schedius kuvanae* Howard. Monob.

Members of this genus attack only the egg stage of their host.

anabrivorus Gahan. Wyo. Host: *Anabrus simplex* Hald.

Ooencyrtus anabrivorus Gahan, 1942. U. S. Natl. Mus. Proc. 92: 40. ♂ ♀.

anasae (Ashmead). N. C., Fla., La., Kans. Hosts: *Solubea pugnax* (F.); *Anasa tristis* (Deg.).

Encyrtus anasae Ashmead, 1887. U. S. Dept. Agr. Div. Ent. Bul. 14: 23. ♀.

Biology: Ingram, 1927. U. S. Dept. Agr. Farmers' Bul. 1543: 4.—Douglas and Ingram, 1942. U. S. Dept. Agr. Cir. 632: 6.

californicus Girault. Calif. Host: *Anasa tristis* (Deg.).

Ooencyrtus (!) *californicus* Girault, 1917. Descr. Stellarum Nov. p. 22. ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 104-105.

clisiocampae (Ashmead). N. Y., Mass., Conn., N. J., Ohio, Ind., Ill., Minn. Hosts: *Malacosoma americanum* (F.); *M. disstria* Hbn.

Encyrtus clisiocampae Ashmead, 1893. Ohio Agr. Expt. Sta. Tech. Ser. Bul. 1: 163. ♀.

Biology: Hodson, 1939. Ent. Soc. Amer. Ann. 32: 131-136.

johnsoni (Howard). Md., Va., N. C., Fla., Tex., Calif. Hosts: *Arilus cristatus* (L.); *Chlorochroa sayi* Stål; *Murgantia histrionica* (Hahn); coccinellid eggs.

Encyrtus Johnsoni Howard, 1898. Canad. Ent. 30: 18. ♂ ♀.

Biology: Drake, 1920. Fla. State Plant Bd. Quart. Bul. 4: 81.—Essig, 1922. Jour. Ent. and Zool. 14: 76.—White and Brannon, 1933. U. S. Dept. Agr. Farmers' Bul. 1712: 5.—Maple, 1937. Ent. Soc. Amer. Ann. 30: 123-154.—Huffaker, 1941. Jour. Econ. Ent. 34: 117.—DeBach, 1942. Jour. Econ. Ent. 35: 787.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 105-107.

kuwanai (Howard), emend. New England. Hosts: *Nygmia phaeorrhoea* (Donov.); *Portheiria dispar* (L.); *Stilpnotia salicis* (L.); *Apanteles melanoscelus* (Ratz.).

Schedius kuvanae Howard, 1910. U. S. Dept. Agr. Bur. Ent. Tech. Bul. 19: 3. ♂ ♀.

Biology: Howard and Fiske, 1911. U. S. Dept. Agr. Bur. Ent. Bul. 91: 86, 176-188, 307.—Crossman, 1925. Jour. Agr. Res. 30: 643-675.—Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 25.—Burgess and Crossman, 1929. U. S. Dept. Agr. Tech. Bul. 86: 31-38.—Parker, 1933. Jour. Agr. Res. 46: 23-34.—Lloyd, 1935. Nature 135: 472-473.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 107-109.

moneilemae Gahan. Tex. Host: *Moneilema crassa* Lec.

Ooencyrtus moneilemae Gahan, 1925. Ent. Soc. Wash. Proc. 27: 167. ♂ ♀.

Genus **APHIDENCYRTUS** Ashmead

Aphidencyrtus Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 340, 347, 398.

Type: (*Encyrtus aphidiphagus* Ashmead) = [*Encyrtus*] *aphidivorus* (Mayr). Orig. desig.

aphidivorus (Mayr). N. Y. to Conn., Va. and Ind.; Fla., La., Idaho. Hosts: *Amphorophora solani* (Thos.); *Anuraphis bakeri* (Cowen); *Aspidaphis aquatica* (G. and B.); *Brevicoryne brassicae* (L.); *Macrosiphum cornelli* Patch; *M. granarium* (Kby.); *M. liriodendri* (Monell); *Myzus persicae* (Sulz.); *Siphonophora avenae* (F.); *Toxoptera graminum* (Rond.); *Trialeurodes vaporariorum* (Westw.); *Aphelinus jucundus* Gahan; *A. samborniae* Gahan; *A. semiflavus* How.; *A. sp.*; *Aphidius testaceipes* (Cress.); *A. spp.*

Encyrtus aphidivorus Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien. Verh. 25: 712, 724. ♂ ♀.

Eupelmus (!) *schizoneuræ* Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xvi. ♂ ♀.

- Encyrtus aphidiphagus* Ashmead, 1887. U. S. Dept. Agr. Div. Ent. Bul. 14: 14. ♀.
- Encyrtus? megourae* Ashmead, 1887. U. S. Dept. Agr. Div. Ent. Bul. 14: 19. ♂ ♀.
- Encyrtus Websteri* Howard, 1890. U. S. Dept. Agr. Insect Life 2: 247. ♂ ♀.
- Biology: Griswold, 1929. Ent. Soc. Amer. Ann. 22: 445.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 61–62.
- Taxonomy: Gahan, 1930. U. S. Natl. Mus. Proc. 77 (8): 6.
- lachni* (Ashmead). Fla. Host: *Lachnus australis* Ashm.
- Eupelmus* (!) *lachni* Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xvi. ♀.
- Taxonomy: Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 18.

Genus SYRPHOPHAGUS Ashmead

- Syrphophagus* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 340, 346, 397.
- Type: (*Encyrtus mesograptae* Ashmead)=[*Pteromalus*] *quadrimaculatae* (Ashmead). Orig. desig.
- 4-maculatae* (Ashmead). S. C., Fla., Miss. Hosts: *Syrphus quadrimaculatus* Ashm.; *S. ribesii* (L.); *Toxomerus polita* (Say).
- Pteromalus 4-maculatae* Ashmead, 1881. Canad. Ent. 13: 171. ♂ ♀.
- Encyrtus mesograptae* Ashmead, 1896 (nec 1887). Amer. Ent. Soc. Trans. 23: 232. ♀.
- Taxonomy: Girault, 1916. Canad. Ent. 48: 344.
- smithi* Kamal. Calif. Hosts: *Syrphus nitens* Zett.; *S. opinator* O. S.
- Syrphophagus smithi* Kamal, 1926. Canad. Ent. 58: 284. ♀.
- Biology: Kamal, 1939. Egypt Min. Agr. Tech. and Sci. Serv. Ent. Sect. Bul. 207: 34 46, 48. ♀.
- vectius* (Walker). Fla.
- Encyrtus Vectius* Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 21. ♂.

Genus PSEUDENCYRTUS Ashmead

- Pseudencyrtus* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 340, 346, 396.
- Type: *Encyrtus cecidomyiae* Howard. Orig. desig.
- cecidomyiae* (Howard). N. Y., Conn., Va. Host: *Phytophaga rigidae* (O. S.).
- Encyrtus cecidomyiae* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 16. ♂ ♀.
- Taxonomy: Girault, 1916. Ent. News 27: 402.
- pleuralis* (Ashmead), n. comb. Ohio. Host: ?*Atomaria* sp.
- Encyrtus pleuralis* Ashmead, 1893. Ohio Agr. Expt. Sta. Tech. Ser. Bul. 1: 163. ♀.

Genus HOLCENCYRTUS Ashmead

- Holcencyrtus* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 339, 346, 394.
- Type: *Aphycus niger* Ashmead. Monob.
- niger* (Ashmead). Fla.
- Aphycus niger* Ashmead, 1888. Ent. Amer. 4: 15. ♂.
- physokermis* Girault. Wis. Host: *Physokermes piceae* (Schrank).
- Holcencyrtus physokermis* Girault, 1916. Ent. News 27: 226. ♂ ♀.

Genus CHEILONEURUS Westwood

- Cheiloneurus* Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 3: 343.
- Type: *Encyrtus elegans* Dalman. Monob.
- Chiloneurus* Foerster, 1856. Hym. Stud., v. 2, p. 50. Emend.
- Cristatithorax* Girault, 1911. Canad. Ent. 43: 169.
- Type: *Cristatithorax pulcher* Girault. Monob.
- Revision: Gahan, 1913. Ent. Soc. Amer. Ann. 7: 247.

- albicornis** Howard. Ont., N. H. to S. C., La., Mo., Iowa, Wis., Colo. Hosts: *Kermes* sp. on oak; *Lecanium caryae* Fitch; *L. corni* Bouché; *L. fletcheri* Ckll.; *L. nigrofasciatum* Perg.; *Physokermes piceae* (Schrank); *Pulvinaria acericola* (W. and R.); *P. vitis* (L.); *P.* sp. on poison ivy.
Chiloneurus albicornis Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 363. ♀.
 Taxonomy: Girault, 1916. Ent. Soc. Amer. Ann. 9: 300. ♂ ♀.
- cupreicollis** Ashmead. Fla. Host: *Lecanium* sp. on oak.
Chiloneurus cupreicollis Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 131. ♀.
- cushmani** Crawford. Va. Host: *Kermes* sp.
Chiloneurus cushmani Crawford, 1911. Ent. Soc. Wash. Proc. 13: 126. ♂ ♀.
- dubius** Howard. Mass., Mo., Wis. Hosts: *Kermes* sp., *Lecanium* sp. from dwarf mountain pine; *L.* sp. from Scotch pine.
Chiloneurus dubius Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 17, 42. ♂.
- elegans** (Dalman). N. Y., N. J., Pa., Md., Va.; Europe. Hosts: *Phytophaga destructor* (Say); *Platygaster vernalis* (Myers).
Encyrtus elegans Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 151. ♀.
 Biology: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 60-64.—Hill, Pinckney, and Udine, 1939. U. S. Dept. Agr. Tech. Bul. 689: 5, 12.
 Morphology: Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 5-6, 11-13.
- inimicus** Compere. Calif. Hosts: *Aphycus lounsburyi* How.; *A. physokermis* Timb.
Cheiloneurus inimicus Compere, 1925. Calif. Univ. Pubs., Ent. 3: 296. ♂ ♀.
 Taxonomy: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 71.
- lineascapus** Gahan. Md., La., Calif. Hosts: *Kermes* sp. on lilac; *K.* sp. on oak; *Saissetia oleae* (Bern.); *Aphycus lounsburyi* How.
Cheiloneurus lineascapus Gahan, 1910. Canad. Ent. 42: 207. ♀.
 Biology: Smith, 1933. Ent. Soc. Amer. Ann. 26: 525.
 Morphology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.
 Taxonomy: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 242, 271-272.
- noxius** Compere. Calif. Hosts: *Saissetia oleae* (Bern.); *Aphycus lounsburyi* How.
Cheiloneurus noxius Compere, 1925. Calif. Univ. Pubs., Ent. 3: 296, 302. ♀.
 Biology: Flanders, 1940. Ent. Soc. Amer. Ann. 33: 252.—LePelley, 1937. Bul. Ent. Res. 28: 181-183.
 Morphology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 71.
 Taxonomy: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 242, 272-274.
- pulcher** (Girault), n. comb. Ill. Host: *Kermes pubescens* Bogue.
Cristatithorax pulcher Girault, 1911. Canad. Ent. 43: 170. ♀.
- swezeyi** Ashmead. Conn., Ohio. Hosts: *Ormenis septentrionalis* (Spin.); *Psilodryinus typhlocybae* (Ashm.).
Cheiloneurus swezeyi Ashmead, 1903. Ent. News 14: 193. ♂ ♀.
 Biology: Swezey, 1903. Ohio Nat. 3: 446-447.

Genus ACHRYSOPOPHAGUS Girault

- Achrysofophagus* Girault, 1915. Queensland Mus. Mem. 4: 89.
 Type: *Achrysofophagus oviductus* Girault. Orig. desig.
 Revision: Mercet, 1928. Eos 5: 359-364.
- americanus** Girault. D. C.
Achrysofophagus americanus Girault, 1917. Descr. Stellarum Nov., p. 16. ♀.
- dactylopii** (Howard). D. C., N. Mex., Minn. Hosts: *Phenacoccus cevalliae* Ckll.; *Pseudococcus citri* (Risso).
Chiloneurus dactylopii Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 17. ♂ ♀.
- modestus** Timberlake. Calif. Hosts: *Pseudococcus maritimus* (Ehrh.); *Anagyris yuccae* (Coq.); *Zarhopalus corvinus* (Gir.).
Achrysofophagus modestus Timberlake, 1924. Calif. Univ. Pubs., Ent. 3: 240. ♀.
 Biology: Clausen, 1924. Calif. Univ. Pubs., Ent. 3: 257-266, 284-286.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 55.

Genus **CHILONEURINUS** Mercet

Chiloneurinus Mercet, 1921. Fauna Ibérica, Himen. Encirtidos, p. 646.

Type: *Chiloneurus microphagus* Mayr. Monob.

microphagus (Mayr). N. Y., Conn., N. J., Va., S. C., Calif. Hosts: *Aspidiotus juglans-regiae* Comst.; *A. perniciosus* Comst.; *Lecanium nigrofasciatum* Perg.; *Lepidosaphes ulmi* (L.).

Chiloneurus microphagus Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien. Verh. 25: 745, 746. ♀.

Chiloneurus diaspidinarum Howard, 1894. U. S. Dept. Agr. Insect Life 7: 256. ♀.

Aphidencyrus aspidioti Girault, 1915. Ent. Soc. Amer. Ann. 8: 283, 284. ♀.

Biology: Griswold, 1925. N. Y. (Cornell) Agr. Expt. Sta. Mem. 93: 44-47.

Taxonomy: Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 1.

Genus **CHRYSOPOPHAGUS** Ashmead

Chrysopophagus Ashmead, 1894. U. S. Dept. Agr. Insect Life 7: 245, 246.

Type: *Chrysopophagus compressicornis* Ashmead. Monob.

Saronotum Perkins, 1906. Hawaii. Sugar Planters' Assoc. Expt. Sta. Div. Ent. Bul. 1: 259.

Type: *Saronotum australiae* Perkins. Desig. by Gahan and Fagan, 1923.

americanus (Perkins). Ohio. Host: Dryinid.

Saronotum americanum Perkins, 1906. Hawaii. Sugar Planters' Assoc. Expt. Sta. Div. Ent. Bul. 1: 260. ♀.

amplicornis (Gahan). Tex. Host: *Eriococcus* sp. on *Bouteloua*.

Chiloneurus amplicornis Gahan, 1914. Ent. Soc. Amer. Ann. 7: 247. ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.

banksi Howard. Tex., N. Mex.

Chrysopophagus banksi Howard, 1898. U. S. Natl. Mus. Proc. 21: 247. ♀.

compressicornis Ashmead. N. C., S. C., Miss., La., Mo., Iowa, Calif. Hosts: *Chrysopa californica* Coq.; *C. majuscula* Banks; *C. plorabunda* Fitch; *C. rufilabris* Burm.

Chrysopophagus compressicornis Ashmead, 1894. U. S. Dept. Agr. Insect Life 7: 246. ♂ ♀.

Biology: Clancy, 1946. Calif. Univ. Pubs., Ent. 7: 432-440.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 72.

kansensis Girault. Kans.

Chrysopophagus kansensis Girault, 1917. U. S. Natl. Mus. Proc. 53: 447. ♀.

Genus **CERAPTEROCERUS** Westwood

Cerapterocerus Westwood, 1833. Mag. Nat. Hist. 6: 495.

Type: *Cerapterocerus mirabilis* Westwood. Monob.

Telegraphus Ratzeburg, 1848. Ichn. d. Forstins., v. 2, p. 152.

Type: (*Telegraphus maculipennis* Ratzeburg) = *Cerapterocerus mirabilis* Westwood. Monob.

floridanus Ashmead. Fla.

Cerapterocerus floridanus Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 190. ♂.

Genus **HABROLEPIS** Foerster

Habrolepis Foerster, 1856. Hym. Stud., v. 2, pp. 34, 38.

Type: (*Encyrtus nubilipennis* Walker) = [*Encyrtus*] *dalmani* (Westwood). Orig. desig.

dalmani (Westwood). Mass., Conn., Ohio. Hosts: *Asterolecanium quercicola* (Bouché); *A. variolosum* (Ratz.); *Lepidosaphes ulmi* (L.).

Encyrtus Dalmani Westwood, 1837. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 10: 440.

Habrolepis Dalmani Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien Verh. 75: 751. ♂ ♀. Emend.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 90.

rouxi Compere. Calif. Host: *Aonidiella aurantii* Mask. on citrus.

Habrolepis rouxi Compere, 1936. Bul. Ent. Res. 27: 493-496. ♀.

Biology: Flanders, 1942. Ecology 23: 120.—Flanders, 1944. Jour. Econ. Ent. 37: 441.—Flanders, 1945. Amer. Nat. 79: 126, 131, 133-136.—Flanders, 1946. Pan-Pacific Ent. 22: 35.

Genus ANABROLEPIS Timberlake

Anabrolepis Timberlake, 1920. Hawaii. Ent. Soc. Proc. 4: 131.

Type: *Anabrolepis extranea* Timberlake. Orig. desig.

zetterstedtii (Westwood). Maine to Ohio and Mich.; B. C. Hosts: *Aspidiotus ostreaeformis* Curt.; *A. perniciosus* Comst.; *Lepidosaphes ulmi* (L.).

Encyrtus Zetterstedtii Westwood, 1837. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 10: 440.

Taxonomy: Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 2.

Genus ADELENCYRTUS Ashmead

Adelencyrtus Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 341, 400.

Type: *Encyrtus chionaspidis* Howard. Orig. desig.

Epiencyrtoides Girault, 1915. Queensland Mus. Mem. 4: 108.

Type: *Epiencyrtoides quadridentatus* Girault. Orig. desig.

aulacaspidis (Brèthes). Ill., Calif. Host: *Aulacaspis rosae* (Bouché).

Prionomitus aulacaspidis Brèthes, 1914. An. de Zool. Aplicada 1: 29. ♀.

Taxonomy: Mercet, 1921. Fauna Ibérica, Himen. Encirtidos, pp. 294-297, 698.

Genus CERAPTROCEROIDEUS Girault

Ceraptroceroideus Girault, 1916. Psyche 23: 47.

Type: *Ceraptroceroideus cinctipes* Girault. Monob. and orig. desig.

cinctipes Girault. Kans. Host: *Rhizaspidiotus dearnessi* Ckll.

Ceraptroceroideus cinctipes Girault, 1916. Psyche 23: 47. ♂ ♀.

Genus CHRYSOPLATYCERUS Ashmead

Rileyia Howard, 1888. In Smith, Ent. Amer. 4: 80. Preocc.

Type: *Rileyia splendens* Howard. Monob.

Chrysoplatycerus Ashmead, 1889. Canad. Ent. 21: 38. N. name.

Revision: Timberlake, 1922. U. S. Natl. Mus. Proc. 61 (2): 1-10.

ferrisi Timberlake. Calif. Host: *Pseudococcus adenostomae* Ferris.

Chrysoplatycerus ferrisi Timberlake, 1922. U. S. Natl. Mus. Proc. 61 (2): 7.
♂ ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.

splendens (Howard). Que. (greenhouses), Calif. Hosts: *Pseudococcus adonidum* (L.); *P. citri* (Risso); *P. maritimus* (Ehrh.); *P. ryani* (Coq.).

Rileyia splendens Howard, 1888. In Smith, Ent. Amer. 4: 80.

Biology: Clausen, 1924. Calif. Univ. Pubs., Ent. 3: 256-266, 279.—Clancy, 1944. Jour. Econ. Ent. 37: 450.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.

Genus ANICETUS Howard

Anicetus Howard, 1896. U. S. Natl. Mus. Proc. 18: 639.

Type: *Anicetus ceylonensis* Howard. Monob.

Asteropaeus Howard, 1898. U. S. Natl. Mus. Proc. 21: 231. N. syn.

Type: *Asteropaeus primus* Howard. Monob.

Habrolepopterygis Girault, 1915. Queensland Mus. Mem. 4: 86.

Type: *Habrolepopterygis felix* Girault. Monob.

Paraceraptrocerus Girault, 1920. U. S. Natl. Mus. Proc. 58: 184.

Type: *Paraceraptrocerus africanus* Girault. Monob.

annulatus Timberlake. Calif.

Anicetus annulatus Timberlake, 1919. Hawaii. Ent. Soc. Proc. 4: 227. ♂ ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 60.

Genus ZARHOPALUS Ashmead

Zarhopalus Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 342, 406.

Type: *Zarhopalus sheldoni* Ashmead. Orig. desig.

Anagyrella Girault, 1915. N. Y. Ent. Soc. Jour. 23: 168.

Type: *Anagyrella corvina* Girault. Monob.

Revision: Timberlake, 1924. Calif. Univ. Pubs., Ent. 3: 235-236.

corvinus (Girault). Que., Calif. Hosts: *Pseudococcus maritimus* (Ehrh.); *P.* sp.

Anagyrella corvina Girault, 1915. N. Y. Ent. Soc. Jour. 23: 169. ♀.

Biology: Clausen, 1924. Calif. Univ. Pubs., Ent. 3: 256-271.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 55, 115.

inquisitor (Howard). Fla. Host: *Pseudococcus citri* (Risso).

Encyrtus inquisitor Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 367. ♀.

sheldoni Ashmead. N. Y., Calif. Host: *Pseudococcus maritimus* (Ehrh.).

Zarhopalus sheldoni Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 406. ♀.

Biology: Clausen, 1924. Calif. Univ. Pubs., Ent. 3: 257-265.—Clancy and Pollard, 1947. Jour. Econ. Ent. 40: 578-579.

Genus STEMMATOSTERES Timberlake

Stemmatosteres Timberlake, 1918. Calif. Univ. Pubs., Ent. 1: 352.

Type: *Stemmatosteres apterus* Timberlake. Monob.

apterus Timberlake. Calif. Host: *Pseudococcus timberlakei* Ckll.

Stemmatosteres apterus Timberlake, 1918. Calif. Univ. Pubs., Ent. 1: 354.

♂ ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 109, 114.

Genus HELEGONATOPUS Perkins

Helegonatopus Perkins, 1906. Hawaii. Sugar Planters' Assoc. Expt. Sta. Div. Ent. Bul. 1: 257.

Type: *Helegonatopus pseudophanes* Perkins. Monob.

pseudophanes Perkins. Ohio. Host: *Gonatopus* sp. on allied form.

Helegonatopus pseudophanes Perkins, 1906. Hawaii. Sugar Planters' Assoc. Expt. Sta. Div. Ent. Bul. 1: 258. ♀.

Genus COCCOBIUS Ratzeburg

Coccobius Ratzeburg, 1852. Ichn. d. Forstins. v. 3, p. 195.

Type: *Coccobius annulicornis* Ratzeburg. Desig. by Gahan and Fagan, 1923.

diaspidis Ashmead. D. C. Host: *Aulacaspis rosae* (Bouché).

Coccobius diaspidis Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 408. ♀.

Genus PSEUDHOMALOPODA Girault

Pseudhomalopoda Girault, 1915. N. Y. Ent. Soc. Jour. 23: 171.

Type: *Pseudhomalopoda prima* Girault. Monob.

prima Girault. Fla. Hosts: *Aleurocanthus woglumi* Ashby; *Aonidiella aurantii* (Mask.); *Chrysomphalus aonidum* (L.).

Pseudhomalopoda prima Girault, 1915. N. Y. Ent. Soc. Jour. 23: 171. ♀.
Biology: Griffiths and Stearns, 1947. Fla. Ent. 30: 4-7.

Genus EUSEMION Dahlbom

Eusemion Dahlbom, 1857. Öfvers. Svenska Vetensk. Akad. Förh. 14: 293 (no species).

Type: *Encyrtus corniger* Haliday. Included by Thomson, 1875.

Revision: Compere, 1938. Bul. Ent. Res. 29: 320.

californicum Compere. Calif. Hosts: *Coccus hesperidum* L.; *Saissetia oleae* (Bern.); *Aphyucus lounsburyi* How.

Eusemion californicum Compere, 1925. Calif. Univ. Pubs., Ent. 3: 296, 304.

♂ ♀.

Biology: Smith, 1933. Ent. Soc. Amer. Ann. 26: 525.—Flanders, 1940. Ent. Soc. Amer. Ann. 33: 252.—Flanders, 1943. Jour. Econ. Ent. 36: 923-924.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 90.

longipennis (Ashmead). Fla., Calif. Hosts: *Lecanium* sp.; *Aphycus flavus* How.; *Microterys flavus* How.

Mira longipennis Ashmead, 1888. Ent. Amer. 4: 17. ♀.

Biology: Timberlake, 1913. Jour. Econ. Ent. 6: 301.

Genus ATROPATES Howard

Atropates Howard, 1898. U. S. Natl. Mus. Proc. 21: 236.

Type: *Atropates collinsi* Howard. Monob.

collinsi Howard. N. Y., Wash. Host: *Pulvinaria vitis* (L.).

Atropates collinsi Howard, 1898. U. S. Natl. Mus. Proc. 21: 236. ♂ ♀.

Genus XANTHOENCYRTUS Ashmead

Xanthoencyrtus Ashmead, 1902. Canad. Ent. 34: 302.

Type: *Xanthoencyrtus nigroclavatus* Ashmead. Monob.

Mirastymachus Girault, 1915. N. Y. Ent. Soc. Jour. 23: 166.

Type: *Mirastymachus europaeus* Girault. Orig. desig.

Scelioencyrtus Girault, 1915. Queensland Mus. Mem. 4: 161.

Type: *Scelioencyrtus nigriclavus* Girault. Orig. desig.

Pholidoceras Mercet, 1918. Soc. Españ. Hist. Nat. Bol. 18: 237.

Type: *Pholidoceras brachyptera* Mercet. Monob.

Revision: Mercet, 1928. Eos. 4: 5-7.

americanus (Girault). D. C.

Mirastymachus americanus Girault, 1915. N. Y. Ent. Soc. Jour. 23: 167. ♀.

nigroclavatus Ashmead. Ind., Ill., S. Dak. Host: Coccid on *Panicum*.

Xanthoencyrtus nigroclavatus Ashmead, 1902. Canad. Ent. 34: 302. ♀.

Biology: Webster, 1903 (1902). Ind. Acad. Sci. Proc. p. 103.

Genus PAURIDIA Timberlake

Pauridia Timberlake, 1919. Hawaii. Ent. Soc. Proc. 4: 206.

Type: *Pauridia peregrina* Timberlake. Monob.

peregrina Timberlake. ?Calif. Hosts: *Pseudococcus kraunhiae* (Kuw.); *P. maritimus* (Ehrh.).

Pauridia peregrina Timberlake, 1919. Hawaii. Ent. Soc. Proc. 4: 208. ♂ ♀.

Biology: Armitage, 1920. Calif. Dept. Agr. Monthly Bul. 9: 446.—Essig, 1931. A Hist. of Ent., p. 361, 389.

Genus PLAGIOMERUS Crawford

Plagiomerus Crawford, 1910. U. S. Natl. Mus. Proc. 38: 89.

Type: *Plagiomerus diaspidis* Crawford. Monob.

Revision: Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 1.

cyaneus (Ashmead). Fla.

Comys cyanea Ashmead, 1888. Ent. Amer. 4: 17. ♀.

Taxonomy: Dozier, 1926. Puerto Rico Dept. Agr. Jour. 10: 273-274.

diaspidis Crawford. D. C., N. Mex. Host: *Diaspis echinocacti* (Bouché).

Plagiomerus diaspidis Crawford, 1910. U. S. Natl. Mus. Proc. 38: 90. ♀.

Genus PSYLLEDONTUS Crawford

Psylledontus Crawford, 1910. U. S. Natl. Mus. Proc. 38: 88.

Type: *Psylledontus insidiosus* Crawford. Monob.

Metallonella Girault, 1915. Queensland Mus. Mem. 4: 77.

Type: *Metallonella australiensis* Girault. Orig. desig.

insidiosus Crawford. N. Y. Host: *Psylla pyricola* Foerst.

Psylledontus insidiosus Crawford, 1910. U. S. Natl. Mus. Proc. 38: 89. ♂ ♀.

Genus AGROMYZAPHAGUS Gahan

Agromyzaphagus Gahan, 1912. Ent. Soc. Wash. Proc. 14: 6.

Type: *Agromyzaphagus detrimmentosus* Gahan. Monob.

detrimmentosus Gahan. Md. Host: *Leucopis* sp. probably *nigricornis* Egger.

Agromyzaphagus detrimmentosus Gahan, 1912. Ent. Soc. Wash. Proc. 14:

7. ♂ ♀.

Taxonomy: Mercet, 1926. Eos 2: 318-319.

Genus PARACALOCERINUS Girault

Paracalocerinus Girault, 1915. Queensland Mus. Mem. 4: 142.

Type: *Paracalocerinus australiensis* Girault. Monob.

Masia Mercet, 1919. Soc. Españ. Hist. Nat. Bol. 19: 470.

Type: *Masia bifasciatella* Mercet. Monob.

americanus Girault. Kans.

Paracalocerinus americanus Girault, 1916. Ent. News 27: 225. ♀.

marylandia Girault, emend. Md., Ill.

Paracalocerinus marilandia Girault, 1917. Chalcidoidea Nova Marilandensis

[I], p. 1. ♀.

Taxonomy: Dozier, 1933. Ent. Soc. Wash. Proc. 35: 94-95.

tertius Girault. Calif.

Paracalocerinus tertius Girault, 1917. Desc. Stellarum Nov., p. 7. ♀.

Genus ECHTHROGONATOPUS Perkins

Echthrogonatopus Perkins, 1906. Hawaii. Sugar Planters' Assoc. Expt. Sta. Div. Ent. Bul. 1: 256.

Type: *Echthrogonatopus exitiosus* Perkins. Desig. by Gahan and Fagan, 1923.

pachycephalus Perkins. Ohio. Host: *Gonatopus* sp. or allied form.

Echthrogonatopus pachycephalus Perkins, 1906. Hawaii. Sugar Planters' Assoc. Expt. Sta. Div. Ent. Bul. 1: 257. ♀.

Genus IXODIPHAGUS Howard

Ixodiphagus Howard, 1907. Ent. News 18: 377.

Type: *Ixodiphagus texanus* Howard. Monob.

texanus Howard. Mass., Minn., Tex., Idaho. Hosts: *Dermacentor variabilis* (Say); *Haemaphysalis leporis-palustris* (Pack.); ?*Ixodes cookei* Pack.; *I. dentatus* Marx; *I. scapularis* Say; *Rhipicephalus sanguineus* (Latr.).

Ixodiphagus texanus Howard, 1907. Ent. News 18: 375. ♀.

Biology: Larson, 1937. Jour. Parasitol. 23: 496-498.—Larson and Green, 1938. Jour. Parasitol. 24: 363-368.—Smith, Cole, and Gouck, 1946. U. S. Dept. Agr. Tech. Bul. 905: 72.

Taxonomy: Gahan, 1934. Ent. Soc. Wash. Proc. 36: 89-97.

Genus HUNTERELLUS Howard

Hunterellus Howard, 1908. Canad. Ent. 40: 240.

Type: *Hunterellus hookeri* Howard. Monob.

hookeri Howard. Mass., S. C., Fla., Tex., Calif., Idaho, Mont. Hosts: *Dermacentor andersoni* Stiles; *D. parumapertus* Neum.; *D. variabilis* (Say); *Haemaphysalis leporis-palustris* (Pack.); *Ixodes dentatus* Marx; *I. muris* B. and S.; *I. scapularis* Say; *Rhipicephalus sanguineus* (Latr.).

Hunterellus hookeri Howard, 1908. Canad. Ent. 40: 239. ♂ ♀.

Ixodiphagus caururtei du Buysson, 1912. Arch. de Parasitol. 15: 246. ♂ ♀.
Biology: Cooley, 1927. Mont. State Bd. Ent. Bien. Rpt. 6: 15-17.—Cooley and Kohls, 1928. Science 67: 656.—Larrousse, King and Wolbach, 1928.

Science 67: 351-353.—Cooley, 1929 (1927-1928). Mont. State Bd. Ent. Bien. Rpt. 7: 10-16; 17-31.—Morton, 1929 (1927-1928). Mont. State Bd. Ent. Bien Rpt. 7: 32-35.—Parker and Butler, 1929 (1927-1928). Mont. State Bd. Ent. Bien. Rpt. 7: 35-38.—Cooley, 1930. Mont. State Bd. Ent. Bien. Rpt. 8: 16-25.—Cooley and Kohls, 1934. Fifth Pacific Sci. Cong. Proc. B 5: 3375-3381.—Bishopp, 1938. U. S. Dept. Agr. Cir. 478: 23.—Smith and Cole, 1943, Jour. Econ. Ent. 36: 569-572.

Taxonomy: Gahan, 1934. Ent. Soc. Wash. Proc. 36: 89-97.

Genus PARALEUROCERUS Girault

Paraleurocerus Girault, 1915. N. Y. Ent. Soc. Jour. 23: 172.

Type: *Paraleurocerus bicoloripes* Girault. Monob.

bicoloripes Girault. Mass., Tex. Hosts: *Cameraria caryaefoliella* (Clem.); *Lithocolletis* sp. mining cherry leaf.

Paraleurocerus bicoloripes Girault, 1915. N. Y. Ent. Soc. Jour. 23: 172.

♂ ♀.

Genus EPANUSIA Girault

Epanusia Girault, 1913. Arch. f. Naturgesch. 79A (6): 91.

Type: *Epanusia bifasciatus* Girault. Monob.

albiclava Girault. D. C.

Epanusia albiclava Girault, 1916. Psyche 23: 44. ♀.

Genus FORMICENCYRTUS Girault

Formicencyrtus Girault, 1916. Psyche 23: 45.

Type: *Formicencyrtus thoreauini* Girault. Monob.

thoreauini Girault. N. Mex. Host: *Dactylopius confusus* (Ckll.).

Formicencyrtus thoreauini Girault, 1916. Psyche 23: 45. ♀.

Genus EPICERCHYSIUS Girault

Epicerchysius Girault, 1915. N. Y. Ent. Soc. Jour. 23: 167.

Type: *Epicerchysius xanthipes* Girault. Monob.

xanthipes Girault. Tex.

Epicerchysius xanthipes Girault, 1915. N. Y. Ent. Soc. Jour. 23: 168. ♀.

Genus ZAOMMOENCYRTUS Girault

Zaommoëncyrtus Girault, 1916. Psyche 23: 46.

Type: *Zaommoëncyrtus submicans* Girault. Monob.

submicans Girault. Pa. Host: *Alobates pennsylvanica* (Deg.).

Zaommoëncyrtus submicans Girault, 1916. Psyche 16: 46. ♀.

Genus NEBAOCHARIS Girault

Nebaocharis Girault, 1916. Psyche 23: 43.

Type: *Nebaocharis hemiptera* Girault. Monob.

hemiptera Girault. Colo.

Nebaocharis hemipterus Girault, 1916. Psyche 23: 43. ♀.

Genus COMPERIELLA Howard

Comperiella Howard, 1906. Ent. News 17: 121.

Type: *Comperiella bifasciata* Howard. Monob.

Pseudanusia Girault, 1915. Queensland Mus. Mem. 4: 155.

Type: *Pseudanusia pia* Girault. Monob.

Habrolepistia Mercet, 1921. Faune Ibérica. Himen. Encirtidos, p. 668.

Type: *Habrolepistia cerapterocera* Mercet. Monob.

Revision: Compere, 1926. Calif. Univ. Pubs., Ent. 4: 44.

bifasciata Howard. Calif. Hosts: *Aonidiella aurantii* (Mask.); *A. citrina* (Coq.); *Chrysomphalus aonidum* (L.).

Comperiella bifasciata Howard, 1906. Ent. News 17: 122. ♀.

Biology: Flanders, 1942. Jour. Econ. Ent. 35: 834-835.—Smith, 1942. Jour. Econ. Ent. 35: 809-812.—Flanders, 1943. Jour. Econ. Ent. 36: 233-235.—Flanders, 1944. Ann. Ent. Soc. Amer. 37: 365.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 74, 76.—Woglum, LaFollette, Landon, and Lewis, 1947. Jour. Econ. Ent. 40: 820.

Genus COCCIDOXENUS Crawford

Coccidoxenus Crawford, 1913. U. S. Natl. Mus. Proc. 45: 248.

Type: *Coccidoxenus portoricensis* Crawford. Monob.

Tetracnemella Girault, 1915. Queensland Mus. Mem. 4: 170.

Type: *Tetracnemella australiensis* Girault. Orig. desig.

Stenoteropsis Girault, 1915. Queensland Mus. Mem. 4: 176.

Type: *Stenoteropsis abjectus* Girault. Monob.

mexicanus Girault. Fla.

Coccidoxenus mexicanus Girault, 1917. Deser. Stellarum Nov., p. 21. ♀.

nubilipennis (Girault). Ill. Host: *Lecanium nigrofasciatum* Perg.

Anagyrus nubilipennis Girault, 1909. Psyche 16: 76. ♂ ♀.

Genus QUAYLEA Timberlake

Quaylea Timberlake, 1919. Hawaii. Ent. Soc. Proc. 4: 214.

Type: *Cerchysius whittieri* Girault. Orig. desig.

whittieri (Girault). Calif. Hosts: *Saissetia oleae* (Bern.); *Aphycus lounsburyi* How.; *Scutellista cyanea* Mots.; *Tomocera californica* How.

Cerchysius whittieri Girault, 1918. Ent. News 29: 66. ♀.

Hemencyrtus crawii Timberlake, 1919. Hawaii. Ent. Soc. Proc. 4: 216.

Biology: Flanders, 1943. Jour. Econ. Ent. 36: 922-925.—Flanders, 1944. Jour. Econ. Ent. 37: 409.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 61, 113-114.

Genus PARASTENOTERYS Girault

Parastenoterys Girault, 1915. Queensland Mus. Mem. 4: 165.

Type: *Parastenoterys punctatus* Girault. Orig. desig.

Parectromoides Girault, 1915. Queensland Mus. Mem. 4: 171.

Type: *Parectromoides magniscutellum* Girault. Monob.

niveiclava Girault. Md.

Parastenoterys niveiclava Girault, 1917. Chalcidoidea Nova Marilandensis II, p. 1. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 191.

Genus ANARHOPUS Timberlake

Anarhopus Timberlake, 1929. Calif. Univ. Pubs., Ent. 5: 15.

Type: *Anarhopus sydneyensis* Timberlake. Monob.

sydneyensis Timberlake. Calif. Hosts: *Pseudococcus adonidum* (L.); *P. gahani* Green.

Anarhopus sydneyensis Timberlake, 1929. Calif. Univ. Pubs., Ent. 5: 5, 17. ♀.

Biology: Compere and Flanders, 1934. Jour. Econ. Ent. 27: 966-973.—Flanders, 1940. Calif. Citrog. 25: 146, 154-155.—Clancy, 1944. Jour. Econ. Ent. 37: 450.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 59-60.—DeBach, 1949. Ecology 30: 16-25.

Genus PSEUDORHOPUS Timberlake

Pseudorhopus Timberlake, 1926. U. S. Natl. Mus. Proc. 69 (3): 9.

Type: *Encyrtus testaceus* Ratzeburg. Orig. desig.

fuscus (Girault). Ont., Que. Host: Apparently coccid, not *Choristoneura fumiferana* (Clem.).

Rhypoideus fuscus Girault, 1912. Canad. Ent. 44: 5. ♀.
Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 184.

hartmani Timberlake. Tex. Host: *Lecanium* sp.

Pseudorhopus hartmani Timberlake, 1926. U. S. Natl. Mus. Proc. 69 (3): 10.
♂ ♀.

Genus HEXACNEMUS Timberlake

Hexacnemus Timberlake, 1926. U. S. Natl. Mus. Proc. 69 (3): 12.

Type: *Hexacnemus armitagei* Timberlake. Monob.

armitagei Timberlake. Calif. Hosts: *Sympherobius californicus* Banks; *S.* sp.

Hexacnemus armitagei Timberlake, 1926. U. S. Natl. Mus. Proc. 69 (3): 15.
♂ ♀.

Genus TACHARDIOBIUS Timberlake

Tachardiobius Timberlake, 1926. U. S. Natl. Mus. Proc. 69 (3): 19.

Type: *Tachardiobius nigricans* Timberlake. Monob.

nigricans Timberlake. Ariz., Calif. Host: *Tachardiella larreae* (Comst.).

Tachardiobius nigricans Timberlake, 1926. U. S. Natl. Mus. Proc. 69 (3): 23.
♂ ♀.

Genus MAYRIDIA Mercet

Mayridia Mercet, 1921. Fauna Ibérica, Himen. Encirtidos, p. 426.

Type: *Mayridia pulchra* Mercet. Orig. desig.

americana Timberlake. N. Dak., S. Dak., Utah. Host: *Trionymus utahensis* (Ckll.).

Mayridia americana Timberlake, 1926. U. S. Natl. Mus. Proc. 69 (3): 28.
♂ ♀.

Genus GAHANIELLA Timberlake

Gahaniella Timberlake, 1926. U. S. Natl. Mus. Proc. 69 (3): 23.

Type: *Gahaniella californica* Timberlake. Orig. desig.

californica Timberlake. Calif. Host: *Lecanium corni* Bouché.

Gahaniella californica Timberlake, 1926. U. S. Natl. Mus. Proc. 69 (3): 26.
♂ ♀.

Genus EPAENASOMYIA Girault

Epaenasomyia Girault, 1917. Chalcidoidea Nova Marilandensis III, p. 3.

Type: *Epaenasomyia varicornis* Girault. Monob.

varicornis Girault. Md.

Epaenasomyia varicornis Girault, 1917. Chalcidoidea Nova Marilandensis III,
p. 3. ♀.

Genus PHEIDOLOXENUS Ashmead

Pheidoloxenus Ashmead, 1904. Carnegie Mus. Mem. 1: 328.

Type: *Pheidoloxenus wheeleri* Ashmead. Monob. and orig. desig.

Pheidoloxenus Girault, 1915. Ent. Soc. Amer. Ann. 8: 273. Preocc.

Type: *Pheidoloxenus wheeleri* Girault. Monob.

Pheidoloxenus Ghesquière, 1946. Rev. Zool. Bot. Africaines 34: 369. N.
name.

wheeleri Ashmead. Tex. Host: Nest of *Pheidole kingi instabilis* Emery.

Pheidoloxenus wheeleri Ashmead, 1904. Carnegie Mus. Mem. 1: 327, 385. ♀.

Pheidoloxenus wheeleri Girault, 1915. Ent. Soc. Amer. Ann. 8: 273. Preocc.
♀.

Taxonomy: Wheeler, 1907. Amer. Mus. Natl. Hist. Bul. 23: 17-18.

Subfamily ARRHENOPHAGINAE

Genus ARRHENOPHAGUS Aurivillius

Arrhenophagus Aurivillius, 1888. Ent. Tidskr. 9: 144.

Type: *Arrhenophagus chionaspidis* Aurivillius. Monob.

- chionaspidis** Aurivillius. Cosmopolitan. Hosts: *Aspidiotus forbesi* Johns., *A. perniciosus* Comst., *Aulacaspis rosae* (Bouché).
Arrhenophagus chionaspidis Aurivillius, 1888. Ent. Tidskr. 9: 146. ♀.
 Taxonomy: Girault, 1911. N. Y. Ent. Soc. Jour. 19: 177-179.

Family EUPELMIDAE

- Revisions: Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 4-20.—Ruschka, 1921 (1920). Zool.-Bot. Gesell. Wien. Verh. 70: 234-315.

Genus METAPELMA Westwood

- Metapelma** Westwood, 1835. Zool. Soc. London Proc. 3: 69.
 Type: *Metapelma spectabilis* Westwood. Monob.
Halidea Foerster, 1856. Hym. Stud., v. 2, p. 31. No species.
 Type: *Halidea insignis* Foerster. Desig. by Gahan and Fagan, 1923.
Halidayella Dalla Torre, 1897. Wien. Ent. Ztg. 16: 85. N. name.
 Revision: Ferrière, 1938. Soc. Ent. France Ann. 107: 25-43.

schwarzi (Ashmead). Va., Tex.

Halidea Schwarzi Ashmead, 1890. Ent. Soc. Wash. Proc. 1: 265. ♀.

spectabilis Westwood. N. Y. and Conn. to Fla.; Kans., Ariz., Calif. Hosts: *Agrilus angelicus* Horn; *Cylas formicarius elegantulus* Sum.; *Magdalis olya* (Hbst.); *M. pandura* (Say); ? *Scolytus quadrispinosus* Say.

Metapelma spectabilis Westwood, 1835. Zool. Soc. London Proc. 3: 69. ♀.
 Biology: Blackman and Stage, 1924. N. Y. State Col. Forestry, Syracuse Univ., Tech. Pub. 17: 25.—Rhoads, 1924. In Blackman and Stage, N. Y. State Col. Forestry, Syracuse Univ., Tech. Pub. 17: 185.

Genus EUSANDALUM Ratzeburg

- Eusandalum** Ratzeburg, 1852. Ichn. d. Forstins., v. 3, p. 199.
 Type: *Eusandalum abbreviatum* Ratzeburg. Desig. by Ashmead, 1904.
Ratzeburgia Foerster, 1856. Hym. Stud., v. 2, pp. 31, 145.
 Type: *Eusandalum abbreviatum* Ratzeburg. Desig. by Gahan and Fagan, 1923.
Meseusandalum Girault, 1915. Queensland Mus. Mem. 4: 34.
 Type: *Meseusandalum cyaneiventris* Girault. Orig. desig.
 Revision: Girault, 1917. Jour. Ent. and Zool. 9: 8-10.
- acmaeoderae** Rohwer. Calif. Hosts: *Acmaeodera* sp. in *Ceanothus integerrimus*; *Amphicerus bicaudatus* (Say).
Eusandalum acmaeoderae (!) Rohwer, 1917. U. S. Natl. Mus. Proc. 53: 171. ♀.
Eusandalum acmaeoderae Girault, 1917. Jour. Ent. and Zool. 9: 9. Emend.
- alpinum** Girault. Calif.
Eusandalum alpinum Girault, 1917. Jour. Ent. and Zool. 9: 8. ♀.
- amphicerovorum** (Ashmead). N. J., Kans.
Ratzeburgia (!) **amphicerovora** Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. V. "♂"=♀.
- arizonae** Girault, emend. Ariz.
Eusandalum arizona Girault, 1917. Jour. Ent. and Zool. 9: 9. ♀.
- californicum** Girault. Calif.
Eusandalum californicum Girault, 1917. Jour. Ent. and Zool. 9: 8. ♀.
- coquillettii** (Ashmead). Calif. Hosts: *Amphicerus bicaudatus* (Say); *Oeme gracilis* Lec.
Ratzeburgia coquillettii Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 11. ♀.
- cyaneum** (Ashmead). Ariz.
Ratzeburgia cyanea Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 11. ♀.
- georgiae** Girault, emend. D. C., Ga.
Eusandalum georgia Girault, 1917. Jour. Ent. and Zool. 9: 8. ♀.

hubbardii (Ashmead). N. J., D. C., Fla., Mont., Wash. Hosts: *Leptostylus biustus* Lec.; *?Ips latidens* Lec.; *?Pityophthorus burkei* Blackm.; *?Pityogenes knechteli* Swaine.

Ratzburgia hubbardii Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 12. ♀.
Biology: De Leon, 1934. Canad. Ent. 66: 60.

hyalinipennis (Ashmead). Calif.

Ratzburgia hyalinipennis Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 12. ♀.

obscurum Girault. Wash.

Eusandalum obscurum Girault, 1917. Jour. Ent. and Zool. 9: 8. ♀.

Genus CALOSOTA Curtis

Calosota Curtis, 1836. Brit. Ent. 13: 596.

Type: **Calosota vernalis** Curtis. Orig. desig.

Calosoter Walker, 1837. Ent. Mag. 4: 358.

Type: **Calosoter vernalis** Walker. Desig. by Westwood, 1840.

longiventris (Ashmead). Calif.

Calosoter longiventris Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 12. ♂ ♀.

metallica (Gahan). Utah, Calif., Oreg., Wash. Hosts: *Ancylics comptana fragariae* (W. and R.); *Archips rosaceana* (Harr.); *Phytophaga destructor* (Say); *Ditropinotus aureoviridis* Cwfd.; *Eurytoma parva* Phillips; *Harmolita grandis* (Riley); *H. tritici* (Fitch).

Calosoter metallica Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 16. ♂ ♀.
Biology: Knowlton and Janes, 1933. Utah Agr. Expt. Sta. Bul. 243: 12.—Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 58–60.—Chamberlain, 1941. U. S. Dept. Agr. Tech. Bul. 784: 38–40.

Genus EUPELMUS Dalman

Eupelmus Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 136, 180.

Type: **Eupelmus memnonius** Dalman. Desig. by Westwood, 1840.

Cerambycobius Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 7, 10, 17. N. syn.

Type: **Eupelmus cleri** Ashmead. Monob. and orig. desig.

Revision. Crawford, 1908. Ent. Soc. Wash. Proc. 9: 157–158. (*Cerambycobius*).

allynii (French). Common throughout U. S.; P. E. I., Ont., Man. Hosts: *Oecanthus nigricornis quadripunctatus* Beut.; *Languria mozaridi* Latr.; *Apion delta* Buch.; *Coleophora malivorella* Riley; *Epiblema otiosana* (Clem.); *Tischeria malifoliella* Clem.; *Lasioptera vernoniae* Beut.; *Phytophaga destructor* (Say); tephritid seed maggot from ironweed; *Meromyza americana* Fitch; *M. saltatrix* (L.); *Cephus cinctus* Nort.; *C. pygmaeus* (L.); *C. tabidus* (F.); *Bracon cephi* (Gahan); *Platygaster hiemalis* Pack.; *P. vernalis* (Myers); *P. sp.*; *Pleurotropis metallica* (Nees); *Tetrastichus carinatus* Forbes; *Ditropinotus aureoviridis* Cwfd.; *Eupteromalus subapterus* (Riley); *Habrocytus languriae* Ashm.; *Merisoporus chalcidiphagus* (W. and R.); *Merisus destructor* (Say); *M. febriculosus* Gir.; *Eurytoma parva* Phillips; *E. sp.*; *Harmolita albomaculata* (Ashm.); *H. atlantica* P. and E.; *H. elymi* (French); *H. elymicola* P. and E.; *H. elymivora* P. and E.; *H. elymophaga* P. and E.; *H. grandis* (Riley); *?H. hesperus* P. and E.; *H. holci* Phillips; *H. hordei* (Harris); *H. maculata* (How.); *?H. occidentalis* P. and E.; *H. tritici* (Fitch); *H. vaginicola* (Doane).

Isosoma allynii French, 1881. Prairie Farmer 52: 418.

Biology: Packard, 1916. Jour. Agr. Res. 6: 370–373.—Phillips and Pooos, 1921. Jour. Agr. Res. 21: 405–426.—Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 41–46, ♂ ♀.—Hill, Pinckney, and Udine, 1939. U. S. Dept. Agr. Tech. Bul. 689: 3–15.—Chamberlain, 1941. U. S. Dept. Agr. Tech. Bul. 784: 29, 39.

Morphology: Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 2–3, 7, 11–13.

Taxonomy: Parker, 1924. Soc. Ent. France Ann. 93: 266, 286.—Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 41–46, ♂ ♀.

ashmeadi Melander and Brues. Mass.

Eupelmus Ashmeadi Melander and Brues, 1903. Biol. Bul. 5: 21. ♀.

auratus Ashmead. Fla., La. Hosts: *Andricus virens* Ashm.; *Callirhytis rugosa* Ashm.

- Eupelmus auratus* Ashmead, 1886. Trans. Amer. Ent. Soc. 12: 128. ♀.
- bardus** Girault. Calif.
Eupelmus bardus Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum. Observ. V, p. 3. ♀.
- 2-guttus** Girault. Md.
Eupelmus 2-guttus Girault, 1917. Ent. News 28: 256. ♀. (*biguttus* in Index).
- brevicauda** (Crawford). Tex., Ariz. Host: *Acanthoscelides horni* (Pic).
Cerambycobius brevicauda Crawford, 1908 (1907). Ent. Soc. Wash. Proc. 9: 158. ♀. (Not *brevicaudus* Gahan, 1910.)
- bruchivorus** (Crawford). N. C., Tex. Hosts: *Bruchus* sp. on *Vachellia* [probably *Mimosestes sallaei* (Sharp)]; *Mimosestes sallaei* (Sharp); ?*Phloeotribus frontalis* (Oliv.).
Cerambycobius bruchivorus Crawford, 1908 (1907). Ent. Soc. Wash. Proc. 9: 158. ♀.
- charitopoides** Girault. W. Va., La.
Eupelmus charitopoides Girault, 1916. Canad. Ent. 48: 244. ♀.
- cleri** Ashmead. Va., N. C. Hosts: Clerid in white pine; *Thanasimus trifasciatus* (Say); ?*Melanophila fulvoguttata* Harr.; ?*Pissodes strobi* (Peck); ?*Odon-taulacus abdominalis* Cress.
Eupelmus cleri Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 339. ♂ ♀.
- coccidis** Girault.
Eupelmus coccidis Girault, 1916. Ent. News 27: 223. ♀. (Not *coccidis* Girault, 1917.)
- conigeræ** Ashmead. N. J., Fla. Host: Gall of *Callirhytis ventricosa* (O. S.).
Eupelmus conigeræ Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xv. ♀.
- cushmani** (Crawford). Tex., La. Hosts: *Araecerus fasciculatus* (Deg.); *Acanthoscelides ochraceicolor* (Pic); *Mimosestes sallaei* (Sharp); *Anthonomus grandis* Boh.; *Cylindrocopturus adspersus* (Lec.); *C. longulus* (Lec.); *Lixus scrobicollis* Boh.; *Trichobaris texana* Lec.
Cerambycobius cushmani Crawford, 1908 (1907). Ent. Soc. Wash. Proc. 9: 158. ♀.
 Biology: Pierce, 1910. Jour. Econ. Ent. 3: 455.—Pierce, Cushman, and Hood, 1912. U. S. Dept. Agr. Bur. Ent. Bul. 100: 51–62.—Pierce and Cushman, 1915. Ent. Soc. Wash. Proc. 17: 165.
 Morphology: Snodgrass, 1910. U. S. Natl. Mus. Proc. 39: 65.
- cyaniceps amicus** Girault. N. Y. to Ga. and Ill.; Ohio, Ark., N. Mex. and ?Tex. Hosts: *Acanthoscelides alboscutelellatus* (Horn); *Bruchus brachialis* Fahr.; *B. pisorum* (L.); *Mimosestes amicus* (Horn); *Anthonomus grandis* Boh.; *Chalcodermus aeneus* Boh.; *Desmoris fulvus* Lec.; *Scolytus multistriatus* (Marsh.); *Ulophora grotei* Rag.; *Grapholitha molesta* (Busek); *Rhyacionia frustrana* (Comst.); *Coleophora malvovorella* Riley; *Macrocentrus* sp.
Eupelmus cyaniceps var. *amicus* Girault, 1916. Canad. Ent. 48: 244. ♀.
 Biology: Fenton and Dunnam, 1929. U. S. Dept. Agr. Tech. Bul. 112: 66.—Beacher, 1947. Ent. Soc. Amer. Ann. 40: 532–544.—Brunson, 1948. Jour. Econ. Ent. 41: 119.
- cyaniceps cyaniceps** Ashmead. Ont. to N. C., Fla., Miss., La., Tex., Ark., Okla., Kans., N. Mex. Hosts: *Anthonomus albopilosus* Dietz; *A. grandis* Boh.; *Apion rostrum* Say; *Conotrachelus crataegi* Walsh; *Cylindrocopturus adspersus* Lec.; *C. longulus* Lec.; *Lixus musculus* Say; *L. scrobicollis* Boh.; *Smicraulax tuberculatus* Pierce; *Tachypterellus quadrigibbus* (Say); *Trichobaris compacta* Casey; *T. texana* Lec.; *Tychius sordidus* Lec.; ?*Acanthoscelides bisignatus* (Horn); ?*A. compressicornis* Schaeff.; *A. horni* Pic; *A. obtectus* (Say); *A. ochraceicolor* (Pic); *Amblycerus robiniae* (F.); *Gibbo-bruchus mimus* (Say); *Mimosestes sallaei* (Sharp); *Carpocapsa pomonella* (L.); *Grapholitha molesta* (Busek); *Bucculatrix fusicola* Braun; *Thyridop-teryx ephemeraeformis* (Haw.); *Bracon* sp.; *Glypta* sp.
Eupelmus cyaniceps Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 129. ♀.

- Biology: Pierce, 1908. U. S. Dept. Agr. Bur. Ent. Bul. 73: 29-48.—Pierce, Cushman, and Hood, 1912. U. S. Dept. Agr. Bur. Ent. Bul. 100: 31-68.—Pierce and Cushman, 1915. Ent. Soc. Wash. Proc. 17: 165-167.—Tucker, 1922. Kans. Acad. Sci. Trans. 30: 144.—Breland, 1948. Ent. News 59: 234.
Morphology: Parker, 1924. Ann. Soc. Ent. France 93: 266.
- cyaniceps** *utahensis* Girault. Utah.
Eupelmus cyaniceps var. *utahensis* Girault, 1916. Canad. Ent. 48: 244. ♀.
- cynipidis** Ashmead. Fla., La. Host: Gall of *Callirhytis batatoides* (Ashm.).
Eupelmus cynipidis Ashmead, 1882. Canad. Ent. 14: 36. ♀.
- dryophantae** Ashmead. Fla. Host: Gall of *Dryocosmus laurifoliae* (Ashm.).
Eupelmus dryophantae Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 130.
♂ ♀.
- ficigeræ** (Ashmead), n. comb. Fla. Hosts in galls of: *Andricus femoratus* Ashm.; *Disholcaspis virens* (Ashm.).
Megastigma (!) *ficigeræ* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 185. ♂.
- flavovariegatus** Ashmead. Kans. Host: Gall of ?*Adleria dimorphus* (Beut.).
Eupelmus flavovariegatus Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. IV. ♂ ♀.
- floridanus** Howard. Fla. Host: Tineid larva on orange.
Eupelmus Floridanus Howard, 1880. Canad. Ent. 12: 209. ♂.
- fonteia** Walker. Fla.
Eupelmus Fonteia Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 19. ♀.
- inoensis** Girault. Calif. Hosts: *Saissetia oleae* (Bern.); ?*Acanthoscelides floridae* (Horn); *A. horni* Pic; *Asphondylia adenostoma* Felt; *Aphycus lounsburyi* How.
Eupelmus inoensis Girault, 1916. Ent. News 27: 223. ♂ ♀.
Biology: Compere, 1925. Calif. Univ. Pubs., Ent. 3: 296.—Flanders, 1940. Ent. Soc. Amer. Ann. 33: 252.
Taxonomy: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 295-297.
- juglandis** Ashmead. N. Y., Va., N. C., Kans. Hosts: *Magdalis* spp.; *Scolytus rugulosus* (Ratz.); ?*Stephanoderes dissimilis* (Zimm.).
Eupelmus juglandis Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 340. ♀.
- lamachus** Walker. Fla.
Eupelmus Lamachus Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 20. ♀.
- limneriæ** Howard. Conn., Md., D. C., N. C., S. C., Fla. Hosts: *Grapholitha molesta* (Buseck); *Homaledra sabatella* (Chamb.); *Macrocentrus* sp.; *Campoplex validus* (Cress.); *Spilochalcis debilis* (Say).
Eupelmus limneriæ Howard, 1897. U. S. Dept. Agr. Div. Ent. Tech. Ser. 5: 39, 56. ♂ ♀.
- macrocarpæ** Ashmead. Ill., Kan. Hosts: *Acraspis erinacei* (Beut.); *A. pezomachoides* (O. S.); gall of *Disholcaspis mamma* (Cress.).
Eupelmus macrocarpæ Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. IV. ♀.
Biology: Balduf, 1926. Canad. Ent. 58: 160-163.
- marylandicus** Girault. Md.
Eupelmus marylandicus Girault, 1916. Canad. Ent. 48: 242. ♀.
- momphæ** Gahan. Conn., Ga., Ala., Tex. Hosts: ?*Oeneis melissa semidea* (Say); ?*Epiblema scudderiana* (Clem.); *E. tripartitana* (Zell.); *Phalonia cephalanthana* Heinr.; ?*Mompha brevivittella* (Clem.).
Eupelmus momphæ Gahan, 1910. Canad. Ent. 42: 205. ♀.
- neococcidis** Peck, n. name. Md., La., Tex., Ariz. Hosts: *Stagmomantis carolina* (Johan.); *S. limbata* (Hahn); *Mantis* sp.; *Coccus hesperidum* (L.).
Eupelmus brevicauda Gahan, 1910. Canad. Ent. 42: 205. ♀. Preocc.
Eupelmus coccidis Girault, 1917. Descr. Stellarum Nov., p. 6. N. name. Preocc. by *E. coccidis* Girault, 1916.
Biology: Breland, 1941. Ent. Soc. Amer. Ann. 34: 108.
- neomexicanus** Girault. N. Mex.
Eupelmus neomexicanus Girault, 1906. Ent. Soc. Amer. Ann. 9: 307. ♀.

- pini** Taylor. N. Y., Mass., Conn. Host: *Pissodes strobi* (Peck).
Eupelmus pini Taylor, 1927. Brooklyn Ent. Soc. Bul. 22: 205. ♀.
 Biology and taxonomy: Taylor, 1929. Ent. Amer. 10: 12-16, 66.
- popa** Girault. Va. to Fla., La., Tex. and Mo. Hosts: *Contarinia caudata* Felt; *C. sorghicola* (Coq.).
Eupelmus popa Girault, 1917. Descr. Hym. Chalcidoid. Variorum Cum Observ. V., p. 4. ♀.
 Biology: Woodruff, 1929. Jour. Econ. Ent. 22: 160-167.—Walter, 1941. U. S. Dept. Agr. Tech. Bul. 778: 18-20.
 Taxonomy: Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 14.
- quercus** Girault. Fla. Host: Gall of *Disholcaspis virens* (Ashm.).
Eupelmus quercus Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 130. ♀.
- rhizophelus** Brues. Mass.
Eupelmus rhizophelus Brues, 1903. Biol. Bul. 4: 186.
 Biology: Melander and Brues, 1903. Biol. Bul. 5: 21.
- rosae** Ashmead. Fla., La., Kans. Hosts: ?*Pyrausta ainsliei* Heinr.; *Diplolepis* gall on rose.
Eupelmus rosae Ashmead, 1882. Canad. Ent. 14: 36. ♀.
- rubicola** (Ashmead), n. comb. Fla. Host: Dipterous larva in stem of *Rubus villosus*.
Xenomerus rubicola Ashmead, 1887. Ent. Amer. 3: 100. ♂.
 Taxonomy: Ashmead, 1893. U. S. Natl. Mus. Bul. 45: 185.
- speciosus** Girault. D. C.
Eupelmus speciosus Girault, 1916. Canad. Ent. 48: 243. ♀.
- sphaericephalus** Ashmead. Fla.
Eupelmus sphaericephalus Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 129. ♀.
- spongipartus** Foerster. N. Y., Conn., Pa., Md., Ohio. Hosts: *Apanteles melanoscelus* (Ratz.); *Macrocentrus ancylivorus* Roh.; *Meteorus versicolor* (Wesm.).
Eupelmus spongipartus Foerster, 1860. Naturh. Ver. Rheinlande Verh. 17: 123. ♂ ♀.
 Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 12, 21-23.—Proper, 1934. Jour. Agr. Res. 48: 366.—Brunson and Allen, 1948. Jour. Econ. Ent. 41: 447.—Brunson, 1948. Jour. Econ. Ent. 41: 119.

Genus ARACHNOPHAGA Ashmead

- Arachnophaga* Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 9, 10, 18.
 Type: *Eupelmus piceus* Riley. Monob.
 Revision: Gahan, 1943. U. S. Natl. Mus. Proc. 94: 339-363.
- abstrusa** Gahan. Tex. Host: *Cyrtarachne* sp.
Arachnophaga abstrusa Gahan, 1943. U. S. Natl. Mus. Proc. 94: 362. ♂ ♀.
- aldrichi** Gahan. Mass., N. J., Md., Miss.
Arachnophaga aldrichi Gahan, 1943. U. S. Natl. Mus. Proc. 94: 360. ♀.
- aureicorpus** (Girault). S. C., Tex. Host: ?Syrphid.
Anastatus aureicorpus Girault, 1916. Ent. Soc. Amer. Ann. 9: 299. ♀.
- costalis** Gahan. N. J., Md. Hosts: *Grapholitha molesta* (Busck); *Macrocentrus* sp.
Arachnophaga costalis Gahan, 1943. U. S. Natl. Mus. Proc. 94: 346. ♀.
- ferruginea** Gahan. Va. Host: *Epeira pegenia* Walck.
Arachnophaga ferruginea Gahan, 1943. U. S. Natl. Mus. Proc. 94: 361. ♀.
- frontalis** Gahan. Conn., N. J., Va., S. C., Ariz., Utah. Hosts: *Thyridopteryx meadii* Hy. Edw.; *Anarsia lineatella* Zell.; *Macrocentrus ancylivorus* Roh.
Arachnophaga frontalis Gahan, 1943. U. S. Natl. Mus. Proc. 94: 357. ♂ ♀.
- longiceps** (Brues). Tex. Host: *Papilio* sp.
Anastatus longiceps Brues, 1907. Wis. Nat. Hist. Soc. Bul. 5: 108. ♀.
- nocua** Gahan. Tex. Hosts: *Estigmene acrea* (Drury); ?*Apanteles* sp.
Arachnophaga nocua Gahan, 1943. U. S. Natl. Mus. Proc. 94: 346, 348. ♂ ♀.

- picea** (Riley). N. J., Ill., Ariz., Calif. Hosts: *Chrysopa californica* Coq.; *Argiope argentata* (F.); *A. sp.*; *Epeira sp.*; *Phidippus opifex* McC.
Eupelmus piceus Riley, 1892. In Howard, Ent. Soc. Wash. Proc. 2: 296.
 ♂ ♀.
 Biology: Weese, 1925. Ill. Biol. Monog. 9 (4): 19, 46-52.—Clancy, 1946. Calif. Univ. Pubs., Ent. 7: 459-460.
 Taxonomy: Clancy, 1946. Calif. Univ. Pubs., Ent. 7: 459-460.
- scutata** Gahan. Ill. Host: Spider.
Arachnophaga scutata Gahan, 1943. U. S. Natl. Mus. Proc. 94: 353. ♂ ♀.

Genus EUPELMELLA Masi

- Macroneura** Walker, 1837. Ent. Mag. 4: 353. Preoce.
 Type: (*Macroneura maculipes* Walker)=[*Ichneumon*] *vesicularis* (Retzius). Monob.
- Macroneura** Blanchard, 1840. Hist. Nat. Anim. Articules, v. 3, p. 273. Emend. Preoce.
- Eupelmella** Masi, 1919. Mus. Civ. Stor. Nat. Genova Ann. 48: 306.
 Type: (*Eupelmus degeeri* Dalman)=[*Ichneumon*] *vesicularis* (Retzius). Monob.
- canadensis** (Provancher), n. comb. Que.
Theocolax Canadensis Provancher, 1883. Nat. Canad. 14: 34. ♀.
- dryorhizoxeni** (Ashmead), n. comb. N. Y., Fla., Kans. Hosts: ?*Dasyneura lysimachiae* Beut.; galls of *Rhabdophaga triticoides* Walsh, *Belonocnema treatae* Mayr.
Eupelmus dryorhizoxeni Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 129.
 ♂ ♀.
- epicaste** (Walker), n. comb. Ont., Fla. Host: *Harmolita tritici* (Fitch).
Eupelmus Epicaste Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 20. ♀.
- melanderi** (Brues), n. comb. Wash. Host: *Rhodites* gall on *Rosa pisocarpa*.
Eupelmus melanderi Brues, 1907. Wis. Nat. Hist. Soc. Bul. 5: 54. ♀.
- meteor** (Gahan), n. comb. Tex. Host: *Meteorus laphygmae* Vier.
Eupelminus meteor Gahan, 1913. U. S. Natl. Mus. Proc. 46: 437. ♀.
 Biology: Luginbill, 1928. U. S. Dept. Agr. Tech. Bul. 34: 74-75.—Vickery, 1929. U. S. Dept. Agr. Tech. Bul. 138: 21, 32, 55, 58.
- vesicularis** (Retzius). Ont. and Maine to Va., Tenn., Colo., Utah, Oreg., Wash. Hosts: *Bruchus brachialis* Fahr.; *Anthonomus signatus* Say; *Ceutorhynchus assimilis* (Payk.); *Cylindrocopturus furnissi* Buch.; *Tachypterellus consors cerasi* List; *Tortrix packardiana* Fern.; *Argyresthia thuiliella* (Pack.); *Coleophora pruniella* Clem.; *C. salmani* Heinr.; *Eurukuttarus confederata* (Grote); *Phytophaga destructor* (Say); *Neodiprion banksianae* Roh.; *Cephus cinctus* Nort.; *C. pygmaeus* (L.); *Apanteles melanoscelus* (Ratz.); *A. solitarius* (Ratz.); *Bathyplectes curculionis* (Thoms.); gall of *Aulacidea podagrae* (Bass.); *A. tumida* (Bass.); *Diplolepis* sp.; *Platygaster vernalis* (Myers); *P. zosine* Walkr.; *Dahlbominus fuscipennis* (Zett.); *Eupelmus allynii* (French); *Ditropinotus aureoviridis* Cwfd.; *Hemadas nubilipennis* (Ashm.); *Merisoporus chalcidiphagus* W. and R.; *Bruchophagus gibbus* (Boh.); *Eurytoma parva* Phillips; *Harmolita albomaculata* (Ashm.); *H. atlantica* P. and E.; *H. dactylicola* P. and E.; *H. elymi* (French); *H. festucae* P. and E.; *H. grandis* (Riley); *H. hordei* (Harr.); *H. maculata* (How.); *H. tritici* (Fitch); *H. vaginicola* (Doane); *H. sp.* in *Agropyron tenerum*; *H. sp.* in *Agropyron*; *H. sp.* in *Elymus*.
- Ichneumon vesicularis** Retzius, 1783. Genera et Species Insectorum, p. 70.
- Euryscapus saltator** Lindeman, 1887. Soc. Imp. Nat. Moscou Bul. (2) 1: 190.
 ♂ ♀.
- Eupelminus coleopterophagus** Girault, 1916. Ent. Soc. Amer. Ann. 9: 306. ♀.
 Biology: McConnell, 1918. Jour. Econ. Ent. 11: 168.—Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 12, 23-24.—Phillips and Poots, 1927. Jour. Agr. Res. 34: 473-482.—Morris, 1938. Parasitology 30: 20-32.—Hill, Pinckney, and Udine, 1939. U. S. Dept. Agr. Tech. Bul. 689: 4-14.—Chamberlain, 1941. U. S. Dept. Agr. Tech. Bul. 784: 25, 29, 38-39.
 Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 52-58.—Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 6-7, 11-13.

Genus ANASTATUS Motschulsky

Anastatus Motschulsky, 1860 (1859). Études Ent. 8: 116.

Type: *Anastatus mantoidae* Motschulsky. Monob.

Antigaster Walsh and Riley, 1869. Amer. Ent. 1: 156.

Type: *Antigaster mirabilis* Walsh and Riley. Monob.

Paraguaya Girault, 1911. Zool. Jahrb., Abt. f. System. 31: 385.

Type: *Paraguaya pulchripennis* Girault. Monob.

Ooderelloides Girault, 1913. Roy. Soc. So. Austral. Trans. 37: 6, 9, 10.

Type: *Ooderelloides nigripurpurea* Girault. Orig. desig.

The Nearctic species of *Anastatus* parasitize insect eggs.

blattidarum Ferrière. Ariz. Host: *Supella supellectilium* (Serv.).

Anastatus blattidarum Ferrière, 1930. Bul. Ent. Res. 21: 33-34. ♀.

Taxonomy: Ferrière, 1935. Stylops 4: 150.

disparis Ruschka, (*bifasciatus* of Amer. Authors, *nec* Fonsc.). New England, Ariz.

Hosts: *Nygmia phaeorrhoea* (Donov.); *Porthetria dispar* L.; *Apanteles melanoscelus* (Ratz.).

Anastatus bifasciatus var. *disparis* Ruschka, 1920. Zoöl.-Bot. Gesell. Wien. Verh. 70: 265. ♂ ♀.

Biology: Fiske, 1910. Parasites of Gipsy and Brown-Tail Moths Mass., p. 16-51.—Howard and Fiske, 1911. U. S. Dept. Agr. Bur. Ent. Bul. 91: 75, 168-176.—Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 24.—Burgess and Crossman, 1929. U. S. Dept. Agr. Tech. Bul. 86: 23-31.—Felker, 1940. N. H. Dept. Agr. Bien. Rpt. 14: 122.—Brown and Sheals, 1944. Jour. Forestry 42: 400.

Taxonomy: Pieltain, 1934. Eos 10: 286-290.

drassi (Riley). Throughout No. Amer. Host: ?*Drassus* sp.

Eupelmus drassi Riley, 1892. In Howard, Ent. Soc. Wash. Proc. 2: 297. ♀.

gemmarii (Ashmead), n. comb. Fla. Host: Gall of *Callirhytis gemmaria* (Ashm.).

Eupelmus gemmarii Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 129. ♀.

hirtus (Ashmead), n. comb. N. Y., N. J., Fla. Host: *Thyanta custator* (F.).

Eupelmus hirtus Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xiv.

♂ ♀.

mantis (Ashmead), n. comb. Fla. Host: *Stagmomantis carolina* (Johan.).

Eupelmus mantis Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xv.

♂ ♀.

microcentri Gahan. D. C., Pa. Host: *Microcentrum* sp.

Anastatus microcentri Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 12.

♂ ♀.

mirabilis (Walsh and Riley). N. J. to Fla., Tex., and Kans. Hosts: *Mantis* sp.; *Amblycorypha oblongifolia* (Deg.); *Microcentrum retinerve* (Burm.); *M. rhombifolium* (Sauss.); *Oecanthus nigricornis* Walkr.; *Acrosternum hilare* (Say); *Cressonia juglandis* (A. and S.); sphingid eggs on willow.

Antigaster mirabilis Walsh and Riley, 1869. Amer. Ent. 1: 156. ♀.

Biology: Howard, 1880. Canad. Ent. 12: 209-210.—Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, pp. 250-251.

Taxonomy: Riley, 1874. Mo. State Bd. Agr. Ann. Rpt. 9: 162-165.

pearsalli Ashmead. N. Y., N. J., Va., N. C. Hosts: *Acrosternum hilare* (Say); *Paonias astylus* (Drury); *Apanteles melanoscelus* (Ratz.).

Anastatus pearsalli Ashmead, 1898. Ent. News 9: 24. ♀.

Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 24-25.

reduvii (Howard). Md. to Fla. and Tex. Hosts: *Stagmomantis carolina* (Johan.); *Microcentrum* sp.; *Acrosternum hilare* (Say); *Anasa tristis* (Deg.); *Arilus cristatus* (L.).

Eupelmus reduvii Howard, 1880. Canad. Ent. 12: 207. ♂ ♀.

Biology: Underhill, 1934. Va. Agr. Expt. Sta. Bul. 294: 17-18.—Breland, 1941. Ent. Soc. Amer. Ann. 34: 110.

Taxonomy: Waterston, 1923. Bul. Ent. Res. 14: 104-108. ♂ ♀.

ruficollis (Cameron) (*mirabilis* of Calif. authors, *nec* W. and R.). Calif. Host: *Microcentrum rhombifolium* (Sauss.).

Brasema ruficollis Cameron, 1903. Invertebrata Pacifica 1: 125. ♀.

Biology: Essig, 1913. Calif. State Comn. Hort. Monthly Bul. 2: 22, 274.—Isaac, 1905. Calif. State Comnr. Hort. Bien. Rpt. 1: 102 (*mirabilis*).

Taxonomy: Essig, 1926. Insects of West. No. Amer.: 843.

semiflavidus Gahan. N. Mex., Ariz. Hosts: *Hemileuca nevadensis* Stretch; *H. oliviae* Ckll.

Anastatus semiflavidus Gahan, 1914. U. S. Natl. Mus. Proc. 48: 160. ♂ ♀.
Biology: Caffrey, 1921. Jour. Agr. Res. 21: 373-384.—Wildermuth, 1933. Jour. Econ. Ent. 26: 796-798.—Frankenfeld and Barnes, 1933. Jour. Econ. Ent. 26: 799-805.

zeli (Ashmead), n. comb. Fla. Hosts: *Anasa tristis* (Deg.); *Zelus longipes* (L.).

Eupelmus zeli Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 130. ♀.

Genus ENCYRTASPIS Ashmead

Encyrtaspis Ashmead, 1904. Carnegie Mus. Mem. 1: 290, 492.

Type: *Encyrtaspis brasiliensis* Ashmead. Monob.

Revision: Gahan, 1943. U. S. Natl. Mus. Proc. 94: 363-369.

californica (Ashmead). N. Mex., Calif. Hosts: *Anarsia lineatella* Zell.; *Evetria* sp. on *Pinus ponderosa*.

Tineobius californicus Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 15. ♀.

laticeps (Brues). Tex.

Anastatus laticeps Brues, 1907. Wis. Nat. Hist. Soc. Bul. 5: 107. ♀.

semirufa Gahan. N. Y. to Ga., La., Tex. Hosts: *Laetilia coccidivora* (Comst.); *Grapholitha molesta* (Busek); *Macrocentrus ancylivorus* Roh.

Encyrtaspis semirufus Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 10. ♂ ♀.
Biology: Haeussler, 1930. Jour. Agr. Res. 41: 366.

Genus LECANIOBIUS Ashmead

Lecaniobius Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 8, 17.

Type: *Lecaniobius cockerelli* Ashmead. Monob.

Zalophothrix Crawford, 1908. Ent. Soc. Wash. Proc. 9: 156.

Type: (*Zalophothrix mirum* Crawford) = *Lecaniobius cockerelli* Ashmead. Monob.

Revision: Compere, 1939. Calif. Univ. Pubs., Ent. 7: 79-83.

cockerelli Ashmead. Fla. Hosts: *Saissetia nigra* (Nietn.); *Scutellista cyanea* Mots.

Lecaniobius cockerelli Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 17. ♀.

Zalophothrix mirum Crawford, 1908. Ent. Soc. Wash. Proc. 9: 157. ♀.

Taxonomy: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 242, 297-301.

utilis Compere. Calif. Host: *Saissetia oleae* (Bern.).

Lecaniobius utilis Compere, 1939. Calif. Univ. Pubs., Ent. 7: 79. ♂ ♀.

Biology: Flanders, 1942. Jour. Econ. Ent. 35: 687.—Flanders, 1944. Jour. Econ. Ent. 37: 409.

Genus ZAISCHNOPSIS Ashmead

Ischnopsis Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 16. Preocc.

Type: *Ischnopsis ophthalmica* Ashmead. Monob.

Zaischnopsis Ashmead, 1904. Ent. Soc. Wash. Proc. 6: 126. N. name.

schwarzii (Ashmead), n. comb. Fla.

Charitopus schwarzii Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 11. ♀.

Family EUCHARITIDAE

Revisions: Rusehka, 1924. Deut. Ent. Ztschr., pp. 82-89.—Gahan, 1940. U. S. Natl. Mus. Proc. 88: 425-458.

Biology: Wheeler and Wheeler, 1937. Ent. Soc. Amer. Ann. 30: 163-175.—Clausen, 1940. Wash. Acad. Sci. Jour. 30: 504-516.

Genus PSEUDOCHALCURA Ashmead

Pseudochalcura Ashmead, 1904. Carnegie Mus. Mem. 1: 268, 269, 468.

Type: *Eucharis gibbosa* Provancher. Orig. desig.

arizonensis (Crawford), n. comb. Ariz.

Chalcura arizonensis Crawford, 1914. Ent. Soc. Wash. Proc. 16: 29. ♀.
Biology: Pierce and Morrill, 1914. Ent. Soc. Wash. Proc. 16: 22.—Clausen, 1940.
Wash. Acad. Sci. Jour. 30: 505-509.

californica (Ashmead), n. comb. Calif.

Chalcura californica Ashmead, 1892. Ent. Soc. Wash. Proc. 2: 356. ♂.

gibbosa (Provancher). Que., Mich. Host: *Camponotus herculeanus ligniperdus* var. *noveboracensis* (Fitch).

Eucharis gibbosa Provancher, 1881. Nat. Canad. 12: 292. ♀.
Biology: Wheeler, 1907. Amer. Mus. Nat. Hist. Bul. 23: 16.

Genus STILBULA Spinola

Stilbula Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 150.

Type: *Ichneumon cyniformis* Rossi. Monob.

floridana (Ashmead). Fla.

Lophyrocera floridana Ashmead, 1888. Ent. Amer. 3: 187. ♂.
Taxonomy: Gahan, 1940. U. S. Natl. Mus. Proc. 88: 435-436.

montana Ashmead. Colo.

Stilbula montana Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 24, 45. ♀.

septentrionalis (Brues). Ariz.

Schizaspidia septentrionalis Brues, 1907. Wis. Nat. Hist. Soc. Bul. 5: 104.
♀.

Genus LOPHYROCERA Cameron

Lophyrocera Cameron, 1884. Biol. Cent.-Amer., Hym. 1, pp. 101, 103.

Type: *Lophyrocera stramineipes* Cameron. Desig. by Ashmead, 1904.

apicalis Ashmead. Calif.

Lophyrocera apicalis Ashmead, 1892. Ent. Soc. Wash. Proc. 2: 357. ♀.

nigromaculata Cameron. Ariz.

Lophyrocera nigromaculata Cameron, 1884. Biol. Cent.-Amer., Hym. 1, p. 104.

Genus KAPALA Cameron

Kapala Cameron, 1884. Biol. Cent.-Amer., Hym. 1, p. 102.

Type: *Eucharis furcata* Fabricius. Monob.

Capala Schulz, 1906. Spolia Hym., p. 150. Emend.

floridana (Ashmead). Fla. Host: *Pogonomyrmex badius* (Latr.).

Thoracantha floridana Ashmead, 1885. Ent. Amer. 1: 96. ♂.
Taxonomy: Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xi. ♂ ♀.

furcata (Fabricius). Ga., Tex.

Eucharis furcata Fabricius, 1804. Systema Piezatorum, p. 158.

Genus PSEUDOMETAGEA Ashmead

Pseudometagea Ashmead, 1899. Ent. Soc. Wash. Proc. 4: 239, 241 (no species).

Type: *Metagea schwarzii* Ashmead. Included by Ashmead, 1904.

hillmeadia Girault. Md.

Pseudometagea hillmeadia Girault, 1916. Brooklyn Ent. Soc. Bul. 11: 113.
♀.

schwarzii (Ashmead). N. J., Pa., Md., D. C., Ill., Colo.

Metagea schwarzii Ashmead, 1892. Ent. Soc. Wash. Proc. 2: 356. ♂ ♀.

Genus ORASEMA Cameron

Orasema Cameron, 1884. Biol. Cent.-Amer., Hym. 1, p. 104.

Type: *Orasema stramineipes* Cameron. Monob.

Revision: Gahan, 1940. U. S. Natl. Mus. Proc. 88: 436-458.

aureoviridis Gahan. Tex.

Orasema aureoviridis Gahan, 1940. U. S. Natl. Mus. Proc. 88: 448. ♂ ♀.

bakeri Gahan. Colo., Ariz.

Orasema bakeri Gahan, 1940. U. S. Natl. Mus. Proc. 88: 452. ♂ ♀.

beameri Gahan. Colo.

Orasema beameri Gahan, 1940. U. S. Natl. Mus. Proc. 88: 447. ♂ ♀.

cockerelli Gahan. Iowa, Kans., Colo., N. Mex., Ariz.

Orasema cockerelli Gahan, 1940. U. S. Natl. Mus. Proc. 88: 453. ♂ ♀.

coloradensis Wheeler. Va., Fla., La., Tex., Iowa, Kans., Colo., N. Mex. Hosts:

Pheidole vinelandica Forel; *Solenopsis molesta* var. *validiuscula* Emery.

Orasema coloradensis Wheeler, 1907. Amer. Mus. Nat. Hist. Bul. 23: 12-14.

♂ ♀.

Biology: Clausen, 1940. Jour. Wash. Acad. Sci. 30: 504-507.

minuta Ashmead. Fla.

Orasema minuta Ashmead, 1888. Ent. Amer. 3: 188. ♂.

neomexicana Gahan. N. Mex.

Orasema neomexicana Gahan, 1940. U. S. Natl. Mus. Proc. 88: 450. ♀.

occidentalis Ashmead. Calif.

Orasema occidentalis Ashmead, 1892. Ent. Soc. Wash. Proc. 2: 355. ♀.

robertsoni Gahan. Fla.

Orasema robertsoni Gahan, 1940. U. S. Natl. Mus. Proc. 88: 451. ♀.

simulatrix Gahan. Ariz.

Orasema simulatrix Gahan, 1940. U. S. Natl. Mus. Proc. 88: 450. ♀.

smithi Howard. Va.

Orasema Smithi Howard, 1897. Linn. Soc. London, Jour., Zool. 26: 134. ♀.

texana Gahan. Tex.

Orasema texana Gahan, 1940. U. S. Natl. Mus. Proc. 88: 440. ♀.

violacea Ashmead. N. C., Fla.

Orasema violacea Ashmead, 1888. Ent. Amer. 3: 187. ♂.

viridis Ashmead. N. C., Ariz.

Orasema viridis Ashmead, 1895. Calif. Acad. Sci. Proc. (2) 5: 553.

Biology: Smith, 1912. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 19: 57-59.

wheeleri Wheeler. Tex., Colo. Hosts: *Pheidole ceres* Whlr.; *P. kingi instabilis* Emery; *P. sciophila* Whlr.

Orasema wheeleri Wheeler, 1907. Amer. Mus. Nat. Hist. Bul. 23: 14. ♀.

Family PERILAMPIDAE

Revision: Ruschka, 1924. Deut. Ent. Ztschr., pp. 90-96.

Genus EUPERILAMPUS Walker

Euperilampus Walker, 1871. Notes on Chalcid., pt. 4, p. 67.

Type: *Perilampus gloriosus* Walker. Monob.

Revision: Crawford, 1914. Ent. Soc. Wash. Proc. 16: 67.

lepreos (Walker). Ga.

Perilampus Lepreos Walker, 1846. List Hym. Brit. Mus., v. 1, pp. 22, 89.

opacus Ashmead. Colo., Ariz.

Euperilampus opacus Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 318. ♀.

Taxonomy: Crawford, 1914. Ent. Soc. Wash. Proc. 16: 69.

triangularis (Say). Que., Maine, N. J., Md., N. C., Ind., Fla., Kans., Colo.

Perilampus triangularis Say, 1828. Contrib. Maclur. Lyc. Phila. 1: 78-79.

Genus PERILAMPUS Latreille

- Perilampus* Latreille, 1809. Gen. Crust. Ins., v. 4, p. 30.
Type: (*Diplolepis violacea* Fabricius) = [*Cynips*] *ruficornis* (Fabricius). Desig. by Latreille, 1810.
- Cinipsillum* Lamarck, 1817. Hist. Nat. Anim. sans Vert., v. 4, p. 156.
Type: (*Chalcis violacea* Panzer) = [*Cynips*] *ruficornis* (Fabricius).
Desig. by Gahan and Fagan, 1923.
- Cynipsillum* Agassiz, 1845. Nomencl. Zool., Index Univ. p. 325. Emend.
Revision: Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 369-412.
- alexinus* Walker. Ga.
Perilampus Alexinus Walker, 1846. List Hym. Ins. Brit. Mus., v. 1, p. 89.
Taxonomy: Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 126.
- anomocerus* Crawford. N. C., Colo., Idaho.
Perilampus anomocerus Crawford, 1914. Ent. Soc. Wash. Proc. 16: 72. ♂ ♀.
- canadensis canadensis* Crawford. Canada, Pa., Md., Va., La., Minn. Hosts:
Zenillia sp.; *Macremphytus* sp.
Perilampus canadensis Crawford, 1914. Ent. Soc. Wash. Proc. 16: 74. ♂ ♀.
- canadensis nitidus* Smulyan. Pa., La.
Perilampus canadensis var. *nitidus* Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 393. ♂ ♀.
- capitatus* Smulyan. N. Y. to Va., Ky. and Mich. Hosts: *Carpocapsa pomonella* (L.); *Ascogaster quadridentata* Wesm.; *Cremastus* sp.
Perilampus capitatus Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 397. ♂ ♀.
Biology: Jaynes and Marucci, 1947. Jour. Econ. Ent. 40: 11-12.
- carinifrons* Crawford. Tex.
Perilampus carinifrons Crawford, 1914. Ent. Soc. Wash. Proc. 16: 71. ♂ ♀.
- carolinensis* Smulyan. Vt., N. Y., Conn., N. J., Va., N. C. Hosts: *Anisota senatoria* (A. and S.); *Datana integerrima* G. and R.
Perilampus carolinensis Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 376.
♂ ♀.
- chrysopae* Crawford. Ont., throughout U. S. Hosts: *Sympherobius angustus* (Banks); *Chrysopa californica* Coq.; *C. oculata* Say; *C. rufilabris* Burm.; *C. sp.*; ?*Carpocapsa pomonella* (L.); *Rhyacionia frustrana* (Comst.); probably *Oiacustes crassus crassus* (Prov.).
Perilampus chrysopae Crawford, 1914. Ent. Soc. Wash. Proc. 16: 73. ♂ ♀.
Perilampus chrysopae var. *laeviceps* Crawford, 1917. (1916). Insectoria Inscitiae Menstruus 4: 144. ♂ ♀.
Biology: Clancy, 1946. Calif. Univ. Pubs., Ent. 7: 440-448.
- crawfordi* Smulyan. N. Y., N. J., Pa., Md., Va.
Perilampus crawfordi Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 384. ♂ ♀.
- cyaneus* Brullé. Carolina. Hosts: *Diacrisia virginica* (F.); *Cingilia catenaria* (Drury); *Ancylis comptana* (Froel.); *Sarcophaga rapax* Wlkr.
Perilampus cyaneus Brullé, 1846. Hist. Nat. Ins. Hym., v. 4, p. 573.
- entellus* Walker. Ohio.
Perilampus Entellus Walker, 1843. Ann. Mag. Nat. Hist. (1) 12: 103. ♂ ♀.
- fulvicornis fulvicornis* Ashmead. Que. to Fla., west to Calif. and B. C. Hosts: *Tetralopha scortealis* (Led.); *Ancylis comptana* (Froel.); *Carpocapsa pomonella* (L.); *Ecdytophila insitiana* Zell.; *Epiblema strenuana* (Wlkr.); *Grapholium molesta* (Busck); *G. prunivora* (Walsh); *Rhyacionia frustrana* (Comst.); gall of *Gnorimoschema gallaesolidaginis* Riley; *G. operculella* (Zell.); *Keiferia glochinella* (Zell.); *Zenillia* sp.; *Apanteles epinotiae* Vier.; *A. sp.*; *Macrocentrus pallisteri* DeGant; *Meteorius trachynotus* Vier.; *M. sp.*; *Cremastus cooki* Weed.
Perilampus (!) *fulvicornis* Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 126. ♂.
- fulvicornis prothoracicus* Smulyan. N. H., Md., Va., La., Mich., Nebr., Wash. Host: *Carpocapsa pomonella* (L.).
Perilampus fulvicornis var. *prothoracicus* Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 403. ♀.

gahani Smulyan. Colo., N. Mex.

Perilampus gahani Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 401. ♀.

granulosus Crawford. N. J. to Ala., La., Tex., Kans. Host: *Gnorimoschema operculella* (Zell.).

Perilampus granulosus Crawford, 1914. Ent. Soc. Wash. Proc. 16: 73. ♂ ♀.

hyalinus Say. Sask., Man., Ont., Que.; throughout U. S. Hosts: ?*Chrysopa rufilabris* Burm.; *Lyctus striatus* Melsh.; *Euchaetias egle* (Drury); *Hyphantria cunea* (Drury); *Acronycta haustulifera* (A. and S.); *Harrisina americana* (Guér.); *Acrobasis caryae* Grote; *Dasypygia alternosquamella* Rag.; *Phlyctaenia extricalis* (Guen.); *Epiblema desertana* (Zell.); *E. scudderiana* (Clem.); ?*Rhyacionia* sp.; *Sarcophaga kellyi* Ald.; *Senotainia trilineata* (Wulp); *Achaetoneura euchaetiae* Web.; *A. frenchii* (Will.); *A. melalophae* Allen; *Compsilura concinnata* (Meig.); *Mericia aldrichi* (Tsn.); ?*M. ampelus* (Wlkr.); *Sturmia scutellata* (R. D.); *Neodiprion abbottii* (Leach); *N. lecontei* (Fitch) (probably secondary); *Diprion* sp.; *Apanteles hyphantriae* Riley; *A. melanoscclus* (Ratz.); *Apanteles* sp.; *Meteorus hyphantriae* Riley; *Microplitis croceipes* (Cress.); *Campoplex* sp.; *C. validus* (Cress.); *Hyposoter fugitivus* (Say); *H. fugitivus pacificus* Cush.; *H. pilosulus* (Prov.); *Phobocampe pallipes* (Prov.); *Dibrachys cavus* (Wlkr.).

Perilampus hyalinus Say, 1828. Contrib. Maclur. Lyc. Phila. 1: 79.

Perilampus aciculatus Provancher, 1887. Addit. Corr. Faune Ent. Canad. Hym., p. 199. ♀. N. syn.

Biology: Smith, 1912. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 19: 34-63.—Smith, 1917. Psyche 24: 64-68.

muesebecki Smulyan. N. H., N. Y., Pa., D. C., Fla., Kans., Nebr., Colo.

Perilampus muesebecki Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 407. ♂ ♀.

ocellatus Smulyan. Ga., Mo.

Perilampus ocellatus Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 390. ♂ ♀.

platygaster Say. Ont., Que.; N. H. to N. C.; Ind., Ill., La., Tex., Kans., Colo.

Hosts: *Harrisina americana* (Guér.); *Epiblema scudderiana* (Clem.); *Melittia* sp.; *Meteorus dimidiatus* (Cress.).

Perilampus platygaster (!) Say, 1836. Boston Jour. Nat. Hist. 1: 274.

Perilampus platygaster Riley, 1870. Mo. State Bd. Agr. Ann. Rpt. 5: 87. Emend. Biology: Strauss, 1916. U. S. Dept. Agr. Bul. 419: 10.

regalis Smulyan. N. C., Mo.

Perilampus regalis Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 378. ♀.

robertsoni Crawford. Canada, Ill., Nebr., Colo.

Perilampus robertsoni Crawford, 1914. Ent. Soc. Wash. Proc. 16: 71. ♂ ♀.

rohweri Smulyan. Canada, N. J.

Perilampus rohweri Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 396. ♂ ♀.

ruficornis (Fabricius). Europe; ?N. Y., ?N. J. Host: Larvaevorid on *Crambus vulgivagellus* Clem.

Cynips ruficornis Fabricius, 1793. Ent. System., v. 2, p. 103.

Diplolepis violacea Fabricius, 1804. Systema Piezatorum, p. 149.

Taxonomy: Lintner, 1883. Injurious Insects N. Y. Ann. Rpt. 1: 146-147.

similis Crawford. U. S. west of Mississippi R.; Alta. Hosts: *Acrobasis* sp.; ?*Homoosoma electellum* (Hulst); *Loxostege sticticalis* (L.); *Eulophus* sp.

Perilampus similis Crawford, 1914. Ent. Soc. Wash. Proc. 16: 73. ♀.

stygius Provancher. Que.; Maine to Va. and Ohio; La., Kans. Hosts: *Epiblema strenuana* (Wlkr.); *Macrocentrus* sp.

Perilampus stygius Provancher, 1888. Addit. Corr. Faune Ent. Canada Hym., p. 406. ♀.

subcarinatus Crawford. N. Y., Ala., Tex., Nebr., Colo., Idaho, Calif.

Perilampus subcarinatus Crawford, 1914. Ent. Soc. Wash. Proc. 16: 70. ♀.

Perilampus bakeri Crawford, 1914. Ent. Soc. Wash. Proc. 16: 72. ♂ ♀.

tassoni Girault. Australia, ?Conn.

Perilampus tassoni Girault, 1922. Insecutor Inscitiae Menstruus 10: 39. ♀. Taxonomy: Britton, 1938. Conn. State Geol. and Nat. Hist. Survey Bul. 60: 139.

- tristis* Mayr. - Ont. Hosts: *Rhyacionia buoliana* (Schiff.); *Ascogaster quadridentata* Wesm.
Perilampus tristis Mayr, 1905. Zool.-Bot. Gesell. Wien. Verh. 55: 564, 566.
 ♂ ♀.
 Biology: Bergold and Ripper, 1937. Ztschr. f. Parasitenk. 9: 394-417.
 Morphology: Parker, 1924. Soc. Ent. France Ann. 93: 265, 275.

Family AGAONTIDAE

The members of this family live phytophagously in the flowers and fruits of figs.

Revision: Grandi, 1935. R. Ist. Super. Agr., Lab. Ent. Bol. 7: 214-240 (world cat.).

Genus BLASTOPHAGUS Gravenhorst

Blastophagus Gravenhorst, 1827 (1826). Übers. Arb. Schles. Gesell. f. Vaterland. Kultur, p. 23.

Type: (*Blastophagus grossorum* Gravenhorst)=*B. psenes* (Linnaeus). Monob.

Blastophaga Gravenhorst, 1829. Schles. Gesell. f. Vaterland. Kultur Beitr. Ent., p. 27. ?Emend.

Kradibia Saunders, 1883. Ent. Soc. London, Trans. pp. 20, 23.
 Type: *Kradibia cowani* Saunders. Monob.

psenes (Linnaeus). Ariz., Calif. Host: Fruit of caprifigs.

Cynips Psenes Linnaeus, 1758. Syst. Nat., ed. 10, p. 554. *Nom. nud.*

Cynips Psenes Linnaeus, 1767. Syst. Nat., ed. 12, tom. 1, pars 2, p. 919.

Blastophaga grossorum Gravenhorst, 1829. Beitr. Ent., besonders in Bezug auf die Schles. Fauna, v. 1, pp. 27-29.

Biology: Grandi, 1929. R. Inst. Super. Agr., Lab. Ent. Bol. 2: 1-145.—Quayle, 1938. Insects of Citrus and Other Subtropical Fruit, pp. 408-416.

Morphology: Grandi, 1929. R. Ist. Super. Agr., Lab. Ent. Bol. 2: 1-145.

Genus SECUNDEISENIA Schulz

Eisenia Ashmead, 1904. Carnegie Mus., Mem. 1: 233. Preocc.

Type: *Eisenia mexicana* Ashmead. Monob.

Eiseniella Ashmead, 1906. Ent. Soc. Wash. Proc. 8: 31. N. name. Preocc.

Secundeisenia Schulz, 1906. Spolia Hym., p. 146. N. name.

Allopale Strand, 1911. Arch. f. Naturgesch. 77: 210. N. name.

mexicana (Ashmead). Fla. Hosts: *Ficus aurea* wild sp. of *Ficus*.

Eisenia mexicana Ashmead, 1904. Carnegie Mus. Mem. 1: 233. ♀.

Taxonomy: Gahan and Peck, 1946. Jour. Wash. Acad. Sci. 36: 315.

Family TORYMIDAE

Subfamily IDARNINAE

Genus COLYOSTICHUS Mayr

Colyostichus Mayr. 1885. Zool.-Bot. Gesell. Wien Verh. 35: 157-158, 237.

Type: *Colyostichus longicauda* Mayr. Desig. by Ashmead, 1904.

brevicauda Mayr. Fla. Host: *Ficus altissimus*.

Colyostichus brevicaudis Mayr, 1885. Zool.-Bot. Gesell. Wien, Verh. 35: 239.

♀.

Genus SYCOPHILA Walker

Sycophila Walker, 1871. Notes on Chalcid, v. 4, p. 63.

Type: *Sycophila decatomoides* Walker. Desig. by Ashmead, 1904.

Isanisa Walker, 1875. Entomologist 8: 15.

Type: *Sycophila decatomoides* Walker. Monob.

Pseudisa Walker, 1875. Entomologist 8: 15.

Type: *Pseudisa smicroides* Walker. Monob.

- bicolor** Ashmead. Fla. Host: *Ficus pedunculata*.
Sycophila bicolor Ashmead, 1900. Ent. Soc. London Trans., pp. 252, 335.
 ♂ ♀.
- incerta** Ashmead. Fla. Host: *Ficus pedunculata*.
Sycophila incerta Ashmead, 1900. Ent. Soc. London Trans., pp. 253, 335. ♀.

Genus IDARNES Walker

Idarnes Walker, 1843. Ann. Mag. Nat. Hist. 12: 47.

Type: *Idarnes carme* Walker. Monob.

Idarnomorpha Girault, 1915. Queensland Mus. Mem. 4: 281.

Type: *Idarnomorpha subaenea* Girault. Monob.

carme Walker. Fla. Host: *Ficus aurea*.

Idarnes Carme Walker, 1843. Ann. Mag. Nat. Hist. 12: 47. ♀.

Subfamily TORYMINAE

Revisions: Crawford, 1914. Ent. Soc. Wash. Proc. 16: 122-126.—Hoffmeyer, 1930.
 Ent. Meddel. 17: 232-285.

Phylogeny: Breland, 1938. N. Y. Ent. Soc. Jour. 46: 355-399.

Genus ALLOTORYMUS Huber

Allotorymus Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 104.

Type: *Syntomaspis splendens* Provancher. Monob.

splendens (Provancher). Ont., Colo., B. C.

Syntomaspis splendens Provancher, 1887. Addit. Corr. Faune Ent. Canada

Hym., 196. ♂ ♀.

Taxonomy: Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 105. ♂ ♀.

Genus TORYMUS Dalman

Callimome Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 146, 148. Sup-
 pressed by Internatl. Comn. Zool. Nomencl. Op. 155, 1944.

Misocampe Latreille, 1818. Nouv. Dict. Hist. Nat., ed. 2, pp. 21, 213. Sup-
 pressed by Internatl. Comn. Zool. Nomencl. Op. 155, 1944.

Torymus Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 135, 178.

Type: *Ichneumon bedeguaris* Linnaeus. Desig. by Internatl.
 Comn. Zool. Nomencl. Op. 155, 1944.

Misocampus Stephens, 1829. Cat. Brit. Ins. Mandibulata, p. 395. Emend.

Syntomaspis Foerster, 1856. Hym. Stud., v. 2, pp. 43, 44.

Type: (*Torymus eurynotus* Foerster)=*Torymus cyaneus* Bo-
 heman. Desig. by Gahan and Fagan, 1923.

Hemitorymus Ashmead, 1904. Carnegie Mus. Mem. 1: 243, 400.

Type: *Hemitorymus thoracicus* Ashmead. Monob.

Revisions: Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 1-114.—Hobbs, 1948.
 Pan-Pacific Ent. 24: 95-96.

The species of this genus are usually associated with plant galls.

adventus (Osten Sacken). Conn., N. J., N. Y., D. C., N. C., Fla., La. Hosts:
Asphondylia rudbeckiae conspicua O. S.; itonidid gall in blossom of *Ver-
 nonia noveboracensis*; *Procecidochares atra* (Loew); ?*Andricus petiolicola*
 (O. S.); ?*Callirhytis ventricosa* (O. S.); ?*Diastrophus nebulosus* (O. S.).

Callimome advena Osten-Sacken, 1870. Amer. Ent. Soc. Trans. 3: 59. ♂ ♀.

aeneoscapus (Huber), n. comb. Idaho.

Callimome aeneoscapum Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 35.
 ♀.

aeneus (Ashmead). Ill., Fla. Hosts: *Belonocnema treatae* Mayr; *Disholcaspis
 omnivora* (Ashm.); *D. virens* (Ashm.); *Dryocosmus imbricariae* (Ashm.).

Callimome aenea Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxxiii.

♂ ♀.

Callimome dryorhizoxeni Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc.
 p. xiii. ♀.

Torymus omnivora Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 188. ♂ ♀.

- aereus** (Huber), n. comb. D. C., Va., Fla., Mo., Tex., Ariz. Hosts: Galls of *Disholcaspis fasciata* Bass. and galls on *Quercus laurifolia*, *Q. macrocarpa*, and *Q. schneckii*.
Callimome aereum Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 71. ♂ ♀.
- aeus** (Walker). N. Y., N. J.
Callimome Aea Walker, 1843. Ann. Mag. Nat. Hist. (1) 12: 104. ♀.
- alamedensis** (Huber), n. comb. Conn., Calif., Oreg. Hosts: Galls on currant and *Rubus parviflorus*.
Callimome alamedensis Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 28. ♂ ♀.
- alaskensis** (Huber), n. comb. Alaska.
Callimome alaskensis Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 31. ♀.
- albitarsis** (Huber), n. comb. Ill., Kans. Hosts: *Desmoris fulvus* (Lec.); *Asphondylia globulus* O. S.; gall on *Oligoneuron rigidum*.
Callimome albitarse Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 80. ♀.
 Biology: Breland, 1939. Ent. Soc. Amer. Ann. 32: 719, 724.
- amelanchieris** (Cushman), n. comb. Pa., W. Va., Minn. Hosts: *Megastigmus amelanchieris* Cush.; gall on *Amelanchier canadensis*.
Syntomaspis amelanchieris Cushman, 1918 (1917). Ent. Soc. Wash. Proc. 19: 82. ♂ ♀.
 Biology: Milliron, 1949. Amer. Midland Nat. 41: 393-395.
- anthomyiae** Ashmead. Ga., Fla. Hosts: *Chalcodermus inaequicollis* Horn; ?muscid leaf miner (probably *Pegomya* sp.) of cultivated plant.
Torymus anthomyiae Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 189. ♀.
- asteridis** (Huber). N. H., Conn. Host: Itonidid gall on aster.
Callimome asteridis Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 43. ♂ ♀.
- atriplicis** (Huber), n. comb. Calif. Host: Itonidid on *Atriplex canescens*.
Callimome atriplicis Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 44. ♀.
- aucupariae** (Rodzianko). Minn. Host: Probably *Megastigmus aucupariae* Ratz.
Syntomaspis aucupariae Rodzianko, 1908. Soc. Imp. Nat. Moscou, Bul. (n. s.) 21: 602. ♂ ♀.
- axillaris** Ashmead. W. V., Va.
Torymus axillaris Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 333. ♀.
- baccharidis** (Huber), n. comb. Conn., Calif. Host: Itonidid on *Baccharis*.
Callimome baccharidis Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 46. ♂ ♀.
- bedeguaris** (Linnaeus). ?Colo. Host: *Diptolepis rosae* (L.).
Ichneumon Bedeguaris Linnaeus, 1758. Syst. Nat., ed. 10, p. 567. ♀.
 Taxonomy: Hoffmeyer, 1930. Ent. Meddel. 17: 238, 249.
- bicoloratus** (Huber), n. comb. N. Mex., Ariz. Hosts: *Amphibolips trizonata* Ashm.; *Diptolepis bicolor* (Harr.).
Callimome bicoloratum Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 73. ♂ ♀.
- brevis** Breland. Tex. Host: *Trishormomyia helianthi* (Brodie).
 ?*Torymus helianthi* Brodie, 1894. Biol. Rev. Ontario 1: 45. ♀.
Torymus brevis Breland, 1948. Ent. Soc. Wash. Proc. 50: 57. ♂ ♀.
 Biology: Breland, 1948. Ent. News 59: 230.
- brodiei** (Ashmead). Ont., Ill. Hosts: *Rhabdophaga cornu* Walsh; *Acraspis pezomachoides* (O. S.).
Syntomaspis Brodiei Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 187. ♂ ♀.
- californicus californicus** (Ashmead). Conn., Fla., Calif., Oreg. Hosts: *Andricus californicus* Ashm.; *A. lasius* (Ashm.); *Disholcaspis corallina* (Bass.); *D. plumbella* Kinsey; *D. truckeensis* Ashm.; *D. simulata* Kinsey; *D. sp.* on *Quercus douglasi*; *Besbicus mirabilis* Kinsey; *Callirhytis agrifoliae* (Ashm.); *C. pomiformis* (Ashm.); *C. sp.* on *Quercus chrysolepis*; *Heteroecus pacificus* (Ashm.); pimply gall on *Quercus douglasi*; ?strawberry gall on *Quercus dumosa*.
Syntomaspis californica Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 127. ♀.

- californicus subdolos** (Huber), n. comb. Conn., Calif. Hosts: *Disholcaspis chrysolepidis* (Beut.); *D. corallina* (Bass.); *D. truckeensis* Ashm.
Callimome californicum var. *subdolum* Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 85. ♂ ♀.
- capillaceus** (Huber), n. comb. Conn., Ariz. Host: Itonidid gall on *Artemisia* stem.
Callimome capillaceum Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 74. ♀.
- capite** (Huber), n. comb. D. C.
Callimome capite Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 32. ♂ ♀.
- castanopsidis** (Huber), n. comb. Conn., Calif. Hosts: ?*Dryocosmus castanopsidis* (Beut.); galls on *Quercus dumosa* and *Q. lobata*.
Callimome castanopsidis Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 64. ♂ ♀.
- cecidomyiae** (Walker). Ont., Kans. Host: *Itonida spongivora* (Wlkr.).
Callimome Cecidomyiae Walker, 1844. Ann. Mag. Nat. Hist. (1) 14: 15. ♀.
- chrysochlorus** (Osten Sacken). New England, N. J., Ohio, Ill., Colo., N. Mex., Ariz., Calif., Oreg., Sask. Hosts: *Diplolepis arefacta* (Gill.); *D. bassetti* (Beut.); *D. californica* (Beut.); *D. dichlocera* (Harr.); *D. fusiformans* (Ashm.); *D. ignota* (O. S.); *D. multispinosa* (Gill.); *D. radicum* (O. S.); *D. variabilis* (Bass.); cynipid woody rose gall.
Callimome chrysochlora Osten Sacken, 1870. Amer. Ent. Soc. Trans. 3: 63. ♂ ♀.
Callimome solitaria Osten Sacken, 1870. Amer. Ent. Soc. Trans. 3: 64. ♀.
- cinerosus** (Huber), n. comb. Tex. Hosts: *Amphibolips* sp. on *Quercus virginiana*; *Disholcaspis cinerosa* (Bass.).
Callimome cinerosum Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 84. ♀.
- citripes** (Huber), n. comb. Colo. Host: *Euaresita tricolor* Doane.
Callimome citripes Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 48. ♂ ♀.
- coccineus** (Huber), n. comb. Maine, Mass., Conn., Va. Hosts: *Amphibolips confluentus* (Harr.); *A. spongifica* (O. S.).
Callimome coccineum Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 68. ♀.
- coeruleus** (Ashmead). N. J., Fla., Colo. Hosts: *Amphibolips cinerea* Ashm. galls on *Rubus* sp.
Callimome coerulea Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxxiii. ♂ ♀.
- coloradensis** (Huber), n. comb. Conn., Kans., Colo. Hosts: Itonidid on *Artemisia*; *Dasyneura* sp. on *Helianthus*.
Callimome coloradensis Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 49. ♂ ♀.
- cruentatus** (Huber), n. comb. Conn. Host: Cynipid gall on leaf of *Quercus virginiana*.
Callimome cruentatum Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 50. ♂ ♀.
- dasyneurae** (Huber), n. comb. Ohio. Host: *Dasyneura almea* Felt.
Callimome dasyneurae Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 56. ♂ ♀.
- druparum** Boheman. Ont., Que., N. S., Maine, Vt., N. Y., Conn., Pa., Va., Ohio, Mich., B. C. Hosts: Seeds of apple, *Crataegus*, *Malus silvestris*, *M.* sp., *Pyrus* spp., *Sorbus intermedia*, and ?*S. latifolia*.
Torymus druparum Boheman, 1834 (1833). Svenska Vetensk. Acad. Handl. 54: 361. ♀.
Biology: Crosby, 1909. N. Y. (Cornell) Agr. Expt. Sta. Bul. 265: 369-375.—Cushman, 1916. Jour. Agr. Res. 7: 487.—Knight, 1922. N. Y. (Cornell) Agr. Expt. Sta. Bul. 410: 490.—Lathrop, 1936. Maine Agr. Expt. Sta. Bul. 384: 392.—Hammer, 1939. Jour. Econ. Ent. 32: 259-264.—Lathrop and Dirks, 1944. Jour. Econ. Ent. 37: 199-204.
- dryophanta** (Ashmead), n. comb. Fla. Host: *Bassettia catesbaei* (Ashm.).
Syntomaspis dryophantae Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 187. ♀.
- dubiosus** (Huber), n. comb. D. C.
Callimome dubiosum Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 24. ♀.

- duplicatus** (Huber), n. comb. Que., Conn., Va., Ohio. Host: *Diastrophus cuculaeformis* O. S.
Callimome duplicatum Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 27.
 ♂ ♀.
- durus** (Osten Sacken). Conn., D. C. Host: *Diplosis caryae* O. S.
Callimome dura Osten Sacken, 1870. Amer. Ent. Soc. Trans. 3: 59. ♂.
- ebrius** (Osten Sacken). Conn., N. J., D. C., Va., Ohio, Tex. Host: *Lasioptera vitis* O. S.
Callimome ebria Osten Sacken, 1870. Amer. Ent. Soc. Trans. 3: 58. ♂ ♀.
- elegantissimus** (Ashmead), n. comb. Ont., Fla. Hosts: *Disholcaspis virens* (Ashm.); ?*Xanthoteras forticorne* (O. S.).
Callimome elegantissima Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxxiv. ♀.
- fagopyrum** (Provancher). Ont., Que.; Maine to Fla.; Mich., Kans., Colo. Hosts: *Dasyneura serrulatae* O. S.; *Rhabdophaga salicifolia* Felt; *Diastrophus cuculaeformis* O. S.; *D. nebulosus* (O. S.); *D. turgidus* Bass.; *Disholcaspis virens* (Ashm.).
Callimome brevicauda Osten Sacken, 1870. Amer. Ent. Soc. Trans. 3: 62.
 ♂ ♀. Preocc.
Callimome (!) *fagopirum* Provancher, 1881 (Sept.). Nat. Canad. 12: 291.
 ♂ ♀.
Callimome Sackenii Ashmead, 1881 (Oct.). Amer. Ent. Soc. Trans. 9: Proc. p. xxxii. N. name.
Callimome virentis Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxxiv.
 ♀.
Callimome brevissimicauda Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxxiii. ♀.
Callimome fagopyrum Provancher, 1883. Petite Faune Ent. Canada 2, index only. Emend.
Torymus ostensackenii Dalla Torre, 1898. Cat. Hym. v. 5, p. 311. N. name.
- ferrugineipes** (Huber), n. comb. Conn., Fla.
Callimome ferrugineipes Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 33.
 ♂ ♀.
- flavicoxa** (Osten Sacken). Ont., Que., Maine, N. H., Mass., Conn., N. J., Va. Hosts: *Belonocnema treatae* Mayr; *Diastrophus nebulosus* (O. S.); *Diplolepis radicum* (O. S.); *Liposthenes gelechomae* (L.).
Callimome flavicoxa Osten Sacken, 1870. Amer. Ent. Soc. Trans. 3: 61. ♀.
- flaviventris** Ashmead. Conn., Kans.
Torymus flaviventris Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. IV, ♀.
- floridensis** Peck, n. name. Fla. Hosts: *Amphibolips fuliginosa* Ashm.; gall on *Quercus phellos* or *Q. laurifolia*.
Callimome robustum Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 72. ♀.
 Preoccupied by *T. robustus* Ratzeburg, 1852.
- fullawayi** (Huber), n. comb. Calif., Oreg. Hosts: *Andricus californicus* Ashm.; *Callirhytis agrifoliae* (Ashm.); *Dryocosmus bicornis* (McC. and Egb.); gall on *Quercus douglasi*.
Syntomaspis caerulea Fullaway, 1912. N. Y. Ent. Soc. Jour. 20: 275. ♀.
 Preocc.
Callimome fullawayi Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 19. N. name.
- Taxonomy: Breland, 1939. Brooklyn Ent. Soc. Bul. 34: 87.
- fulvus** (Huber), n. comb. Nebr.
Callimome fulvum Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 26. ♀.
- gahani** (Huber), n. comb. Oreg. Host: Cynipid on *Quercus garryana*.
Callimome gahani Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 69. ♂ ♀.
- giganticus** (Huber). Calif., Oreg. Hosts: ?*Besbicus mirabilis* (Kinsey).
Callimome giganticum Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 65.
 ♂ ♀.

- hainesi** Ashmead. Tex., Ariz., Calif. Host: *Asphondylia websteri* Felt.
Torymus hainesi Ashmead, 1893. Ent. News 4: 278. ♀.
Callimome asphondyliae Gahan, 1919. Preocc.
- helianthi** Brodie. Ont. Host: *Diplosis helianthi* Brodie.
Torymus helianthi Brodie, 1894. Biol. Rev. Ontario 1: 45. ♀.
 ?*Torymus brevis* Breland, 1948. Ent. Soc. Wash. Proc. 50: 57. ♂ ♀.
 Taxonomy: Breland, 1948. Ent. Soc. Wash. Proc. 50: 58.
- hircinus** Ashmead. W. Va., Va. Host: Twig gall on willow.
Torymus hircinus Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 333. ♂ ♀.
- hirsutus** (Huber), n. comb. Ariz. Host: Twig gall on *Quercus* sp.
Callimome hirsutum Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 74. ♂ ♀.
- holcaspoideus** (Ashmead), n. comb. Brazil; ?Conn.
Syntomaspis holcaspoidea Ashmead, 1904. Carnegie Mus. Mem. 1: 397.
 ♂ ♀.
- huberi** (Hoffmeyer), n. comb. Tex. Host: ?Itonidid gall on *Celtis* sp.
Callimome tarsale Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 76. ♂ ♀.
 Preocc.
Callimome huberi Hoffmeyer, 1929. Ent. Meddel. 16: 333. N. name.
- kinseyi** (Huber), n. comb. Utah, Calif. Hosts: *Trypeta* sp. on *Chrysothamnus viscidiflorus*; dipteron on *Artemisia* sp.
Callimome kinseyi Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 44. ♂ ♀.
- koebelei** (Huber), n. comb. Calif. Host: Itonidid gall on *Baccharis pilularis*.
Callimome koebelei Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 52. ♂ ♀.
- lissus** (Walker), n. comb. Fla.
Callimome lissus Walker, 1843. Soc. Ent. France Ann. (2) 1: 150. ♂.
- lividus** (Ashmead). Fla., La.
Callimome lividus Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xiii. ♀.
- longicauda** (Provancher). Ont., Que.
Callimome longicauda Provancher, 1883. Nat. Canad. 14: 34. ♀.
- longior** Brodie. Ont. Host: *Diplosis helianthi* Brodie.
Torymus longior Brodie, 1894. Biol. Rev. Ontario 1: 45. ♀.
- longistigma** (Huber), n. comb. Calif. Host: Woody itonidid gall on willow.
Callimome longistigmum Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 47.
 ♂ ♀.
- magnificus** (Osten Sacken). N. H., N. Y., Conn., N. J., D. C., Fla., Kans., Colo.
 Host: *Diplolepis radicum* (O. S.).
Callimome magnifica Osten Sacken, 1870. Amer. Ent. Soc. Trans. 3: 62.
 ♂ ♀.
- melanocerae** (Ashmead), n. comb. D. C., Va., Ga., Fla., Kans. Hosts: *Amphibolips citriformis* Ashm.; *A. globulus* Beut.; *A. inanis* (O. S.); *A. melanocera* Ashm.; *A. spongifica* (O. S.); *Andricus flocci* (O. S.); *Disholcaspis quercus-globulus* (Fitch); *D. terrestris* Weld; *Xanthoteras politum* (Bass.).
Callimome melanocerae Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xiii. ♀.
Callimome citriformi (!) Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xiii. ♀.
Syntomaspis citriformis Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 187.
 Emend.
- mellipes** (Huber), n. comb. Mass., Conn. Host: Itonidid on *Populus* sp.
Callimome mellipes Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 23. ♂ ♀.
- mexicanus** Ashmead. Ariz. Host: Cynipid gall.
Torymus Mexicanus Ashmead, 1899. Ent. News 10: 195. ♂ ♀.
- minutissimus** (Huber), n. comb. Calif. Host: Twig gall on *Quercus* sp.
Callimome minutissimum Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 78.
 ♀.
- missouriensis** (Huber), n. comb. N. C., Ind., Mo. Hosts: Itonidid stem gall on *Rubus*; cynipid gall.

- Callimome missouriensis* Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 42.
♂ ♀.
multicolor (Huber), n. comb. Calif. Host: Gall on *Ephedra* sp.
Callimome multicolor Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 51. ♀.
neuroterus Ashmead. Fla. Host: *Neuroterus minutissimus* Ashm.
Torymus neuroterus Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 188. ♂.
obscurus (Breland), n. comb. Ill., Ind., Ky., Tenn., Ala., Miss., Tex., Mo. Host:
Lasioplera murtfeldtiana Felt.
Callimome obscura Breland, 1939. Ent. Soc. Amer. Ann. 32: 719, 721. ♂ ♀.
Biology: Satterthwait, 1948. Jour. Econ. Ent. 41: 729-730.
- occidentalis** (Huber), n. comb. Calif. Host: Dipterous galls on *Juniperus occi-*
dentalis.
Callimome occidentale Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 79.
♂ ♀.
ochreatus Say. Ind. Host: In *Liatrix* receptacle.
Torymus ochreatus Say, 1836 (1835). Boston Jour. Nat. Hist. 1: 275. ♂ ♀.
- osborni** (Huber), n. comb. Wyo. Host: Cynipid on *Rosa* sp.
Callimome osborni Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 93. ♂ ♀.
- oviperditor** (Gahan), n. comb. Kans. Hosts: *Melampsalla calliope* (Wlkr.);
Tibicen aurifera Say.
Syntomaspis oviperditor Gahan, 1927. Ent. Soc. Wash. Proc. 29: 99-100.
♂ ♀.
- pachypsyllae** (Ashmead), n. comb. Presumably Kans. Host: *Pachypsylla venusta*
O. S.
Monodontomerus pachypsyllae Ashmead, 1888. Kans. Agr. Expt. Sta. Bul.
3: App. p. III. ♂ ♀.
- pavidus** Say. Ind.
Torymus pavidus Say, 1836. Boston Jour. Nat. Hist. 1: 275. ♂.
- perplexus** (Huber). Oreg. Host: *Besbicus mirabilis* (Kinsey).
Callimome perplexus Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 49. ♀.
- persimilis** Ashmead. W. Va., Va. Host: Itonidid on willow.
Torymus persimilis Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 334. ♀.
- pilularidis** (Huber), n. comb. Conn., Calif. Host: *Prosoma* sp. on *Baccharis pilu-*
laris.
Callimome pilularidis Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 45. ♂ ♀.
- prunicola** (Huber), n. comb. N. Mex.
Callimome prunicola Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 91. ♀.
- racemariae** (Ashmead), n. comb. N. Y. to Fla., Ala., Tex., Colo., Ill. Hosts:
Amphibolips confluentus (Harr.); *A. fuliginosa* Ashm.; *A. gainesi* Bass.;
A. inanis (O. S.); *A. prunus* Cress.; *A. racemaria* Ashm.; *Disholcaspis*
cinerosa (Bass.); *D. quercus-globulus* (Fitch); *D. terrestris* Weld; *Dryocosmus*
imbricariae (Ashm.).
Callimome racemariae Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p.
xxxiii. ♂ ♀.
Syntomaspis racemariae Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 187.
Emend.
Biology: Balduf, 1926. Canad. Ent. 58: 137-143, 163.
Morphology: Snodgrass, 1910. U. S. Natl. Mus. Proc. 39: 65.
- rhoditidis** (Huber), n. comb. Mass. Host: *Diplolepis* sp. on *Rosa*.
Callimome rhoditidis Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 34. ♂ ♀.
- rohweri** (Huber), n. comb. Conn., Calif. Hosts: ? *Harmolita* in *Lolium multi-*
florum and *L. temulentum*.
Callimome rohweri Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 58. ♂ ♀.
- rosae** (Huber), n. comb. Colo. *Diplolepis* sp. on *Rosa fendleri*.
Callimome rosae Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 35. ♀.
- rubenidis** (Huber), n. comb. Colo. Host: *Disholcaspis rubens* (Gill.).
Callimome rubenidis Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 78. ♂ ♀.
- rudbeckiae** Ashmead. Ont., Colo. Hosts: Itonidid on *Desmodium grandiflorum*

- (Walt.); gall on *Rudbeckia* sp.
Torymus rudbeckiae Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 26, 45. ♂ ♀.
- sativae* (Huber), n. comb. Ariz. Hosts: *Asphondylia websteri* Felt; *Rhabdophaga siliqua* Walsh.
Syntomaspis medicaginis Gahan, 1919. Ent. Soc. Amer. Ann. 12: 162. Preocc.
- Callimome sativae* Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 77. ♂ ♀. N. name.
- scalaris* (Huber), n. comb. Ariz., Calif. Host: *Pachypsylla celtidisgemma* Riley.
Callimome scalaris Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 21. ♂ ♀.
- solidaginis* (Huber), n. comb. N. Y., Conn., N. C. Host: Itonidid.
Callimome solidaginis Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 92. ♂ ♀.
- splendidulus* Dalla Torre. Ont., Colo. Hosts: *Rhabdophaga cornu* Walsh; *R. siliqua* Walsh.
Callimome splendidus Walker, 1844. Ann. Mag. Nat. Hist. (1) 14: 14. ♀. Preocc.
- Torymus splendidulus* Dalla Torre, 1898. Cat. Hym., v. 5, p. 313. N. name.
- strobiloides* (Huber), n. comb. Ohio. Hosts: *Rhabdophaga strobiloides* (Walsh); *Salix* gall.
Callimome strobiloides Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 40. ♀.
- sulcatus* (Huber), n. comb. Calif. Host: Cynipid gall on *Quercus pumila*.
Callimome sulcatum Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 22. ♀.
- superbus* (Provancher), n. comb. Que.
Cleonymus superbus Provancher, 1888. Addit. Corr. Faune Ent. Canada Hym., p. 407. ♀.
- texanus* (Hoffmeyer), n. comb. Tex., Ariz. Host: *Atrusca aggregata* (Weld); *A. bella* (Bass.); *A. simulatrix* Kinsey; *A. vanescens* Kinsey; *Disholcaspis colorado* (Gill.).
Callimome texanum Hoffmeyer, 1930. Ent. Meddel. 17: 213. ♂ ♀.
 Taxonomy: Breland, 1939. Brooklyn Ent. Soc. Bul. 34: 87.
- thalassinus* (Crosby), n. comb. N. Y., Conn., Ohio, Minn. Host: *Harmolita* sp. "from timothy and orchard grass."
Syntomaspis thalassinus Crosby, 1908. Canad. Ent. 40: 43. ♂ ♀.
- theon* (Walker). Fla.
Callimome theon Walker, 1843. Soc. Ent. France Ann. (2) 1: 149. ♀.
- thompsoni* Fyles. Que. Host: Plum fruit.
Torymus Thompsoni Fyles, 1904 (1903). Ent. Soc. Ontario Ann. Rpt. 34: 10.
Torymus thompsoni Fyles, 1916 (1915). Ent. Soc. Ontario Ann. Rpt. 46: 55. Emend.
- tricolor* (Huber), n. comb. Tex. Host: *Asphondylia* sp.
Callimome tricolor Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 96. ♂ ♀.
- tubularis* (Huber), n. comb. Colo.
Callimome tubularis Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 39. ♂ ♀.
- tubicola* (Osten Sacken). Que., Mass. to N. C. and Ohio; Mo., La., Tex., Calif. Hosts: *Amphibolips spongifica* (O. S.); *Andricus californicus* Ashm.; *A. flocci* (O. S.); *A. petiolicola* (O. S.); *Atrusca simulatrix* (Kinsey); *Callirhytis operator* (O. S.); *C. seminator* (Harr.); *C. tubicola* (O. S.); *Disholcaspis colorado* (Gill.) var.; *D. corallina* (Bass.); *D. plumbella* Kinsey; *D. quercus-globulus* (Fitch); *D. simulata* Kinsey; *D. simulata vancouverensis* Kinsey.
Callimome tubicola Osten Sacken, 1870. Amer. Ent. Soc. Trans. 3: 60. ♂ ♀.
- umbilicatus* (Gahan), n. comb. Conn., Ariz., Fla. Hosts: Itonidid galls on *Atriplex canescens* and on *Suaeda* sp.
Syntomaspis umbilicata Gahan, 1919. Ent. Soc. Amer. Ann. 12: 163. ♂ ♀.
- warreni* (Cockerell), n. comb. N. Y., N. C., Tex., Colo., Ariz. Hosts: *Antron dumosae* (Kinsey); *Disholcaspis cinerosa* (Bass.); *D. colorado* (Gill.); *D. mamma* (Cress.); *D. quercus-globulus* (Fitch); *D. rubens* (Gill.); *D. spongiosa* (Karsch).

Syntomaspis warreni Cockerell, 1911. Ent. News 22: 82. ♀.

xanthopus (Schulz), n. comb. Kans. Host: Itonidid on cedar.

Megastigmus? flavipes Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. III. ♂. Preocc.

Megalostigmus xanthopus Schulz, 1906. Spolia Hym., p. 147. N. name.

Torymus abortus Crosby, 1914. Ent. News 25: 27. ♂. N. name.

Genus DIOMORUS Walker

Diomorus Walker, 1834. Ent. Mag. 2: 159.

Type: (*Diomorus nobilis* Walker)=*Torymus armatus* Boheman. Monob.

Dihomerus. Schulz, 1906. Spolia Hym., p. 148. Emend.

biorhizae Ashmead. Ont. Host: *Xanthoteras forticorne* (O. S.).

Diomorus biorhizae Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 186. ♀.

viridis (Provancher), n. comb. Que.

Haltichella viridis Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 192. ♀.

zabriskiei Cresson, emend. N. Y., N. J., W. Va., Kans., Calif., B. C. Hosts:

Ectemnius lapidarius (Panz.); *E. stirpicola* (Pack.); *Ceratina dupla* Say.

Diomorus zabriskii (!) Cresson, 1878. Psyche 2: 189. ♀.

Genus PHYSOTHORAX Mayr

Physothorax Mayr, 1885. Zool.-Bot. Gesell. Wien, Verh. 35: 159, 196.

Type: *Physothorax disciger* Mayr. Desig. by Gahan and Fagan, 1923.

pallidus Ashmead. Fla. Host: *Ficus laevigata*.

Physothorax pallidus Ashmead, 1900. Ent. Soc. London Trans., p. 254. ♂ ♀.

russelli Crawford. Fla. Host: *Ficus aurea*.

Physothorax russelli Crawford, 1910 (1909). Ent. Soc. Wash. Proc. 11: 204. ♀.

Subfamily ERIMERINAE

Genus ERIMERUS Crawford

Erimerus Crawford, 1914. Ent. Soc. Wash. Proc. 16: 123.

Type: *Torymus wickhami* Ashmead. Monob.

wickhami (Ashmead). Utah. Host: Galls on *Hilaria*.

Torymus wickhami Ashmead, 1904. Ent. News. 15: 302. ♀.

Taxonomy: Crawford, 1914. Ent. Soc. Wash. Proc. 16: 123.

Genus PSEUDERIMERUS Gahan

Pseuderimerus Gahan, 1919. U. S. Natl. Mus. Proc. 55: 124.

Type: *Pseuderimerus mayetiolae* Gahan. Monob.

femoratus Gahan. Calif. Host: *Phytophaga destructor* (Say).

Pseuderimerus femoratus Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 32-33. ♀.

mayetiolae Gahan. Calif. Host: *Phytophaga destructor* (Say).

Pseuderimerus mayetiolae Gahan, 1919. U. S. Natl. Mus. Proc. 55: 125. ♂ ♀.

Biology: Packard, 1928. U. S. Dept. Agr. Tech. Bul. 81: 14.—Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 30-32.

Taxonomy: Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 10-13.

semiflavus Gahan. Calif. Host: *Phytophaga destructor* (Say).

Pseuderimerus semiflavus Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 33. ♀.

Subfamily MONODONTOMERINAE

Revision: Crawford, 1914. Ent. Soc. Wash. Proc. 16: 123-124.

Genus LIODONTOMERUS Gahan

Lochites Foerster, 1856. Hym. Stud., v. 2, pp. 43, 44, 120. Preocc.

Type: *Lochites papaveris* Foerster. Monob.

Liodontomerus Gahan, 1914. U. S. Natl. Mus. Proc. 48: 159. N. syn.

Type: *Liodontomerus perplexus* Gahan. Monob.

Lochitisca Ghesquière, 1946. Rev. Zool. Bot. Africaines 34: 368. N. name.
N. syn.

insuetus Gahan. Kans., N. Mex., Ariz. Host: *Bruchophagus gibbus* (Boh.).

Liodontomerus insuetus Gahan, 1917. U. S. Natl. Mus. Proc. 53: 208. ♀.

longfellowi (Girault), n. comb. Minn., S. Dak., Idaho, Ore. Host: *Bruchophagus gibbus* (Boh.).

Idiomacromerus longfellowi Girault, 1917 (May 14). Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 8. ♂ ♀.

Liodontomerus secundus Gahan, 1917 (May 26). U. S. Natl. Mus. Proc. 53: 208. ♂ ♀. N. syn.

Biology: Urbahns, 1919. Jour. Agr. Res. 16: 169-170.

perplexus Gahan. Iowa, S. Dak., Utah, Ariz., Calif. Host: *Bruchophagus gibbus* (Boh.).

Liodontomerus perplexus Gahan, 1914. U. S. Natl. Mus. Proc. 48: 159. ♂ ♀.

Biology: Urbahns, 1920. U. S. Dept. Agr. Bul. 812: 17-18.—Sorenson, 1930. Utah Agr. Expt. Sta. Bul. 218: 27-32.

punctatus (Ashmead), n. comb. Fla.

Lochites punctata Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 185. ♂.

Genus IDIOMACROMERUS Crawford

Idiomacromerus Crawford, 1914. Ent. Soc. Wash. Proc. 16: 124.

Type: *Idiomacromerus bimaculipennis* Crawford. Monob.

bimaculipennis Crawford. Kans., Utah. Host: *Eurytoma seminis* Bugbee.

Idiomacromerus bimaculipennis Crawford, 1914. Ent. Soc. Wash. Proc. 16: 124. ♀.

Genus PLATYKULA Huber

Platykula Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 106.

Type: *Syntomaspis albihirta* Ashmead. Monob.

albihirta (Ashmead). Fla.

Syntomaspis albihirta Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 187. ♀.

Genus DIMEROMICRUS Crawford

Dimeromicrus Crawford, 1910. U. S. Natl. Mus. Proc. 38: 127.

Type: *Dimeromicrus ashmeadi* Crawford. Monob.

cecidomyiae (Ashmead). Fla., Tex. Host: Itonidid on *Baccharis halimifolia*.

Megastigma (!) *cecidomyiae* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 185. ♂ ♀.

Lochites auriceps Ashmead, 1894. Linn. Soc. London, Jour. Zool. 25: 153.

♂ ♀.

Taxonomy: Milliron, 1949. Amer. Midland Nat. 41: 347.

smithi (Schread), n. comb. Conn. Host: Gall on *Caryomyia*.

Lochites smithi Schread, 1937. Brooklyn Ent. Soc. Bul. 32: 102. ♂ ♀.

Genus MONODONTOMERUS Westwood

Monodontomerus Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 2: 443.

Type: *Monodontomerus obscurus* Westwood. Monob.

Paroligosthenus Cameron, 1913 (1912). Indian Forest Rec. 4: 94.

Type: *Paroligosthenus trichiophthalmus* Cameron. Monob.

Revision: Gahan, 1941. U. S. Natl. Mus. Proc. 90: 461-482.

aereus Walker. ?N. B., New England. Hosts: *Hemerocampa leucostigma* (A. and S.); *Nygmia phaeorrhoea* (Donov.); *Porthetria dispar* (L.); *Malacosoma americanum* (F.); *Archips argyrospila* (Wlkr.); *Carcelia laxifrons* Vill.; *Compilura concinnata* (Meig.); *Exorista larvarum* (L.); *Sturmia nidicola* Tns.; *S. scutellata* (R.-D.); *Apanteles lacteicolor* Vier.; *A. melanoscelus* (Ratz.); *A. solitarius* (Ratz.); *Meteorus versicolor* (Wesm.); *Phobocampe disparis* (Vier.); *Iseropus coelebs* (Walsh).

Monodontomerus aereus Walker, 1834. Ent. Mag. 2: 158. ♀.

Biology: Howard and Fiske, 1911. U. S. Dept. Agr. Bur. Ent. Bul. 91: 86-308.— Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 19-20.— Burgess and Crossman, 1929. U. S. Dept. Agr. Tech. Bul. 86: 77-80.— Proper, 1934. Jour. Agr. Res. 48: 361-376.

Taxonomy: Muesebeck, 1931. Jour. Agr. Res. 43: 445-460.

bakeri Gahan. Colo.

Monodontomerus bakeri Gahan, 1941. U. S. Natl. Mus. Proc. 90: 475. ♀.

dentipes (Dalman). Ont., Que., Maine, N. Y., Conn., N. J., Pa., Ohio, Mich., Idaho. Hosts: *Hemerocampa pseudoisugata* McD.; larvaevorid puparia; *Diprion hercyniae* (Htg.); *D. similis* (Htg.); *D. sp.*; *Rogas unicolor* (Wesm.).

Torymus dentipes Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 173, 178. ♂ ♀.

Biology: Morris, Cameron, and Jepson. Bul. Ent. Res. 28: 377-380, 389, 391.

Morphology: Bucher, 1948. Canad. Jour. Res. 26D: 230-281.

dianthidii Gahan. Calif. Host: *Dianthidium* sp.

Monodontomerus dianthidii Gahan, 1941. U. S. Natl. Mus. Proc. 90: 464. ♂ ♀.

emarginatus Gahan. Colo. Host: ?*Megachile* sp.

Monodontomerus emarginatus Gahan, 1941. U. S. Natl. Mus. Proc. 90: 476. ♀.

indiscretus Gahan. Maine. Host: *Heterarthrus nemoratus* (Fall.).

Monodontomerus indiscretus Gahan, 1941. U. S. Natl. Mus. Proc. 90: 469. ♀.

mandibularis Gahan. N. Y., D. C., Ohio, Ill., Mo., La. Hosts: *Osmia cordata* Rob.; *Anthophora abrupta* Say; *A. bomboides* Kirby; *Melitoma taurea* (Say).

Monodontomerus mandibularis Gahan, 1941. U. S. Natl. Mus. Proc. 90: 474. ♂ ♀.

Biology: Rau, 1947. Ent. Soc. Amer. Ann. 40: 221-226.

montivagus Ashmead. Ont., Del., Ill., Mo., Colo., N. Mex., Calif., Mont., B. C. Hosts: *Choristoneura fumiferana* (Clem.); *Anthidium emarginatum* (Say); *Dianthidium pudicum* (Cress.); *D. pudicum consimile* (Ashm.); *Osmia cordata* Robertson; *Anthophora abrupta* Say; *Anthophora linsleyi* Timb.; *A. occidentalis* Cress.; ?*Melissodes* sp.; *Xylocopa orpifex* Smith.

Monodontomerus montivagus Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 25, 45. ♀.

Monodontomerus americanus Girault, 1917. Deser. Stellarum Nov., p. 11. ♀.

Biology: Linsley and McSwain, 1942. Amer. Midland Nat. 27: 403, 409-412.

obscurus Westwood. N. Y., D. C., Mo., Iowa. Hosts: *Osmia cordata* Robt.; *O. lignaria* Say.

Monodontomerus obscurus Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 2: 443.

subsoletus Gahan. N. Y., N. J., Del. Hosts: *Malacosoma americanum* (F.); *Grapholitha molesta* (Busck); ?*Choristoneura fumiferana* (Clem.); *Gambrus extrematis* (Cress.).

Monodontomerus subsoletus Gahan, 1941. U. S. Natl. Mus. Proc. 90: 480. ♂ ♀.

Genus ZAGLYPTONOTUS Crawford

Zaglyptonotus Crawford, 1914. Ent. Soc. Wash. Proc. 16: 124, 125.

Type: **Zaglyptonotus schwarzi** Crawford. Monob.

mississippiensis Breland. Ala., Miss. Host: *Tephritis finalis* (Loew).

Zaglyptonotus mississippiensis Breland, 1933. Ent. Soc. Amer. Ann. 31: 205. ♂ ♀.

schwarzi Crawford. Fla., Tex., Kans., Colo. Hosts: ?*Desmoris fulvus* Lec.; *Iso-phrictis similiella* (Chamb.); tephritid seed maggot from ironweed.
Zaglyptonotus schwarzi Crawford, 1914. Ent. Soc. Wash. Proc. 16: 126. ♀.
 Biology: Brandhorst, 1943. Kans. Acad. Sci. Trans. 46: 168.—Needham, 1948. Ecol. Monog. 18: 446.

Genus GLYPHOMERUS Foerster

Glyphomerus Foerster, 1856. Hym. Stud., v. 2, pp. 43, 44, 145.

Type: *Ichneumon stigma* Fabricius. Orig. desig.

Oligosthenus Foerster, 1856. Hym. Stud., v. 2, p. 145. N. name.

stigma (Fabricius). Que., to Fla.; Calif., Ore. Hosts: *Diptolepis rosae* (L.); *Melitoma taurea* Say.

Ichneumon stigma Fabricius, 1793. Ent. System. 2: 188.

Monodontomerus viridaeneus Provancher, 1881. Nat. Canad. 12: 290. ♀.

Oligosthenus bimaculatus Provancher, 1887. Addit. Corr. Faune Ent.

Canada Hym., p. 196. ♀. N. syn.

Taxonomy: Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 186.

Genus ERIDONTOMERUS Crawford

Eridontomerus Crawford, 1907. N. Y. Ent. Soc. Jour. 15: 178-179.

Type: (*Eridontomerus primus* Crawford)=*Stictonotus isosomatis* Riley. Monob.

isosomatis Riley. N. Y. to Tenn., Ill. and Mich.; Ariz., Utah. Hosts: *Phytophaga destructor* (Say); *Harmolita albomaculata* (Ashm.); *H. atlantica* P. and E.; *H. dactylicola* P. and E.; *H. festucae* P. and E.; *H. grandis* (Riley); *H. hordei* (Harris); *H. maculata* (How.); *H. secale* (Fitch); *H. tritici* (Fitch); *H. vaginicola* (Doane); *H. websteri* (How.).

Stictonotus isosomatis Riley, 1882. U. S. Dept. Agr. Ann. Rpt. for 1881-1882: 186. ♂ ♀.

Eridontomerus primus Crawford, 1907. N. Y. Ent. Soc. Jour. 15: 179. ♂ ♀.

Biology: Phillips and Poos, 1927. Jour. Agr. Res. 34: 483-488.—Knowlton and Janes, 1933. Utah. Agr. Expt. Sta. Bul. 243: 11-12.

Taxonomy: Gahan, 1921 (1920). Ent. Soc. Wash. Proc. 22: 235.

Genus PSEUDOTORYMUS Masi

Holaspis Mayr, 1874. Zool.-Bot. Gesell. Wien, Verh. 24: 83. Preocc.

Type: *Torymus militaris* Boheman. Desig. by Ashmead, 1904.

Pseudotorymus Masi, 1922. Mus. Civ. Stor. Nat. Genova Ann. 49: 235. N. name.

lazulellus (Ashmead), n. comb. Ont., Conn., Colo. Hosts: *Harmolita* in rye stems; *H. sp.* in timothy stems, clover heads, oak galls.

Syntomaspis lazulella Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 26, 45. ♀.

Biology: Webster, 1906 (1905). Ent. Soc. Wash. Proc. 7: 116.

Genus CRYPTOPRISTUS Foerster

Cryptopristus Foerster, 1856. Hym. Stud., v. 2, pp. 43, 44.

Type: *Torymus caliginosus* Walker. Monob.

Websterellus Ashmead, 1893. Ohio Agr. Exp. Sta. Tech. Bul. 1: 164.

Type: (*Websterellus tritici* Ashmead)=[*Torymus*] *harrisii* (Fitch). Monob.

harrisii (Fitch), n. comb. N. Y., Va., Ohio, Ky., Kans. Hosts: *Harmolita grandis* (Riley); ?*H. hordei* (Harr.); *H. tritici* (Fitch); *H. sp.*

Torymus Harrisii Fitch, 1862 (1861). N. Y. State Agr. Soc. Trans. 21: 152.

Websterellus tritici Ashmead, 1893. Ohio Agr. Expt. Sta. Tech. Ser. Bul. 1: 164. ♂ ♀.

Cryptopristus americanus Girault, 1917. Descr. Stellarum Nov., p. 8. ♀.

Biology: Webster, 1893. U. S. Dept. Agr. Insect Life 6: 151.—Gahan 1921 (1920). Ent. Soc. Wash. Proc. 22: 237.

Genus **DITROPINOTUS** Crawford

Ditropinotus Crawford, 1907. N. Y. Ent. Soc. Jour. 15: 178.

Type: *Ditropinotus aureoviridis* Crawford. Monob.

aureoviridis Crawford, N. Y. to Ala. and Kans.; Utah, Oreg. Hosts: *Phytophaga destructor* (Say); *Eurytoma parva* Phillips; *Harmolita atlantica* P. and E.; *H. elymicola* P. and E.; *H. grandis* (Riley); *H. secale* (Fitch); *H. tritici* (Fitch); *H. vaginicola* (Doane); *Eurytoma* spp.; *Merisporus chalcidiphagus* (W. and R.).

Ditropinotus aureoviridis Crawford, 1907. N. Y. Ent. Soc. Jour. 15: 178.

♂ ♀.

Ditropinotus flavicoxus (!) Gahan, 1912. Ent. Soc. Wash. Proc. 14: 5. ♂ ♀. Biology: Hill Pinckney and Udine, 1939. U. S. Dept. Agr. Tech. Bul. 689: 5, 10, 13.—Chamberlain, 1941. U. S. Dept. Agr. Tech. Bul. 784: 25–28, 35–38.

Morphology: Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 6, 11–13.

Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 25–30.

Genus **ANTISTROPHOPLEX** Crawford

Antistrophoplex Crawford, 1914. Ent. Soc. Wash. Proc. 16: 122–125.

Type: *Antistrophoplex bicoloripes* Crawford. Monob.

bicoloripes Crawford. Kans. Host: *Antistrophus* sp.

Antistrophoplex bicoloripes Crawford, 1914. Ent. Soc. Wash. Proc. 16: 125.

♀.

Genus **MICRODONTOMERUS** Crawford

Microdontomerus Crawford, 1907. N. Y. Ent. Soc. Jour. 15: 178, 179.

Type: *Torymus anthonomi* Crawford. Monob.

anthidii (Ashmead). Calif. Host: *Dianthidium pudicum consimile* (Ashm.).

Torymus anthidii Ashmead, 1896. Ent. News 7: 24. ♀.

anthonomi (Crawford). N. J., Va., Mo., La., Tex., Utah, Idaho, Oreg., Wash. Hosts: *Acanthoscelides horni* (Pic); *Bruchus brachialis* Fahr.; *B. pisorum* (L.); *Brachytarsoides alternatus* (Say); *Anthonomus grandis* Boh.; *Ancyliis comptana fragariae* (W. and R.); *Coleophora malivorella* Riley; *Bracon mellitor* Say.

Torymus anthonomi Crawford, 1907. Canad. Ent. 39: 133. ♂ ♀.

Biology: Pierce, Cushman, and Hood, 1912. U. S. Dept. Agr. Bur. Ent. Bul. 100: 1, 31, 49, 57–62.

fumipennis Crawford. N. Mex., Utah. Hosts: *Malacosoma fragile* Stretch; *Archips rosaceana* (Harr.).

Microdontomerus fumipennis Crawford, 1917 (1916). Insecutor Inscitiae Menstruus 4: 141–142. ♂ ♀.

Subfamily **MEGASTIGMINAE**Genus **MEGASTIGMUS** Dalman

Megastigmus Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 178.

Type: *Pteromalus bipunctatus* Swederus. Desig. by Crosby, 1913.

Trogocarpus Rondani, 1877. Soc. Ent. Ital. Bol. 9: 204.

Type: *Torymus ballestrerii* Rondani. Monob.

Megalostigmus Schulz, 1906. Spolia Hym., p. 147. Emend.

Xanthosomoides Girault, 1913. Canad. Ent. 45: 220.

Type: *Xanthosomoides maculatipennis* Girault. Orig. desig.

Revision: Milliron, 1949. Amer. Midland Nat. 41: 257–420.

Species of this genus are phytophagous. They develop in the seeds of plants.

aculeatus aculeatus (Swederus). Mass., N. Y. Host: *Rosa* spp.

Pteromalus aculeatus Swederus, 1795. Svenska Vetensk. Akad. Handl. 16: 221–222.

- aculeatus nigroflavus** Hoffmeyer. N. J., Va. Host: *Rosa multiflora* Thunb.
Megastigmus aculeatus var. *nigroflavus* Hoffmeyer, 1931. Ent. Meddel. 16: 324-326. ♂ ♀.
- albifrons** Walker. Ariz., Calif. Host: *Pinus ponderosa*.
Megastigmus albifrons Walker, 1869. Roy. Ent. Soc. London, Trans., p. 314.
♂.
- amelanchieris** Cushman. N. H., N. Y., Vt., W. Va., Pa., Minn. Hosts: *Amelanchier canadensis*; *A. leavis* × *humilis*; *A. sanguinea*; *Sorbus aucuparia*.
Megastigmus amelanchieris Cushman, 1918 (1917). Ent. Soc. Wash. Proc. 19: 81. ♂ ♀.
Biology: Milliron, 1949. Amer. Midland Nat. 41: 363.
- brevicauda** Ratzeburg. Emend. Minn. Host: *Sorbus aucuparia*.
Megastigmus brevicaudis Ratzeburg, 1852. Ichn. d. Forstins., v. 3, p. 225.
♀.
- Biology: Milliron, 1949. Amer. Midland Nat. 41: 363-365, 393, 402.
- caperatus** Milliron. Ont. Host: ?*Picea* sp.
Megastigmus caperatus Milliron, 1949. Amer. Midland Nat. 41: 306, 347, 350. ♀.
- flavipes** Ashmead. Fla.
Megastigmus flavipes Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 128. ♂.
- floridanus** Milliron. Fla.
Megastigmus floridanus Milliron, 1949. Amer. Midland Nat. 41: 342, 348, 350. ♀.
- formosus** Milliron. Ont., Que. Hosts: ?*Crataegus* sp.; ?*Rosa* sp.
Megastigmus formosus Milliron, 1949. Amer. Midland Nat. 41: 339, 348, 350. ♀.
- gahani** Milliron. Minn., Mo., Colo. Hosts: *Physocarpus opulifolius* var. *intermedius* and *P. opulifolius* var. *lutens*.
Megastigmus gahani Milliron, 1949. Amer. Midland Nat. 41: 275, 347, 351, 365. ♂ ♀.
- hoffmeyeri** Walley. Ont., Que., N. Y. Hosts: ?*Abies amabilis*; *Tsuga canadensis*.
Megastigmus spermotrophus var. *canadensis* Hoffmeyer, 1930. Ent. Meddel. 17: 218. ♂ ♀. Preocc.
Megastigmus spermotrophus var. *hoffmeyeri* Walley, 1932. Canad. Ent. 64: 188. N. name.
Biology: Miller, 1916. Jour. Agr. Res. 6: 65.
- laricis** Marcovitch. N. Y. Host: *Larix laricina*.
Megastigmus laricis Marcovitch, 1914. Canad. Ent. 46: 435. ♂ ♀.
- lasiocarpae** Crosby. Conn., Colo. Hosts: *Abies amabilis*; *A. lasiocarpa*.
Megastigmus lasiocarpae Crosby, 1913. Ent. Soc. Amer. Ann. 6: 163. ♂ ♀.
- melanus** Milliron. ?Mich.
Megastigmus melanus Milliron, 1949. Amer. Midland Nat. 41: 302, 347, 351. ♀.
- milleri** Milliron. Calif., B. C. Hosts: *Abies grandis*; *A. magnifica* var. *shastensis*.
Megastigmus milleri Milliron, 1949. Amer. Midland Nat. 41: 323, 344, 347, 352. ♂ ♀.
- nigrovariegatus** Ashmead. N. S. to Va. to Calif. to Alaska. Hosts: *Rosa acicularis*; *R. acicularis* var. *engelmannii*; *R. blanda*; *R. californica*; *R. canina*; *R. palustris*; *R. rugosa* and *R. virginiana*.
Megastigmus nigrovariegatus Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 26, 45. ♀.
Biology: Balduf, 1945. Ent. Soc. Wash. Proc. 47: 185-198.—Milliron, 1949. Amer. Midland Nat. 41: 373-390.
- physocarpi** Crosby. Que., Ont., Minn., Mich., Ind., Mo., Idaho. Hosts: *Physocarpus opulifolius*; *P. opulifolius* var. *intermedius*.
Megastigmus physocarpi Crosby, 1913. Ent. Soc. Amer. Ann. 6: 158. ♂ ♀.
Biology: Milliron, 1949. Amer. Midland Nat. 41: 365-366.
- piceae montana** Milliron, n. status. Mont. Host: *Picea engelmannii*.
Megastigmus piceae var. *montana* Milliron, 1949. Amer. Midland Nat. 41: 305, 347, 352. ♂ ♀.

- piceae piceae** Rohwer. Colo., Calif. Hosts: ?*Abies arizonica*; ?*Picea engelmannii*; *P. pungens*; *P. sitchensis*.
Megastigmus piceae Rohwer, 1915. Canad. Ent. 47: 97. ♂ ♀.
- pinus marginatus** Hoffmeyer. Oreg. Host: *Abies grandis*.
Megastigmus pinus var. *marginatus* Hoffmeyer, 1930. Ent. Meddel. 17: 216. ♂.
- pinus pinus** Parfitt. Conn., Colo., Nev., Calif., Oreg., Wash. Hosts: *Abies amabilis*; *A. concolor*; *A. grandis*; *A. lasiocarpa*; *A. magnifica*; *A. magnifica* var. *shastensis*; *A. nobilis*; *A. venusta*; ?*Picea sitchensis*; ?*Thuja plicata*, and ?*Tsuga* sp.
Megastigmus Pinus Parfitt, 1857. Zoologist 15: 5543. ♀.
Megastigmus pinus var. *crobyi* Hoffmeyer, 1930. Ent. Meddel. 17: 215. ♀.
 Biology: Laidlaw, 1931. Scot. Forestry Jour. 45: 179-184.
- rafni** Hoffmeyer. Colo., N. Mex., Calif., Idaho, Oreg., B. C. Hosts: *Abies concolor*; *A. grandis*; *A. magnifica*; *A. magnifica* var. *shastensis*; ?*Pseudotsuga taxifolia*.
Megastigmus rafni Hoffmeyer, 1928. Ent. Meddel. 16: 331. ♀.
 Taxonomy: Hoffmeyer, 1930. Ent. Meddel. 17: 216-217.
- slossonae** Crosby. N. Y., Ont. Host: *Sorbus* sp.
Megastigmus slossonae Crosby, 1913. Ent. Soc. Amer. Ann. 6: 157. ♀.
Megastigmus americanus Milliron, 1949. Amer. Midland Nat. 41: 285, 347, 349, 365. ♂ ♀. N. syn.
- specularis** Walley. N. B., N. H., ?Mass., ?Conn., Minn. Host: *Abies balsamea*.
Megastigmus specularis Walley, 1932. Canad. Ent. 64: 187. ♂ ♀.
- spermatrophus nigrodorsatus** Milliron. Calif. Host: *Pseudotsuga macrocarpa*.
Megastigmus spermatrophus var. *nigrodorsatus* Milliron, 1949. Amer. Midland Nat. 41: 316, 346, 353. ♂ ♀.
- spermatrophus spermatrophus** Wachtl. Calif., N. Mex., Colo., Oreg., Wash., B. C. Host: *Pseudotsuga taxifolia*.
Megastigmus spermatrophus Wachtl, 1893. Wien. Ent. Ztg. 12: 25. ♂ ♀.
Megastigmus spermatrophus Dalla Torre, 1898. Cat. Hym., v. 5, p. 287. Emend.
 Biology: Crosby, 1909. N. Y. (Cornell) Agr. Expt. Sta. Bul. 265: 379-380.—Miller 1916. Jour. Agr. Res. 6: 65-68.—Milliron, 1949. Amer. Midland Nat. 41: 367-368, 390-391.
- tsugae heterophyllae** Milliron. B. C. Host: *Tsuga heterophylla*.
Megastigmus tsugae var. *heterophyllae* Milliron, 1949. Amer. Midland Nat. 41: 309, 347, 353. ♂ ♀.
- tsugae tsugae** Crosby. West. U. S. Hosts: ?*Abies amabilis*; *Tsuga mertensiana*.
Megastigmus tsugae Crosby, 1913. Ent. Soc. Amer. Ann. 6: 162. ♀.

Family ORMYRIDAE

Genus MONOBAEUS Foerster

Monobaeus Foerster, 1860. Naturh. Ver. Rheinlande Verh. 17: 95.

Type: *Monobaeus cingulatus* Foerster. Desig. by Ashmead, 1904.

hegeli Girault. Mich.

Monobaeus hegeli Girault, 1917. Ent. News 28: 106. ♀.

Genus ORMYRUS Westwood

Ormyrus Westwood, 1832. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 1: 127.

Type: *Ormyrus punctiger* Westwood. Monob.

Periglyphus Boheman, 1833. Svenska Vetensk. Akad. Handl. 54: 378.

Type: (*Periglyphus gastris* Boheman) = *Ormyrus punctiger* Westwood. Monob.

Siphonura Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 81.

Type: *Siphonura variolosa* Nees. Desig. by Gahan and Fagan, 1923.

- Cyrtosoma* Perris, 1840. Soc. Ent. France Ann. 9: 96.
Type: *Cyrtosoma papaveris* Perris. Monob.
- andricus** Ashmead. Fla. Host: *Callirhytis difficilis* (Ashm.).
Ormyrus andricus Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 128. ♀.
- brunneipes** Provancher. Que., Pa.
Ormyrus brunneipes Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 198. ♀.
Ormyrus bruneipes Dalla Torre, 1898. Cat. Hym., v. 5, p. 282. Emend.
- distinctus** Fullaway. Conn., Calif. Host: Strawberry gall on *Quercus dumosa*.
Ormyrus distinctus Fullaway, 1912. N. Y. Ent. Soc. Jour. 20: 276. ♀.
- dryorhizoxeni** Ashmead. Conn., Fla. Host: Gall of *Belonocnema treatae* Mayr.
Ormyrus dryorhizoxeni Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xiv. ♀.
- labotus** Walker. Md., Fla., Kans. Hosts: Galls of *Diastrophus nebulosus* (O. S.) and *Disholcaspis virens* (Ashm.).
Ormyrus labotus Walker, 1843. Soc. Ent. France Ann. (2) 1: 148. ♂ ♀.
- minutus** Ashmead. Mich., N. J., Fla. Hosts: *Neuroterus noxiosus* (Bass.); cynipid gall on *Quercus laurifolia*.
Ormyrus minutus Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 189. ♂ ♀.
- querci-pilulae** (Fitch). Maine, N. Y., N. J. Hosts: *Acraspis pezomachoides* (O. S.); gall on *Quercus borealis*.
Pteromalus Querci-pilulae Fitch, 1859 (1858). Trans. N. Y. State Agr. Soc. 18: 819.
- quercus** Ashmead. Fla. Host: Gall of *Callirhytis batatoides* (Ashm.).
Ormyrus quercus Ashmead, 1886. Amer. Ent. Soc. Trans. 14: 128. ♂ ♀.
- rosae** Ashmead. N. J., Fla., Kans., Colo. Host: Gall of *Diplolepis ignota* (O. S.).
Ormyrus rosae Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xiv. ♀.
- thymus** Girault. Calif.
Ormyrus thymus Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 87. ♀.
- tubulosus** (Fonscolombe). Europe; ?Mass.
Cinips (!) *tubulosa* Fonscolombe, 1832. Ann. des Sci. Nat. [Paris] 26: 290.
- unifasciatipennis** Girault, emend. Calif.
Ormyrus unifasciatipennis (!) Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 87. ♀.
- unimaculatipennis** Girault. La.
Ormyrus unimaculatipennis Girault, 1916. Canad. Ent. 48: 342. ♀.
- vacciniicola** Ashmead. Ont., Maine, N. J. Host: *Hemadas nubilipennis* (Ashm.).
Ormyrus vacciniicola Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 189. ♀.
Biology: Driggers, 1927. N. Y. Ent. Soc. Jour. 35: 254-258.
- ventricosus** Ashmead. Ont., Que., N. H., N. Y., Conn., N. J., Mich., Ill., Fla., Kans. Hosts: Galls of *Acraspis erinacei* (Beut.); *Aulacidea podagrae* (Bass.); *Callirhytis ventricosa* (O. S.); *Diastrophus nebulosus* (O. S.); *Disholcaspis mamma* (Cress.).
Ormyrus ventricosus Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 189. ♂.
Biology: Triggerson, 1914. Ent. Soc. Amer. Ann. 7: 8-9.

Genus MEGORMYRUS Cockerell

- Megormyrus* Cockerell, 1926. Psyche 33: 36.
Type: *Megormyrus amabilis* Cockerell. Monob.
- amabilis** Cockerell. Colo. Host: *Stelis* sp.
Megormyrus amabilis Cockerell, 1926. Psyche 33: 37. ♀.

Family PTEROMALIDAE

Subfamily SPHEGIGASTERINAE

Tribe SPALANGIINI

- Revisions: Ashmead, 1894. Ent. Soc. Wash. Proc. 3: 27-37.—Masi, 1917. Novitates Zool. 24: 188-189.

Genus SPALANGIA Latreille

Spalangia Latreille, 1805. Hist. Nat. Crust. Ins., v. 13, p. 227.

Type: *Spalangia nigra* Latreille. Monob.

Revision: Richardson, 1913. Jour. Morph. 24: 515.

drosophilae Ashmead. N. J., Md., N. C., Ga., Fla., Ill., Tex. Hosts: *Drosophila melanogaster* Meig.; *Oscinella* sp.; *Siphona irritans* (L.); *Alysia ridibunda* Say; *Eucoila rufocincta* (Kieff.).

Spalangia drosophilae Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 199. ♀.
Biology: Lindquist, 1936. Jour. Econ. Ent. 29: 1154-1158.—Simmonds, 1944. Bul. Ent. Res. 35: 222.

haematobiae Ashmead. N. J., Va. Host: *Siphona irritans* (L.).

Spalangia haematobiae Ashmead, 1894. Ent. Soc. Wash. Proc. 3: 37. ♀.

muscae Howard. La., Tex., Kans. Hosts: *Musca domestica* L.; *Stomoxys calcitrans* (L.); *S. sp.*; *Siphona irritans* (L.).

Spalangia muscae Girault (!) Howard, 1911. The House Fly, p. 90.

muscarum Girault. Ill. Host: Muscid.

Spalangia muscarum Girault, 1920. U. S. Natl. Mus. Proc. 58: 213. ♀.

muscidarum Richardson. Mass., N. J., Md., D. C., La., Tex., Kans. Hosts: *Musca domestica* L.; *Stomoxys calcitrans* (L.); ?*Lucilia sericata* (Meig.); ?*Megasebia iroquoiana* Mall.

Spalangia muscidarum Richardson, 1913. Psyche 20: 38. ♂ ♀.
Biology: Pinkus, 1913. Psyche 20: 148-158.—Richardson, 1913. Jour. Morph. 24: 513-549.

nigra Latreille. Europe; ?N. Amer. Host: ?*Musca domestica* L.

Spalangia nigra Latreille, 1805. Hist. Nat. Crust. Ins. v. 13, p. 228.

rugosicollis Ashmead. Conn., N. J., D. C., Ill., Mo., Kans., La., Tex. Hosts: *Pyrallis farinalis* (L.); *Stomoxys calcitrans* (L.).

Spalangia rugosicollis Ashmead, 1894. Ent. Soc. Wash. Proc. 3: 36. ♀.
Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 213.

stomoxysiae Girault, n. status. Tex. Hosts: *Musca domestica* L.; *Orthellia* sp.; *Stomoxys calcitrans* (L.); *Sarcophaga effrenata* Wlkr.; *S. impar* Aldrich; *S. sueta* Wulp; *Siphona irritans* (L.).

Spalangia muscidarum var. *stomoxysiae* Girault, 1916. Soc. Ent. 31: 57. ♀.

Spalangia muscidarum var. *texensis* Girault, 1920. U. S. Natl. Mus. Proc. 58: 213. ♂. N. syn.
Biology: Lindquist, 1936. Jour. Econ. Ent. 29: 1154-1158.

Tribe CEROCEPHALINI

Revision: Gahan, 1946. U. S. Natl. Mus. Proc. 96: 349-376 (Cerocephalinae).

Genus CHOETOSPILA Westwood

Choetospila Westwood, 1874. Thesaurus Ent. Oxon., p. 137, pl. 25.

Type: *Choetospila elegans* Westwood. Monob.

Chaetospila Dalla Torre, 1898. Cat. Hym., v. 5, p. 207. Emend.

Spalangiomorpha Girault, 1913. Queensland Mus. Mem. 2: 333.

Type: *Spalangiomorpha fasciatiennis* Girault. Orig. desig.

Revision: Gahan, 1946. U. S. Natl. Mus. Proc. 96: 350-355.

elegans Westwood. Cosmopolitan. Hosts: *Lasioderma serricorne* (F.); *Stegobium paniceum* (L.); ?*Rhyzopertha dominica* (F.); *Callosobruchus chinensis* (L.); *C. maculatus* (F.); *Caulophilus latinasus* (Say); *Sitophilus granarius* (L.); *S. linearis* (Hbst.); *S. oryza* (L.); ?*Sitotroga cerealella* (Oliv.).

Choetospila elegans Westwood, 1874. Thesaurus Ent. Oxon., p. 137.

Biology: Bare, 1942. Jour. Econ. Ent. 35: 186.

Taxonomy: Waterston, 1921. Rpt. Grain Pests (War) Com. [Gt. Brit.], no. 9, p. 25.

tabida Gahan. Md. Host: ?Cossonine beetle.

Choetospila tabida Gahan, 1946. U. S. Natl. Mus. Proc. 96: 354. ♂ ♀.

Genus ACEROCEPHALA Gahan

Acercephala Gahan, 1946. U. S. Natl. Mus. Proc. 96: 369.

Type: *Cerocephala atrovioleacea* Crawford. Orig. desig.

aenigma Gahan. Calif., Ore.

Acercephala aenigma Gahan, 1946. U. S. Natl. Mus. Proc. 96: 371. ♂ ♀.

atrovioleacea (Crawford). N. Mex. Hosts: *Conophthorus edulis* Hopkins; scolytid infesting cones of *Pinus edulis*.

Cerocephala (!) *atrovioleacea* Crawford, 1913. U. S. Natl. Mus. Proc. 45: 315. ♀.

Genus THEOCOLAXIA Girault

Theocolaxia Girault, 1924. Lese Majeste, New Insecta and Robbery, p. 1.

Type: *Theocolaxia lessingi* Girault. Monob.

Revision: Gahan, 1946. U. S. Natl. Mus. Proc. 96: 363-368.

pityophthori (Ashmead). N. C. Fla. Hosts: *Pityophthorus consimilis* Lec.; *Thysanoes fimbriicornis* Lec.

Cerocephala pityophthori Ashmead, 1894. Ent. Soc. Wash. Proc. 3: 32. ♀.

scolytivora (Ashmead). Fla. Host: *Loganius ficus* Schwarz.

Cerocephala scolytivora Ashmead, 1894. Ent. Soc. Wash. Proc. 3: 33. ♂ ♀.

Tribe ASAPHINI

Genus ASAPHES Walker

Asaphes Walker, 1834. Ent. Mag. 2: 151.

Type: *Asaphes vulgaris* Walker. Monob.

Isocratus Foerster, 1856. Hym. Stud., v. 2, pp. 53, 58. N. name.

americanus Girault. N. Y. to N. C. and Ky.; Iowa, Wis. Hosts: *Anuraphis bakeri* (Cowen); *Aphis rumicis* L.; *Eriosoma lanigerum* (Hausm.); *Kakimia houghtonensis* (Troop); *Macrosiphum cornelli* Patch; *Myzus persicae* Sulz.; *Periphyllus negundinis* (Thos.); *Aphidius phorodontis* Ashm.; *A. polygonaphis* Fitch; *A. testaceipes* Cress.; *Diaeretus rapae* (Curt.); *Praon simulans* (Prov.); *Aphelinus jucundus* Gahan; *A. semiflavus* How.; *Aphidencyrus aphidivorus* (Mayr).

Asaphes americana Girault, 1914. Ent. Soc. Wash. Proc. 16: 114. ♂ ♀.

Biology: Spencer, 1926. Ent. Soc. Amer. Ann. 19: 145.—Griswold, 1929. Ent. Soc. Amer. Ann. 22: 449.

californicus Girault. Utah, Calif. Host: *Macrosiphum escalantis* (Knowl.).

Asaphes californicus Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 1. ♀.

fletcheri (Crawford), n. comb. Ont., Que., Conn. Hosts: *Anuraphis roseus* Baker; *Aphis sorbi* Kltb.; *Macrosiphum pisi* (Kltb.).

Megorismus Fletcheri Crawford, 1909. Canad. Ent. 41: 98. ♂ ♀.

lucens (Provancher), n. comb. Ont., Que.

Euplectrus lucens Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 207. ♀.

rufipes Brues. N. Y., Mass., Wash. Hosts: *Brevicoryne brassicae* (L.); *Hyalopterus* sp., probably *atriplicis* (L.).

Asaphes rufipes Brues, 1908. Wis. Nat. Hist. Soc. Bul. 6: 160. ♀.

Biology: Cardiff, 1915. Wash. Agr. Expt. Sta. Bul. 127: 32.

vulgaris Walker. Europe; ?Ont. to Va. Hosts: *Aphis rumicis* L.; *Brevicoryne brassicae* (L.); *Macrosiphum destructor* Johns.; *M. granarium* (Kby.); *M. rosae* (L.); aphid on *Euonymus atropurpureus*; *Pseudococcus adonidum* (L.); probably *Aphicoletes cumeris* Lintn.; *Agromyza lutea* Meig.; *Diplazon laetatorius* (F.).

Asaphes vulgaris Walker, 1834. Ent. Mag. 2: 152. ♂ ♀.

Genus HYPERIMERUS Girault

Hyperimerus Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III., p. 5.

Type: *Hyperimerus corvus* Girault. Monob.

corvus Girault. Calif.

Hyperimerus corvus Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 5. ♀.

Tribe DIPARINI

Genus DIPARA Walker

Dipara Walker, 1833. Ent. Mag. 1: 371, 373.

Type: *Dipara petiolata* Walker. Monob.

latipennis Ashmead. Colo.

Dipara latipennis Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 26, 45. ♂.

Genus APTEROLELAPS Ashmead

Apterolelaps Ashmead, 1901. Fauna Hawaii. v. 1, p. 312.

Type: *Apterolelaps nigriceps* Ashmead. Monob.

Apterolaelaps Schulz, 1906. Spolia Hym., p. 144. Emend.

Apterolaelaps Girault, 1916. Canad. Ent. 48: 264. Preocc.

Type: (*Apterolaelaps nigriscutum* Girault) = *Apterolelaps nigriceps* Ashmead. Monob.

nigriceps Ashmead. W. Va.

Apterolelaps nigriceps Ashmead, 1904. Carnegie Mus. Mem. 1: xi, 279. ♀.

Apterolaelaps nigriscutum Girault, 1916. Canad. Ent. 48: 264. ♀.

Taxonomy: Gahan and Fagan, 1923. U. S. Natl. Mus. Bul. 124: 16.

Genus SPALANGIOLAELAPS Girault

Spalangiolaelaps Girault, 1916. Ent. News 28: 22.

Type: *Spalangiolaelaps argenticoxa* Girault. Monob.

argenticoxa Girault. Md.

Spalangiolaelaps argenticoxa Girault, 1917. Ent. News 28: 23. ♀.

Tribe LAMPROTATINI

Genus LAMPROTATUS Westwood

Lamprotatus Westwood, 1833. Mag. Nat. Hist. 6: 121.

Type: *Lamprotatus splendens* Westwood. Monob.

Miscogaster Walker, 1833. Ent. Mag. 1: 371, 458.

Type: *Halticoptera hortensis* Walker. Desig. by Ashmead, 1904.

Lamprotatus (!) Walker, 1843. Soc. Ent. France Ann. (2) 1: 155.

Mischogaster Howard, 1886. Ent. Amer. 2: 33. Emend.

abnormicolor (Girault), n. comb. Fla.

Miscogaster abnormicolor Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 8. ♀.

auratus (Ashmead), n. comb. Ill.

Stictomischus auratus Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 221. ♀.

biguttatus (Girault), n. comb. Fla.

Miscogaster biguttata Girault, 1917. Psyche 24: 97. ♂ ♀.

canadensis Girault. Alta.

Lamprostatus (!) *canadensis* Girault, 1917. Psyche 24: 96. ♀.

conicus Girault. Alaska.

Lamprostatus (!) *conicus* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 11. ♀.

cyrnus Walker. Fla.

Lampretatus (!) cyrnus Walker, 1843. Soc. Ent. France Ann. (2) 1: 157.

diaeus Walker. Ont. Host: *Vanessa cardui* (L.).

Lamprotatus Diaeus Walker, 1844. Ann. Mag. Nat. Hist. (1) 14: 16. ♀.

discoloripes (Girault), n. comb. Fla.

Miscogaster discoloripes Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 9. ♀.

flora (Girault), n. comb. Fla.

Miscogaster flora Girault, 1917. Psyche 24: 96. ♀.

habis Walker. Fla.

Lampretatus (!) habis Walker, 1843. Soc. Ent. France Ann. (2) 1: 155. ♀.

keatsi (Girault), n. comb. Md.

Miscogaster keatsi Girault, 1917. Chalcidoid. Nova Marilandensis III, p. 5. ♀.

marylandicus (Girault), emend., n. comb. Md., Fla.

Miscogaster marilandica Girault, 1916. Brooklyn Ent. Soc. Bul. 11: 87. ♀.

pilicornis Thomson. ?Greenland.

Lamprotatus pilicornis Thomson, 1876. Hym. Scand., v. 4, p. 229. ♂ ♀.

salemus Walker. Fla.

Lampretatus (!) salemus Walker, 1843. Soc. Ent. France Ann. (2) 1: 156. ♀.

trypherus Walker. Fla.

Lampretatus (!) trypherus Walker, 1843. Soc. Ent. France Ann. (2) 1: 158. ♀.

unguttus (Girault), n. comb. Md.

Miscogaster ungotta Girault, 1917. Ent. News 28: 23. ♀.

Genus SELADERMA Walker

Seladerma Walker, 1834. Ent. Mag. 2: 288.

Type: *Seladerma laetum* Walker. Desig. by Westwood, 1840.

salicis (Nees). Europe; ?N. Y. Host: *Rhabdophaga salicis* Schrank.

Pteromalus salicis Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, pp. 105, 424. ♂ ♀.

Taxonomy: Felt, 1902. N. Y. State Mus. Bul. 53: 744.

Genus SYNTOMOPUS Walker

Syntomopus Walker, 1833. Ent. Mag. 1: 371, 372.

Type: *Syntomopus thoracicus* Walker. Desig. by Westwood, 1840.

affinis Ashmead. D. C., Ill.

Syntomopus affinis Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 228. ♀.

americanus Ashmead. N. Y., Conn., Ohio, Ill., La. Hosts: *Anthomyza angelicae* Frost; *Agromyza virens* Loew.

Syntomopus americanus Ashmead, 1894. Cincinnati Soc. Nat. His. Jour. 17: 51. ♂ ♀.

Biology: Lange, 1944. Jour. Econ. Ent. 37: 394-395.

Genus BUBEKIA Dalla Torre

Brachycrepis Ashmead, 1888. Canad. Ent. 20: 174, 176. Preocc.

Type: *Brachycrepis tricarinatus* Ashmead. Monob.

Bubekia Dalla Torre, 1897. Wien Ent. Ztg. 16: 84. N. name.

Revision: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 114.

carolinensis (Ashmead), n. comb. N. C.

Acroclisis carolinensis Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 228. ♂.

fallax Gahan. Ind., Tenn., Okla., Kans., Iowa. Hosts: *Meromyza americana* Fitch; *Phytophaga destructor* (Say).

Bubekia fallax Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 114-116. ♂ ♀.

- lasiopterae** (Ashmead), n. comb. Ohio. Host: *Lasioptera muhlenbergiae* Mart.
Megorisimus lasiopterae Ashmead, 1893. Ohio Agr. Expt. Sta. Tech. Ser.
 Bul. 1: 160. ♂.
- tricarinata** (Ashmead). Kans.
Brachycrepis tricarinatus Ashmead, 1888. Canad. Ent. 20: 176. ♀.

Genus BRACHYCAUDONIA Ashmead

- Brachycaudonia* Ashmead, 1904. Carnegie Mus. Mem. 1: 283, 285.
 Type: *Brachycaudonia californica* Ashmead. Monob.

- californica** Ashmead. Calif.
Brachycaudonia californica Ashmead, 1904. Carnegie Mus. Mem. 1: 282,
 368. ♀.
- Taxonomy: Gahan and Peck, 1946. Jour. Wash. Acad. Sci. 36: 315.

Genus CHRYSOLAMPUS Spinola

- Chrysolampus* Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 147.
 Type: (*Diplolepis splendidula* Spinola)=*Chrysolampus cyaneus*
 (Fabricius). Monob.

- Lamprostylus* Foerster, 1856. Hym. Stud., v. 2, p. 42 (no species).
 Type: *Lamprostylus punctatus* Foerster. Included by Foerster,
 1859.

- Revision: Crawford, 1914. Ent. Soc. Wash. Proc. 16: 74.

The nearctic species in this genus parasitize insect eggs.

- lycti** Crawford. W. Va.
Chrysolampus lycti Crawford, 1914. Ent. Soc. Wash. Proc. 16: 75. ♂ ♀.

- spinolae** (Ratzeburg). ?Conn.
Pteromalus spinolae Ratzeburg, 1844. Ichn. d. Forstins., v. 1, p. 189. ♂ ♀.

Genus ELATUS Walker

- Elatus* Walker, 1848. List Hym. Brit. Mus., v. 2, pp. 104, 153.
 Type: *Elatus thenae* Walker. Monob.

- Revision: Crawford, 1914. Ent. Soc. Wash. Proc. 16: 74.

- parcipunctatus** (Crawford), n. comb. Calif.
Chrysolampus parcipunctatus Crawford, 1914. Ent. Soc. Wash. Proc. 16: 75.
 ♀.

- schwarzi** (Crawford), n. comb. Utah.
Chrysolampus schwarzi Crawford, 1914. Ent. Soc. Wash. Proc. 16: 76. ♀.

- sisymbrii** Ashmead. N. Mex.
Elatus sisymbrii Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 218. ♂.

Genus PARACAROTOMUS Ashmead

- Paracarotomus* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 335.
 Type: *Paracarotomus cephalotes* Ashmead. Monob.

- cephalotes** Ashmead. Va.
Paracarotomus cephalotes Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 336.
 ♂.

Tribe PACHYNEURINI

Genus PACHYNEURON Walker

- Pachyneuron* Walker, 1833. Ent. Mag. 1: 371, 380.
 Type: *Pachyneuron formosum* Walker. Monob.

- Pachyneuron* Blanchard, 1840. Hist. Nat. Anim. Articles, v. 3, pp. 260, 266.
 Emend.

- Pachynevrum* Agassiz, 1846. Nomencl. Zool., Index Univ., p. 778. Emend.
Propachyneuronia Girault, 1917. Psyche 24: 102.

- Type: *Encyrtus siphonophorae* Ashmead. Monob.
 Revision: Girault, 1917. Psyche 24: 88-90.

albutius (Walker). Fla.

Pachyneuron albutius Walker, 1843. Soc. Ent. France Ann. (2) 1: 158. ♀.

altiscutum Howard. Ont., N. H., N. Y., Conn., N. J., Mich., Ohio, Va., La., Kans. Hosts: *Lecanium corni* Bouché; *L. nigrofasciatum* Perg.; *Pseudococcus comstocki* (Kuw.); *P. juniperi* Ehrh.; *Pulvinaria acericola* (W. and R.); *Saissetia oleae* (Bern.); *Coleophora laricella* (Hbn.); *Aphycus lounsburyi* How.; *Clausenia purpurea* Ishii; *Quaylea whittieri* (Gir.); *Scutellista cyanea* Mots.

Pachyneuron altiscuta (!) Howard, 1885 (1884). In Cook, Mich. State Hort. Soc. Ann. Rpt. 14: 91. ♂ ♀.

anthomyiae Howard. Fla. Host: Museid puparium.

Pachyneuron anthomyiae Howard, 1885. In Hubbard, Insects Affecting the Orange, p. 217. ♂ ♀.

californicum Girault. Calif. Hosts: *Chrysopa californica* Coq.; *C. majuscula* Banks; *Gelis tenellus* (Say); *Chrysophagus compressicornis* Ashm.; *Isodromus iceryae* How.; *I. niger* Ashm.; *Dibrachys cavus* (Wlkr.).

Pachyneuron californicum Girault, 1917. Psyche 24: 90. ♂ ♀.

Biology: Clancy, 1946. Calif. Univ. Pubs., Ent. 7: 454-456.

eros Girault. Calif. Hosts: *Lecanium corni* Bouché; *Pseudococcus adenostomae* Ferris; *P. aurilanus* (Mask.); *Leucopis bella* Loew; *L. sp. ex Aphis atriplicis* L.

Pachyneuron eros Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 1. ♀.

groenlandicum (Holmgren). Greenland.

Pteromalus groenlandicus Holmgren, 1872. Öfvers. K. Vetensk. Akad. Förh. 29: 100. ♂ ♀.

hammari Crawford. N. Mex. Host: *Carpocapsa pomonella* (L.).

Pachyneuron hammari Crawford, 1914. Insector Inscitiae Menstruus 2: 36. ♂ ♀.

mucronatum Girault. Kans.

Pachyneuron mucronatum Girault, 1917 (1916). Insector Inscitiae Menstruus 4: 116. ♀.

Biology: Brandhorst, 1943. Kans. Acad. Sci. Trans. 46: 168.

siphonophorae (Ashmead). N. Y. to N. C., Tenn., and Ill.; Minn., Fla., La., Utah, Calif., Wash. Hosts: *Aphis gossypii* Glov.; *A. maidis* Fitch; *A. pomi* Deg.; *A. nigragregalis* Knowl.; *Brevicoryne brassicae* (L.); *Capitophorus bitrichus* K. and S.; *C. ribis* (L.); *Kakimia houghtonensis* (Troop); *Lachnus solani* (L.); *Macrosiphum granarium* Kby.; *M. solanifolii* Ashm.; *Rhopalosiphum pseudobrassicae* (Davis); *Toxoptera graminum* (Rond.); *Kermes pubescens* Bogue; *Lecanium* sp. on mulberry; *Baccha clavata* (F.); *Aphidius testaceipes* (Cress.); *Diaeretus rapae* (Curt.).

Encyrtus siphonophorae Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 131. ♀.

Pachyneuron aphidivora Ashmead, 1887. U. S. Dept. Agr. Div. Ent. Bul. 14: 14. ♀.

Pachyneuron maidaphidis Ashmead, 1888. Fla. Agr. Expt. Sta. Bul. 2: 23-24. ♀.

Pachyneuron micans Howard, 1890. U. S. Dept. Agr. Insect Life 2: 246. ♂ ♀.

Biology: Folsom and Bondy, 1930. U. S. Dept. Agr. Cir. 116: 8.

Taxonomy: Gahan, 1924 (1923). Ent. Soc. Wash. Proc. 25: 187.

syrphi (Ashmead). Ill., N. C., S. C., Fla., La., Idaho, Calif. Hosts: *Carpocapsa pomonella* (L.); *Allograpta fracta* O. S.; *A. obliqua* Say; *Baccha clavata* (F.); *Eupeodes volucris* O. S.; *Mesograpta polita* Say; *Paragus tibialis* Fall.; *Scaeva pyrastri* (L.); *Sphaerophoria cylindrica* (Say); *Syrphus nitens* Zett.; *S. opinator* (O. S.); *S. philadelphicus* Macq.; *S. rectus* O. S.; *Phaogenes* sp.

Spalangia? syrphi Ashmead, 1881. Canad. Ent. 13: 171. ♂ ♀.

Pachyneuron allograptae Ashmead, 1887. U. S. Dept. Agr. Div. Ent. Bul. 14: 15. ♂ ♀.

Biology: Kamal, 1939. Egypt Min. Agr. Tech. and Sci. Serv. Bul. Ent. Sect. 207: 36, 46, 47.

syrpicola Ashmead. Fla.

- Pachyneuron syrphi* Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 131. ♂ ♀.
Preocc.
- Pachyneuron syrphicola* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 193.
N. name.
- texanum* Girault. Ohio, La., Tex. Host: Syrphid pupae.
Pachyneuron texanum Girault, 1917. Psyche 24: 90. ♀.
- validum* Waterston. Calif. Host: *Euphyllura arbuti* Schwarz.
Pachyneuron validum Waterston, 1923. Bul. Ent. Res. 14: 110. ♂ ♀.
- virginicum* Girault. Va. Host: *Aphis sorbi* Klth.
Pachyneuron virginicum Girault, 1917. Psyche 24: 89. ♂ ♀.

Genus PACHYCREPOIDEUS Ashmead

- Pachycrepoideus* Ashmead, 1904. Carnegie Mus. Mem. 1: 329.
Type: *Pachycrepoideus dubius* Ashmead. Monob.
Revision: Girault and Sanders, 1910. Psyche 17: 110.
- dubius* Ashmead. Ont., N. Y., D. C., Ohio, Ill., Mich. Hosts: *Piophila casei* (L.); *Ceratitis capitata* (Wied.); *Rhagoletis fausta* O. S.; *Hylemya brassicae* (Bouché); *Musca domestica* L. ? *Muscidifurax raptor* G. and S.
Pachycrepoideus dubius Ashmead, 1904. Carnegie Mus. Mem. 1: 329, 383.
♀.
- Biology: Girault and Sanders, 1910. Psyche 17: 108-117.—Crandall, 1939. Ent. Soc. Amer. Ann. 32: 632-654.

Genus EUNEURA Walker

- Euneura* Walker, 1844. Ann. Mag. Nat. Hist. 14: 331.
Type: *Euneura augurus* Walker. Monob.
- Euneura* Agassiz, 1846. Nomencl. Zool., Index Univ., p. 427. Emend.
- Hypsicamara* Foerster, 1856. Hym. Stud., 2: 52, 54 (no species). N. syn.
Type: *Hypsicamara ratzeburgi* Reinhard. Included by Reinhard, 1859.
- Hypsicamera* Dalla Torre, 1898. Cat. Hym., v. 5, p. 168. Emend.
- lachni* (Ashmead), n. comb. N. B., Maine, Ohio, Fla., Utah, Idaho. Host: *Lachnus australis* Ashm.
Pachycrepis lachni Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 193 ♀.
Taxonomy: Gahan, 1942. U. S. Natl. Mus. Proc. 92: 46.

Tribe CRATOMINI

Genus CRATOMUS Dalman

- Cratomus* Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 173, 177.
Type: *Cynips megacephalus* Fabricius. Monob.
- Caratomus* Dalman, 1822. Svenska Vetensk. Akad. Handl. 43: 403. Emend.
- cancellatus* Cockerell. Colo.
Cratomus cancellatus Cockerell, 1916. Ent. News 27: 417. ♂.
- leucophthalmus* Ashmead. Ont.
Cratomus leucophthalmus Ashmead, 1888. Canad. Ent. 20: 55. ♂.
- megacephalus* (Fabricius). N. J., Ill.
Cynips megacephala Fabricius, 1793. Ent. System., v. 2, p. 103.
Caratomus megalcephalus Schulz, 1906. Spolia Hym., p. 144. Emend.

Tribe HALTICOPTERINI

Genus HALTICOPTERA Spinola

- Halticoptera* Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 148.
Type: *Diplolepis flavicornis* Spinola. Desig. by Ashmead, 1904.
- Phagonia* Curtis, 1832. Brit. Ent., v. 9, p. 427.
Type: *Diplolepis flavicornis* Spinola. Orig. desig.

Dicyclus Walker, 1833. Ent. Mag. 1: 371, 455.

Type: *Dicyclus aeneus* Walker. Desig. by Westwood, 1840.

Megorismus Walker, 1846. List Hym. Brit. Mus., v. 1, p. 29. N. syn.

Type: *Miscogaster daiphron* Walker. Monob.

Megalorismus Schulz, 1906. Spolia Hym., p. 147. Emend. N. syn.

aenea (Walker). Throughout East. and Cent. U. S.; Ariz., Calif., Ont. Hosts: *Phloeosinus dentatus* (Say); *Phytophaga destructor* (Say); *Agromyza angulata* Loew; *A. citreifrons* Mall.; *A. coquilletti* Mall.; *A. melampyga* Loew; *A. parvicornis* Loew; *A. pusilla* Meig.; *A. virens* Loew; *Cerodonta dorsalis* Loew; *C. femoralis* (Meig.); *Phytomyza delphiniae* Frost; *Meromyza americana* Fitch; *Oscinella* sp.

Dicyclus aeneus Walker, 1833. Ent. Mag 1: 456. ♀.

Cyrtogaster liqueatus Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 336. ♂.

Cyrtogaster occidentalis Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 230.

♂ ♀

Cyrtogaster citripes Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 230. ♂.

Polycyrtus (!) *floridanus* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 230.

♂.

Polycystus foersteri Crawford, 1913. U. S. Natl. Mus. Proc. 45: 313. ♂ ♀.

Biology: Lange, 1944. Jour. Econ. Ent. 37: 394-395.

Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 116-121.

brodiei Ashmead. Ont., Conn., N. J.

Halticoptera Brodiei Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 192. ♀.

goodi Crawford. N. S.

Halticoptera goodi Crawford, 1915. Insecutor Inscitiae Menstruus 3: 107.

♂ ♀.

stella Girault. Calif.

Halticoptera stella Girault, 1917 (May). Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 1. ♀.

Megorismus poloni Girault, 1917 (June). Psyche 24: 27. ♀.

Tribe SPHEGIGASTERINI

Genus TRIGONOASTRA Ashmead

Trigonogastra Ashmead, 1904. Carnegie Mus. Mem. 1: 330.

Type: *Trigonogastra aurata* Ashmead. Monob.

aurata Ashmead. Mich.

Trigonogastra aurata Ashmead, 1904. Carnegie Mus. Mem. 1: 330, 392. ♀.

Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 317.

Genus CYRTOGASTER Walker

Cyrtogaster Walker, 1833. Ent. Mag. 1: 371, 381.

Type: *Cyrtogaster rufipes* Walker. Desig. by Westwood, 1840.

glasgowi Crawford. Ill. Host: *Brachydeutera argentata* (Wlkr.).

Cyrtogaster glasgowi Crawford, 1914. Insecutor Inscitiae Menstruus 2: 36.

♂ ♀.

vulgaris Walker. B. C. Host: *Phytomyza ilicis* Curt.

Cyrtogaster vulgaris Walker, 1833. Ent. Mag. 1: 382. ♂ ♀.

Biology: Cameron, 1939. Bul. Ent. Res. 30: 178-180, 197-199.

Genus GYRINOPHAGUS Ruschka

Gyrinophagus Ruschka, 1914. Zool.-Bot. Gesell. Wien, Verh. 64: 208.

Type: *Gyrinophagus luteipes* Ruschka. Monob

dineutis (Ashmead) n. comb. N. J., Mich., Iowa. Hosts: *Dineutes assimilis* (Kby.); *Gyrinus* sp.

Cyrtogaster dineutis Ashmead, 1894. Canad. Ent. 26: 26. ♀.

Biology: Butcher, 1933. Ent. Soc. Amer. Ann. 26: 83.—Galtsoff, Lutz, Welch, and Needham, 1937. Culture Methods for Invertebrate Animals, pp. 496-497.

Genus EURYDINOTA Foerster

Eurydinota Foerster, 1878 Naturh. Ver. Rheinlande Verh. 35: 42.

Type: *Eurydinota leptomera* Foerster. Monob.

lividicorpus Girault. Que., Maine, Conn., Pa., Va., Wis., Calif., Oreg., Wash.
Hosts: *Coleophora malivorella* Riley; *C. pruniella* Clem.; *C. sacramento*
Heinr.; *C. salmani* Heinr.

Eurydinota lividicorpus Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 86. ♂

♀.

Biology: [Christensen] 1934. Wis. Agr. Expt. Sta. Bul. 428: 101.—Beacher, 1947.
Ent. Soc. Amer. Ann. 40: 532-544.

rufiventris Girault. Ga.

Eurydinota rufiventris Girault, 1920. U. S. Natl. Mus. Proc. 58: 212. ♀.

Genus HETEROSCHEMA Gahan

Heteroschema Gahan, 1919. U. S. Natl. Mus. Proc. 55: 126.

Type: (*Heteroschema prima* Gahan) = *Pteromalus rugosopunctata* Ashmead. Monob.

Revision: Gahan, 1938. Ent. Soc. Wash. Proc. 40: 222-224.

aeneiventris (Ashmead), n. comb. Kans.

Sphegigaster aeneiventris Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3:
App. p. VI. ♂.

punctata (Ashmead). Fla., Ariz. Hosts: *Parozyna piccicola* Bigot; *Agromyza*
virens Loew.

Glyphe punctata Ashmead, 1894. Linn. Soc. London, Jour., Zool. 25: 162 ♀.

rugosopunctata (Ashmead) Ariz; St Vincent Isl. Host: *Agromyza gibsoni* Mall.

Pteromalus rugosopunctatus Ashmead, 1894. Linn. Soc. London, Jour.
Zool. 25: 165. ♂ ♀.

Heteroschema prima Gahan, 1919. U. S. Natl. Mus. Proc. 55: 126. ♂ ♀.

Genus PANSTENON Walker

Panstenon Walker 1846. List Hym. Brit. Mus. v. 1, p. 29.

Type: *Miscogaster oxylus* Walker. Monob.

columbianum Ashmead. D. C.

Panstenon columbiana Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 231. ♀.

Subfamily PTEROMALINAE

Revision: Kurdjumov, 1913. Rev. Russe d'Ent. 13: 1-24.

Tribe EUNOTINI

Revision: Masi, 1931. Eos 7: 411-459. (Eunotinae).

Genus TOMOCERA Howard

Tomocera Howard, 1881. In Comstock, U. S. Dept. Agr. Ann Rpt. for 1880,
p. 368.

Type: *Tomocera californica* Howard. Monob.

Dilophogaster Howard, 1886. Ent. Amer. 2: 98. N. name.

Eunotomyia Masi, 1917. Nov. Zool. 24: 297.

Type: *Eunotomyia festiva* Masi. Monob.

Revision: Mercet, 1924. Soc. Españ. Hist. Nat. Bol. 24: 422-426.

californica Howard. Calif. Hosts: ?*Symphorobius californicus* Banks; *Coccus*
hesperidum L.; *Saissetia oleae* (Bern.); *Microterys flavus* (How.).

Tomocera californica Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880,
pp. 252, 368. ♀.

Biology: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 242, 317-321.—
Essig, 1931. A Hist. of Ent., pp. 139-143, 334-335, 366, 387.

Genus EUNOTUS Walker

Eunotus Walker, 1834. Ent. Mag. 2: 297.

Type: *Eunotus cretaceus* Walker. Monob.

Megapelte Foerster, 1856. Hym. Stud., v. 2, p. 63. N. name.

americanus Girault. Maine. Host: *Eriopeltis festucae* Fonse.

Eunotus americanus Girault, 1915. Ent. Soc. Amer. Ann. 8: 273. ♂ ♀.

lividus Ashmead. Ont., N. Y., N. J., Ohio, N. C., Ga., Colo. Hosts: *Lecanium corni*

Bouché; *L. nigrofasciatum* Perg.; *Pulvinaria vitis* (L.).

Eunotus lividus Ashmead, 1892. Ent. Soc. Wash. Proc. 2: 288. ♀.

Biology: Smith, 1906. N. J. Agr. Expt. Sta. Ann. Rpt. 26: 606-607.—Johnson, 1906.

Colo. Agr. Expt. Sta. Bul. 116: 11.

Genus SCUTELLISTA Motschulsky

Scutellista Motschulsky, 1859. Études Ent. 8: 172, 177.

Type: *Scutellista cyanea* Motschulsky. Monob.

Aspidocoris Costa, 1863. Ann. Accad. Aspiranti Nat. Napoli (3) 2: Bol. p. 25.

Type: *Aspidocoris cyaneus* Costa. Monob.

Revision: Masi, 1931. Eos 7: 456-459.

cyanea Motschulsky. D. C., Fla., La., Calif. Hosts: ?*Ceroplastes floridensis* Comst.;

Coccus hesperidum L.; *Lecanium corni* Bouché; *Phenacoccus artemisiae*

Ehrh.; *Saissetia hemisphaerica* (Targ.); *S. nigra* (Nietn.); *S. oleae* (Bern.).

Scutellista cyanea Motschulsky, 1859. Etudes Ent. 8: 172. ♂ ♀.

Biology: Essig, 1931. A Hist. of Ent., pp. 335-337, 360, 388.—Woglum, LaFollette,

Landon, and Lewis, 1947. Jour. Econ. Ent. 40: 818-819.

Taxonomy: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 242, 322-332.

Tribe PIRENINI

Revision: Ferrière, 1934. Schweiz. Ent. Gesell. Mitt. 16: 83-92. (Pireninae.)

Genus PIRENE Haliday

Pirene Haliday, 1833. Ent. Mag. 1: 336.

Type: *Pirene varicornis* Haliday. Desig. by Westwood, 1840.

Corynocere Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 123.

Type: *Corynocere deplana* Nees. Desig. by Gahan and Fagan, 1923.

Phocion Girault, 1925. Insector Inscitiae Menstruus 13: 91.

Type: *Phocion ipswichi* Girault. Orig. desig.

Pirenisca Ghesquière, 1946. Rev. Zool. Bot. Africaines 34: 369. N. name.

marylandensis Girault. Md.

Pirene marylandensis Girault, 1916. Brooklyn Ent. Soc. Bul. 11: 88. ♀.

marylandica Girault. Md.

Pirene marylandica Girault, 1916. Canad. Ent. 48: 116. ♀.

Genus SPATHOPUS Ashmead

Spathopus Ashmead, 1904. Carnegie Mus. Mem. 1: 272.

Type: *Spathopus anomalipes* Ashmead. Monob.

Revision: Ferrière, 1934. Schweiz. Ent. Gesell. Mitt. 16: 86, 88.

anomalipes Ashmead. Fla.

Spathopus anomalipes Ashmead, 1904. Carnegie Mus. Mem. 1: 272. ♀.

Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 316.

Genus MORODORA Gahan

Morodora Gahan, 1933. Canad. Ent. 65: 31.

Type: *Morodora armata* Gahan. Monob.

armata Gahan. Mont. Host: *Apaulina avium* (Shan. and Dobr.).

Morodora armata Gahan, 1933. Canad. Ent. 65: 32. ♂ ♀.

Genus **PARECRIZOTES** Girault

Parecrizotes Girault, 1916. Ent. Soc. Amer. Ann. 9: 304.

Type: *Parecrizotes marylandensis* Girault. Monob.

marylandensis Girault. Md.

Parecrizotes marylandensis Girault, 1916. Ent. Soc. Amer. Ann. 9: 305. ♂
♀.

Genus **STIGMATOCREPIS** Ashmead

Stigmatocrepis Ashmead, 1904. Carnegie Mus. Mem. 1: 273, 274.

Type: *Stigmatocrepis americana* Ashmead. Monob.

americana Ashmead. Fla.

Stigmatocrepis americana Ashmead, 1904. Carnegie Mus. Mem. 1: 273, 389.

♂ ♀.

Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 316.

Genus **DIPACHYSTIGMA** Crawford

Dipachystigma Crawford, 1911. U. S. Natl. Mus. Proc. 39: 618.

Type: *Dipachystigma cushmani* Crawford. Monob.

cushmani Crawford. La. Host: *Stephanoderes* sp.

Dipachystigma cushmani Crawford, 1911. U. S. Natl. Mus. Proc. 39: 619.

♀.

secundum Girault. D. C.

Dipachystigma secunda Girault, 1917. Deser. Stellarum Nov., p. 15. ♀.

Tribe **BRACHYSCELIDIPHAGINI**Genus **HEMADAS** Crawford

Hemadas Crawford, 1909. Canad. Ent. 41: 98.

Type: *Megorismus nubilipennis* Ashmead. Monob.

Parhabritys Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V,
p. 2.

Revision: Gahan and Ferrière, 1947. Ent. Soc. Amer. Ann. 40: 292.

nubilipennis (Ashmead). Ont., Maine, Conn., N. J., Ind., Fla. Hosts: Galls on
Vaccinium spp.

Megorismus nubilipennis Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 192.

♀.

Biology: Driggers, 1927. N. Y. Ent. Soc. Jour. 35: 253-259.—McAlister and Ander-
son, 1932. Jour. Econ. Ent. 25: 1164-1169.

Morphology: Snodgrass, 1910. U. S. Natl. Mus. Proc. 39: 65.

Tribe **TRIDYMINI**Genus **TRIGONODERUS** Westwood

Trigonoderus Westwood, 1832. London, Edinb. and Dublin Phil. Mag. and
Jour. Sci. (3) 1: 127.

Type: *Trigonoderus princeps* Westwood. Monob.

Revision: Girault, 1917. Ent. News 28: 396-397.

aegeriae Ashmead. Fla. Host: ?*Melittia cucurbitae* (Harr.).

Trigonoderus aegeriae Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 192. ♀.

algonquiniae Girault, emend. Conn., Ill.

Trigonoderus algonquinia Girault, 1917. Ent. News 28: 396. ♀.

conicus Girault. Ariz.

Trigonoderus conicus Girault, 1917. Ent. News 28: 396. ♀.

irvingi Girault. Colo.

Trigonoderus irvingi Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum
Observ. V, p. 15. ♀.

nonstylatus Girault. East. U. S. Host: Itonidid.

Trigonoderus nonstylatus Girault, 1917. Ent. News 28: 396. ♀.

unguttus Girault. Md.

Trigonoderus ungtuttus Girault, 1917. Ent. News 28: 396. ♀.

Genus ELACHERTODOMYIA Girault

Elachertodomyia Girault, 1917. Canad. Ent. 49: 110.

Type: *Secodes phloeotribi* Ashmead. Monob.

phloeotribi (Ashmead). Conn., N. J., Va. Hosts: *Lixus musculus* Say; *Chramesus hickoriae* Lec.; *Phloeotribus frontalis* (Oliv.); *Pseudopityophthorus minutissimus* (Zimm.).

Secodes phloeotribi Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 233. ♂ ♀. Biology: Chittenden, 1898. Ent. Soc. Wash. Proc. 4: 78.

Taxonomy: Girault, 1917. Canad. Ent. 49: 110.

Genus TRIDYMUS Ratzeburg

Tridymus Ratzeburg, 1848. Ichn. d. Forstins., v. 2, p. 183.

Type: *Tridymus aphidum* Ratzeburg. Desig. by Ashmead, 1904.

Trydymus Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 8. Emend.

aeneicornis Girault. N. Y.

Trydymus aeneicornis Girault, 1917. Psyche 24: 98. ♀.

americensis Girault. Mich.

Trydymus americensis Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 8. ♀.

aphidis Girault. N. Y., Conn. Host: *Lasioptera vitis* O. S.

Trydymus aphidis Girault, 1917. U. S. Natl. Mus. Proc. 54: 450. ♀.

aureipes Girault. Fla.

Trydymus aureipes Girault, 1917. U. S. Natl. Mus. Proc. 53: 449. ♀.

biguttatipennis Girault. Conn., Fla.

Trydymus biguttatipennis Girault, 1917. U. S. Natl. Mus. Proc. 53: 449. ♀.

clavicornis Girault. Sask.

Trydymus clavicornis Girault, 1917. Deser. Hym. Chalcidoid. Variorum Cum Observ. V, p. 15. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 214.

gargantua Girault. Conn., N. Y.

Trydymus gargantua Girault, 1917. Psyche 24: 98. ♀.

metallicus Ashmead. N. Y., N. J., Kans. Host: *Rhabdophaga salicis* Schrank.

Trydymus metallicus Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. V. ♂ ♀.

nigriclava Girault, emend. Md.

Trydymus nigriclavus Girault, 1917. Chalcidoidea Nova Marilandensis, p. 2, ♀.

poloni Girault. N. H.

Trydymus poloni Girault, 1917. Psyche 24: 98. ♀.

robiniaecola Ashmead. W. Va., Va.

Trydymus robiniaecola Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 334. ♂ ♀.

Genus PARASYNTOMOCERA Girault

Parasyntomocera Girault, 1917. Chalcidoidea Nova Marilandensis II, p. 2.

Type: *Parasyntomocera hillmeadia* Girault. Monob.

hillmeadia Girault. Md.

Parasyntomocera hillmeadia Girault, 1917. Chalcidoidea Nova Marilandensis II, p. 2. ♀.

Genus SYSTASIS Walker

Systasis Walker, 1834. Ent. Mag. 2: 288, 296.

Type: *Systasis encyrtoides* Walker. Desig. by Westwood, 1840.

diplosidis Eckel. Mass., Calif. Hosts: *Retinodiplosis resinicoloides* (Will.); *R. resinicola* (O. S.).

Syntasis (!) *diplosidis* Eckel, 1903. Ent. News 14: 283. ♀.

Genus TEROBIA Foerster

Terobia Foerster, 1878. Naturh. Ver. Rheinlande Verh. 35: 64.

Type: *Terobia dispila* Foerster. Monob.

flora Girault. Fla.

Terobia flora Girault, 1920. U. S. Natl. Mus. Proc. 58: 216. ♂ ♀.

vulgaris Ashmead. Alaska.

Terobia vulgaris Ashmead, 1902. Wash. Acad. Sci. Proc. 4: 144. ♂ ♀.

Genus ERIXESTUS Crawford

Erixestus Crawford, 1910. U. S. Natl. Mus. Proc. 38: 87.

Type: *Erixestus winnemana* Crawford. Monob.

winnemana Crawford. Que., Md., Va. Hosts: Eggs of *Calligrapha bigsbyana* (Kby.); *C. scalaris* (Lec.).

Erixestus winnemana Crawford, 1910. U. S. Natl. Mus. Proc. 38: 88. ♂ ♀.
Biology: Daviault, 1941. Nat. Canad. 68: 106-107.

Tribe MERISINI

Genus MERISUS Walker

Merisus Walker, 1834. Ent. Mag. 2: 166.

Type: *Merisus splendidus* Walker. Monob.

Parapteromalus Ashmead, 1904. Carnegie Mus. Mem. 1: 320. N. syn.

Type: *Parapteromalus isosomatis* Ashmead. Monob.

atriscapus Gahan. N. Dak. Host: *Stipa comata*.

Merisus atriscapus Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 4. ♂ ♀.

cognatus Gahan. Calif. Host: *Phytophaga destructor* (Say).

Merisus cognatus Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 102. ♀.

cupraeus (Provancher), n. comb. "Canada," Ont. Hosts: *Megachile albitarsis* Cress.; *M. centuncularis* (L.).

Semiotellus cupraeus Provancher, 1881. Nat. Canad. 12: 295. ♂.

destructor (Say). Man., Ont., P. E. I.; N. Y. to N. C., Kans. and Minn.; Calif., Oreg., Wash. Hosts: ? *Hemerocampa leucostigma* (A. and S.); *Phytophaga destructor* (Say); *Platygaster hiemalis* Pack.; *P. vernalis* (Myers).

Ceraphron destructor Say, 1817. Acad. Nat. Sci. Phila. Jour. (1) 1: 47, 63.
Biology: Packard, 1916. Jour. Agr. Res. 6: 367.—McCulloch, 1923. Kans. Agr. Expt. Sta. Tech. Bul. 11: 64.—Hill, Pinckney, and Udine, 1939. U. S. Dept. Agr. Tech. Bul. 689: 4-15.

Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 89-95.

febriolosus Girault. Vt. to N. C., Tenn., Kans. and N. Dak. Hosts: *Phytophaga destructor* (Say); *Platygaster hiemalis* Pack.; *P. vernalis* (Myers); *Harmolita grandis* (Riley); *H. hordei* (Harr.); *H. tritici* (Fitch).

Merisus febriculosus Girault, 1917. Deser. Stellarum Nov., p. 17. ♀.
Biology: Hill, Pinckney, and Udine, 1939. U. S. Dept. Agr. Tech. Bul. 689: 4-7, 11-15.
Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 95-99.

flaviventris Girault. Md.

Merisus flaviventris Girault, 1915. Ent. Soc. Amer. Ann. 8: 282. ♀.

harmolitae Gahan. Calif. Host: *Harmolita grandis* (Riley).

Merisus harmolitae Gahan, 1928. U. S. Natl. Mus. Proc. 71 (4): 2. ♂ ♀.

- isomatis** (Ashmead), n. comb. Ind., Ill. Hosts: *Harmolita hordei* (Harr.); *H.* spp.
Parapteromalus isomatis Ashmead, 1904. Carnegie Mus. Mem. 1: 318, 384.
 ♀.
- Merisus carinatus** Girault, 1916. Soc. Ent. 31: 57. ♂ ♀.
 Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 316.
- mordellistinae** Crawford. Pa., D. C., Va., Ohio, Ind., Kans., Tex. Hosts: *Mordellistena andreae* var. *pustulata* Melsh.; ?*Mordellista* sp. in *Phleum pratense*;
Phytophaga destructor (Say); *Harmolita* sp. ex wheat straw.
- Merisus mordellistinae** Crawford, 1910. Ent. Soc. Wash. Proc. 12: 145. ♀.
 Morphology: Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 9, 11-13.
 Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 99-102.
- octoguttatus** Girault. Md.
Merisus octoguttata (!) Girault, 1915. N. Y. Ent. Soc. Jour. 23: 166. ♀.
- semilongifasciatus** Girault. Md.
Merisus semilongifasciata (!) Girault, 1915. Ent. Soc. Amer. Ann. 8: 282. ♀.
- texensis** Girault. Tex.
Merisus texensis Girault, 1917. Deser. Stellarum Nov., p. 17. ♀.

Genus MERISOPORUS Masi

- Merisoporus** Masi, 1926. Mus. Civ. Stor. Nat. Genova Ann. 50: 226.
 Type: *Homoporus luniger* Nees. Orig. desig.

- chalcidiphagus** (Walsh and Riley). Ont., N. Y. to S. C., Tenn., Kans., Nebr., and N. Dak.; Mont., Oreg. Hosts: *Phytophaga destructor* (Say); *Ditropinotus aureoviridis* (Cwfd.); *Harmolita atlantica* P. and E.; *H. elymicola* P. and E.; *H. grandis* (Riley); *H. hordei* (Harr.); *H. secale* (Fitch); *H. tritici* (Fitch); *H. vaginicola* (Doane).
- Semiotellus chalcidiphagus** Walsh and Riley, 1869. Amer. Ent. 1: 152.
 ♂ ♀.
- Biology: Phillips and Poos, 1921. Jour. Agr. Res. 21: 405-406.—Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 104-109.

Genus CALLITULA Spinola

- Callitula** Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 151.
 Type: *Callitula bicolor* Spinola. Monob.

- Micromelus** Walker, 1833. Ent. Mag. 1: 371, 464.

Type: (*Micromelus rufomaculatus* Walker)=*Callitula bicolor* Spinola. Desig. by Westwood, 1840.

- Baeotomus** Foerster, 1856. Hym. Stud., v. 2, p. 145. N. name.

- bicolor** Spinola. N. Y. to Va., Ind. and Mich.; Kans., N. Dak. Hosts: *Phytophaga destructor* (Say); *Meromyza americana* Fitch; *Oscinella frit* (L.); *Platygaster vernalis* (Myers); *P. zosine* Wlkr.

- Callitula bicolor** Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 151.

- Biology: Hill and Smith, 1928. Jour. Agr. Res. 36: 153-155.—Hill, Pinckney, and Udine, 1939. U. S. Dept. Agr. Tech. Bul. 689: 13.
 Morphology: Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 5, 11-13.

- cyrene** (Walker), n. comb. Fla.

- Micromelus cyrene** Walker, 1843. Soc. Ent. France Ann. 2 (1): 154. ♀.

- illinoensis** (Ashmead). Ill.

- Cryptopymnus illinoensis** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 228.
 ♀.

Tribe RHAPHITELINI

Genus RHAPHITELUS Walker

- Rhaphitelus** Walker, 1834. Ent. Mag. 2: 168, 178.

Type: *Rhaphitelus maculatus* Walker. Monob.

- Styloceras** Ratzeburg, 1844. Ichn. d. Forstins., v. 1, p. 207.

Type: (*Styloceras ladenbergii* Ratzeburg)=*Rhaphitelus maculatus* Walker. Desig. by Gahan and Fagan, 1923.

- Rhaphidotelus* Agassiz, 1846. Nomencl. Zool., Index Univ., p. 932. Emend.
Storthyocer Ratzeburg, 1848. Ichn. d. Forstins., v. 2, p. 208. N. name.
 Revision: Ferrière, 1948. Schweiz. Ent. Gesell. Mitt. 21: 526-528.
- maculatus* Walker. N. Y., Conn., N. J., Ohio, N. C., Calif. Hosts: *Magdalis armicollis* (Say); *M. barbata* (Say); *Magdalis* spp.; *Pissodes strobi* (Peck); *Scolytus rugulosus* (Ratz.).
- Rhaphitelus maculatus* Walker, 1834. Ent. Mag. 2: 179. ♂.
 Biology: morphology: Russo, 1938: R. Lab. Ent. Agr. Portici Bol. 2: 216-225.

Tribe PTEROMALINI

Genus PACHYCERAS Ratzeburg

- Pachyceras* Ratzeburg, 1844. Ichn. d. Forstins., v. 1, table facing p. 40; p. 217.
 Type: *Pachyceras xylophagorum* Ratzeburg. Autob.
- Roptrocer* Ratzeburg, 1848. Ichn. d. Forstins., v. 2, p. 209. N. name.
 Unnecessarily proposed.
 Type: *Pachyceras xylophagorum* Ratzeburg. Desig. by Ashmead, 1904.
- Rhoptrocer* Dalla Torre, 1898. Cat. Hym., v. 5, p. 98. Emend.
- eccoptogastris* Ratzeburg. N. Y., Va., N. C., Mont.; Idaho, Wash. Hosts: *Dendroctonus frontalis* Zimm.; *D. monticolae* Hopk.; *D. pseudotsugae* Hopk.; *Ips calligraphus* (Germ.); ?*I. grandicollis* (Eichh.); *I. pini* (Say); *Orthotomicus caelatus* (Eichh.).
- Pachyceras Eccoptogastris* Ratzeburg, 1844. Ichn. d. Forstins. v. 1, p. 218
 ♀.
 Biology: Evenden, 1943. U. S. Dept. Agr. Cir. 664: 17.
- rectus* (Provancher). Que., N. Y., Mich., Calif.
Roptrocerus rectus Provancher 1887. Addit. Corr. Faune Ent. Canada Hym., p. 202. ♀.
- xylophagorum* Ratzeburg. N. H. to N. C., La. Hosts: ?*Orthotomicus caelatus* (Eichh.); ?*Phloeosinus dentatus* (Say); *Polygraphus rufipennis* (Kby.); *Scolytus rugulosus* (Ratz.).
- Pachyceras Xylophagorum* Ratzeburg, 1844. Ichn. d. Forstins., v. 1, p. 218.
 ♀.
- Platygerrius* (?) *scolyti* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 335.
 "♀" = ♂. N. syn.

Genus METACOLUS Foerster

- Metacolus* Foerster, 1856. Hym. Stud., v. 2, pp. 65, 70.
 Type: *Metacolus unifasciatus* Foerster. Monob.
- bifasciatus* Girault. ?W. Va.
Metacolus bifasciatus Girault, 1917. Descr. Stellarum Nov., p. 14. ♂ ♀.
- fasciatus* Girault. N. Mex.
Metacolus fasciatus Girault, 1917. Descr. Stellarum Nov., p. 14. ♀.

Genus DINOTISCUS Ghesquière

- Dinotus* Foerster, 1856. Hym. Stud., v. 2, pp. 66, 70. No species. Preocc.
 Type: *Dinotus bidentulus* Thomson. Desig. by Ashmead, 1904.
- Dinotiscus* Ghesquière, 1946. Rev. Zool. Bot. Africaines 34: 370. N. name.
- agrili* (Rohwer), n. comb. Calif. Host: *Agrilus angelicus* Horn.
Dinotus agrili Rohwer, 1919. Ent. Soc. Wash. Proc. 21: 6. ♀.
- elongatus* (Ashmead), n. comb. ?Fla.
Dinotus elongatus Ashmead, 1888. Canad. Ent. 20: 175. ♀.

Genus RHOPALICUS Foerster

- Rhopalicus* Foerster, 1856. Hym. Stud., v. 2, pp. 66, 70.
 Type: (*Cleonymus maculifer* Foerster) = *Cheiropachus tutela* Walker. Monob.

pallipes Provancher. Que.

Rhopalicus pallipes (!) Provancher, 1888. Addit. Corr. Faune Ent. Canada Hym., p. 407. ♀. (*R. pallipes* in index.)

Rhopalicus pallidipes Dalla Torre, 1898. Cat. Hym., v. 5, p. 177. Emend.

pulchripennis (Crawford). Maine, N. H., Mass., N. Y., Mich., Mont., Calif., Wash. Hosts: *Cylindrocopturus eatoni* Buch.; *C. furnissi* Buch.; *Dendroctonus monticolae* Hopk.; *Pissodes strobi* Peck; *P. sp.*; ?*Polygraphus rufipennis* (Kby.); ?*Scolytus piceae* (Swaine); ?*Ceoloides dendroctoni* Cush.

Spintherus pulchripennis Crawford, 1912. U. S. Natl. Mus. Proc. 43: 168.

♀.

Rhopalicus americanus Girault, 1916. Ent. Soc. Amer. Ann. 9: 296. ♀. Biology: Taylor, 1929. Ent. Amer. 10: 17-22, 66-67. ♂ ♀.

Taxonomy: Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 16.

tutela (Walker). N. H., Conn. Hosts: *Pissodes notatus* (F.); *P. strobi* (Peck).

Cheirapachus tutela Walker, 1836. Ent. Mag. 4: 14. ♂ ♀.

Pteromalus suspensus Ratzeburg, 1844. Ichn. d. Forstins., v. 1 p. 189.

Taxonomy: Ferrière, 1948. Schweiz. Ent. Gesell. Mitt. 21: 519-521.

Genus AMBLYMERUS Walker

Amblymerus Walker, 1834. Ent. Mag. 2: 303, 306.

Type: *Amblymerus amoenus* Walker. Desig. by Westwood, 1840.

Eutelus Walker, 1834. Ent. Mag. 2: 351, 356.

Type: (*Eutelus dilectus* Walker) = *Amblymerus amoenus* Walker. Desig. by Westwood, 1840.

betulae (Girault), n. comb. N. Y. Host: *Semudobia betulae* Winnertz.

Eutelus betulae Girault, 1917. Psyche 24: 93. ♂ ♀.

bruchophagi (Gahan). Wyo., Utah, Calif., Idaho. Hosts: *Bruchophagus gibbus* (Boh.); ?*B. mexicanus* Ashm.

Eutelus bruchophagi Gahan, 1917. U. S. Natl. Mus. Proc. 53: 212. ♂ ♀.

Biology: Sorenson, 1934. Utah Agr. Expt. Sta. Bul. 250: 50.

Biology and morphology: Urbahns, 1919. Jour. Agr. Res. 16: 171-172.

confusus (Ashmead), n. comb. Alaska, Mont. Host: ?*Ips oregonis* (Eichh.).

Eutelus confusus Ashmead, 1902. Wash. Acad. Sci. Proc. 4: 145. ♂ ♀.

flavipes (Walker). Oreg., Wash. Host: *Cheilosia alaskensis* Hunter.

Eutelus flavipes Walker, 1834. Ent. Mag. 2: 364. ♀.

justicia Girault. N. Mex., Calif. Host: *Diarthronomyia hypogaea* Loew.

Amblymerus justicia Girault, 1917. Descr. Stellarum Nov., p. 21. ♂ ♀.

mayetiolae (Gahan). Calif., Oreg., Wash. Hosts: *Phytophaga destructor* (Say); *Harmolita* sp. on canary grass.

Eutelus mayetiolae Gahan, 1919. U. S. Natl. Mus. Proc. 55: 128. ♂ ♀.

Biology: Packard, 1928. U. S. Dept. Agr. Tech. Bul. 81: 14.—Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 65-67.

ruskini (Girault), n. comb. Colo.

Eutelus ruskini Girault, 1917 (1916). Insecutor Inscitiae Menstruus 4: 113. ♀.

salicis (Girault), n. comb. Mass. Host: Itonidid gall on *Salix longifolia*.

Eutelus salicis Girault, 1917. Psyche 24: 94. ♀.

verditer (Norton). Ont. to N. J.; Man., Idaho, Oreg., B. C. Hosts: *Camptilychila aemula* (Hbn.); *Barbara colfaxiana colfaxiana* (Kearf.); *Taniva albolineana* (Kearf.); *Choristoneura fumiferana* (Clem.); *Tortrix packardiana* Fern.; *Diprion hercyniae* (Htg.); *D. similis* (Htg.); *Neodiprion abietis* (Harr.); *N. tsugae* Middl.; *Phytodietus fumiferanae* Roh.

Pteromalus verditer Norton, 1869. Amer. Ent. Soc. Trans. 2: 327. ♂ ♀.

Biology: Dowden, Buchanan, and Carolin, 1948. Jour. Econ. Ent. 41: 459.

Taxonomy: Gahan, 1938. Ent. Soc. Wash. Proc. 40: 222.

Genus ZACALOCHLORA Crawford

Zacalochlora Crawford, 1913. U. S. Natl. Mus. Proc. 45: 251.

Type: *Zacalochlora milleri* Crawford. Monob.

- milleri* Crawford. Calif. Host: *Laspeyresia* spp. in cones of *Pinus jeffreyi*.
Zacalochlora milleri Crawford, 1913. U. S. Natl. Mus. Proc. 45: 251. ♀.

Genus PLATYTERMA Walker

Platyterma Walker, 1834. Ent. Mag. 2: 303.

Type: *Platyterma nobile* Walker. Desig. by Westwood, 1840.

Platytermus Thomson, 1878. Hym. Scand., v. 5, p. 75. Emend.

- citripes* Ashmead. Colo., Wyo.

Platyterma citripes Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 223. ♀.

- fuscipes* Ashmead. Mich.

Platyterma fuscipes Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 223. ♀.

Genus COELOPISTHIA Foerster

Coelopisthia Foerster, 1856. Hym. Stud., v. 2, p. 65 (no species).

Type: *Pteromalus cephalotes* Walker. Desig. by Ashmead, 1904.

Coelopisthus Thomson, 1878. Hym. Scand., v. 5, p. 162. Emend.

- bicarinata* Girault. No. Amer.

Coelopisthia bicarinata Girault, 1916. Soc. Ent. 31: 57. ♂ ♀.

- forbesii* (Dalla Torre). N. J., Ill., La. Hosts: *Apantesis nais* (Drury); *Catocala* sp. on hickory.

Pteromalus pallipes Forbes, 1885. Ill. State Dept. Agr. Trans. 22: App. pp. 46, 49. Preoc.

Pteromalus forbesii Dalla Torre, 1898. Cat. Hym., v. 5, p. 125. N. name.

Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 145-146.

- fumosipennis* Gahan. Md. Host: Lepidopterous pupa.

Coelopisthia fumosipennis Gahan, 1909. Canad. Ent. 41: 431. ♀.

- intermedia* Girault. D. C.

Coelopisthia intermedia Girault, 1916. Soc. Ent. 31: 57. ♀.

- smithii* Gahan. N. J.

Coelopisthia smithii Gahan, 1913. Canad. Ent. 45: 179.

- suborbicularis* (Provancher). Que., N. H., Md., Ill. Host: ?*Pissodes strobi* (Peck); *Agrotis* sp.; caterpillar in *Solidago* gall; *Itoplectis conquisitor* (Say).

Semiotellus suborbicularis Provancher, 1881. Nat. Canad. 12: 296. ♀.

Biology: Fiske, 1903. N. H. Agr. Expt. Sta. Tech. Bul. 6: 182, 197, 228.

Genus DIBRACHOIDES Kurdjumov

Dibrachoides Kurdjumov, 1913. Rev. Russe d'Ent. 13: 12.

Type: *Pteromalus dynastes* Foerster. Monob.

- dynastes* (Foerster). Utah, Oreg., Wash. Hosts: *Hypera nigrirostris* (F.); *H. postica* (Gyll.); *H. rumicis* (L.).

Pteromalus dynastes Foerster, 1840. Beitr. Monog. Pteromalidae, p. 24. ♀.

Biology: Smith, 1930. Ent. Soc. Amer. Ann. 23: 577-593.

Genus BELONURA Ashmead

Belonura Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 224.

Type: *Belonura singularis* Ashmead. Monob.

- singularis* Ashmead. Maine, Mass., Va., Ga.

Belonura singularis Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 225. ♀.

Genus UROLEPIS Walker

Urolepis Walker, 1846. List Hym. Brit. Mus., v. 1, p. 26.

Type: *Ormocerus maritimus* Walker. Monob.

Halizoa Foerster, 1856. Hym. Stud., v. 2, p. 145. N. name.

- rufipes* (Ashmead). Calif. Host: *Ephydra hians* Say.

Halizoa rufipes Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 225. ♂ ♀.

Genus EPIPTEROMALUS Ashmead

Epipteromalus Ashmead, 1904. Carnegie Mus. Mem. 1: 319.

Type: *Epipteromalus algonquinensis* Ashmead. Monob.

algonquinensis Ashmead. Ill.

Epipteromalus algonquinensis Ashmead, 1904. Carnegie Mus. Mem. 1: 318-319. ♀.

Polycystus gibbus Girault, 1920. U. S. Natl. Mus. Proc. 58: 212. ♀.

Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 315.

Genus TRICHOMALUS Thomson

Trichomalus Thomson, 1878. Hym. Scand., v. 5, pp. 131, 134.

Type: *Trichomalus punctinucha* Thomson. Desig. by Ashmead, 1904.

fasciatus (Thomson). Wash. Host: *Ceutorhynchus assimilis* (Paykull).

Isocyrtus (Trichomalus) fasciatus Thomson, 1878. Hym. Scand., v. 5, p. 139. ♂ ♀.

Biology: Heymons, 1921. Ztschr. f. Angew. Ent. 8: 108-111.

Genus DIGLOCHIS Foerster

Diglochis Foerster, 1856. Hym. Stud., v. 2, p. 65 (no species).

Type: *Pteromalus complanatus* Ratzeburg. Included by Mayr, 1904.

Trichoglenus Thomson, 1878. Hym. Scand., v. 5, p. 146, 149.

Type: *Pteromalus complanatus* Ratzeburg. Monob.

occidentalis (Ashmead). Conn., Minn., Sask., Alta., Wash. Hosts: *Chrysops aestuans* Wulp; *C. excitans* Wlkr.; *C. mitis* O. S.

Trichoglenes (!) occidentalis Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 225. ♀.

Genus TRITNEPTIS Girault

Tritneptis Girault, 1908. Psyche, 15: 92.

Type: *Tritneptis hemerocampae* Girault. Monob.

Revision: Gahan, 1938. Ent. Soc. Wash. Proc. 40: 213-214.

diprionis Gahan. Maine, Mass., Minn. Host: *Neodiprion sertifer* (Geof.).

Tritneptis diprionis Gahan, 1938. Ent. Soc. Wash. Proc. 40: 217. ♂ ♀.

hemerocampae Girault. Que. to W. Va., Ill., Colo., B. C. Hosts: *Papilio ajax* L.; *Diacrisia virginica* (F.); *Estigmene acrea* (Drury); *Hemerocampa leucostigma* (A. and S.); *Stilpnotia salicis* (L.); *Carpocapsa pomonella* (L.); *Grapholitha molesta* (Busck); *Coleophora malivorella* Riley; *Diprion hercyniae* (Htg.).

Tritneptis hemerocampae Girault, 1908. Psyche 15: 90, 92. ♂ ♀.

Coelopisthia diacrisiae Crawford, 1910. Ent. Soc. Wash. Proc. 12: 145. ♀.

Amblymerus lipardis (!) Viereck, 1924. Canad. Ent. 56: 69. ♂ ♀.

Biology: Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 6, 153.

klugii (Ratzeburg). Maine, Ont., Wis., Minn., Mont., Idaho, Ore., B. C. Hosts: *Diprion hercyniae* (Htg.); *Neodiprion banksianae* Roh.; *N. tsugae* Midd.; *Pristiphora erichsonii* (Htg.).

Pteromalus Klugii Ratzeburg, 1844. Ichn. d. Forstins., v. 1, p. 198. ♀.

Pteromalus nematicida Packard, 1883. U. S. Dept. Agr. Ann. Rpt. for 1883, p. 146.

Biology: Hewitt, 1912. Canad. Dept. Agr. Div. Ent. Bul. 5: 28.—Finlayson and Reeks, 1936. Canad. Ent. 68: 163.—Finlayson, 1938. Ent. Soc. Ontario Ann. Rpt. 69: 34-35.

koebelei Gahan. Calif. Host: ?*Caliroa cerasi* (L.).

Tritneptis koebelei Gahan, 1938. Ent. Soc. Wash. Proc. 40: 218. ♂ ♀.

scutellata (Muesebeck). New England. Host: *Apanteles melanoscelus* (Ratz.).

Coelopisthia scutellata Muesebeck, 1927. Jour. Agr. Res. 34: 331. ♂ ♀.

Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 27.

Genus PSEUDOMICROMELUS Gahan and Fagan

Micromelus Dalla Torre, 1898. Cat. Hym., v. 5, p. 184. Preocc.

Type: *Micromelus silvanus* Walker. Desig. by Gahan and Fagan, 1923.

Pseudomicromelus Gahan and Fagan, 1923. U. S. Natl. Mus. Bul. 124: 124. N. name.

deplanatus (Nees). Calif. Host: *Anarsia lineatella* Zell.

Pteromalus deplanatus Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 110.

♂ ♀.

Taxonomy: Gahan, 1938. Ent. Soc. Wash. Proc. 40: 226.

Genus DIBRACHYS Foerster

Dibrachys Foerster, 1856. Hym. Stud., v. 2, p. 65. No species.

Type: (*Pteromalus bouchéanus* Ratzeburg)=*Pteromalus cavus* Walker. Desig. by Thomson, 1878.

Coelopisthoidea Gahan, 1913. Canad. Ent. 45: 179.

Type: (*Coelopisthoidea cladiae* Gahan)=*Pteromalus saltans* Ratzeburg. Orig. desig.

cavus (Walker). East. U. S. and Canada, Colo., Utah, Calif., Oreg., Idaho, B. C. Hosts: *Symphorobius californicus* Banks; *Chrysopa californica* Coq.; *C. lateralis* Guer.; *C. majuscula* Banks; *Stegobium paniceum* (L.); *Sitophilus granarius* (L.); *S. oryza* (L.); ?*Pieris rapae* (L.); *Oeneis melissa semidea* (Say); *Samia cecropia* (L.); *Acronycta populii* Riley; *Camptylorchila aemula* (Hbn.); *Peridroma margaritosa* (Haw.); *Hemerocampa leucostigma* (A. and S.); *H. vetusta* (Bdvl.); *Notolophus antiqua* (L.); *Porthetria dispar* L.; *Malacosoma americanum* (F.); *M. californicum* (Pack.); *M. constrictum* (Stretch); *M. dissertia* Hbn.; *Lambdina fiscellaria somnariaria* (Hulst); *Phlyctaenia rubigalis* (Guen.); *Dicymolomia pegasalis* (Wlkr.); *Galleria mellonella* (L.); *Plodia interpunctella* (Hbn.); *Barbara colfaxeana colfaxeana* (Kearf.); *Carpocapsa pomonella* (L.); *Epiblema scudderiana* (Clem.); *Grapholitha molesta* (Busek); *Taniva albolineana* (Kearf.); *Archips cerasivorana* (Fitch); *A. semiferana* (Wlkr.); *Argyrotaenia velutinana* (Wlkr.); *Tortrix packardiana* Fern.; *Anarsia lineatella* Zell.; *Dichomeris marginella* (F.); *Gnorimoschema gallaesolidaginis* (Riley); *G. operculella* (Zell.); *Sitotroga cerealella* (Oliv.); *Anthophila pariana* (Clerck); *Eurukittarus confederata* (Grote); *Thyridopteryx ephemeraeformis* (Haw.); *Nemapogon granella* (L.); *Bigonicheta setipennis* (Fall.); *Compsilura concinnata* (Meig.); *Mericia aldrichi* (Tns.); *Nemorilla floralis* (Fall.); *Phorocera tortricis* Coq.; *Diprion hercyniae* (Htg.); *D. similis* (Htg.); *Neodiprion abietis* (Harr.); ?*Nematus ribesii* (Scop.); *Apanteles clisiocampae* Ashm.; *A. hyphantriae* Riley; *A. lacticolor* Vier.; *A. melanoscelus* (Ratz.); *A. solitarius* (Ratz.); *Ascogaster quadridentata* Wesm.; *Bracon gelechia* Ashm.; *B. johannseni* (Vier.); *B. sp.*; *Chelonus shoshoneanorum* Vier.; *Macrocentrus ancylivorus* Roh.; *M. sp.*; *Meteorus acronyctae* Mues.; *M. communis* (Cress.); *M. hyphantriae* Riley; *M. vesicolor* (Wesm.); *Perilitus coccinellae* (Schrank); *Rogas stigmator* (Say); *Sphoeropyx bicolor* Cress.; *braconid*; *Bathyplectes curculionis* (Thoms.); *Bathythrix pimplae* (How.); *Campoplex validus* (Cress.); *Coccygomimus aequalis* (Prov.); *C. sanguinipes* (Cress.); *Erigorgus* sp.; *Gambrus extrematis* (Cress.); *Horogenes acutus* (Vier.); *Hyposoter fugitivus fugitivus* (Say); *H. fugitivus pacificus* Cush.; *H. pilosulus* (Prov.); *Iseropus coelebs* Walsh; *Itoplectis conquisitor* (Say); *Mastrus carpocapsae* (Cush.); *Phaogenes walsbiae* Ashm.; *Phobocampe clisiocampae* (Weed); *Polistiphaga fulva* (Cress.); *Theronia atalantae* (Poda); *Eurydinota lividicorpus* Gir.; *Habrocytus phycidis* Ashm.; ?*Pteromalus puparum* (L.); ?*Ceratostomicra debilis* (Say); *Epeira foliata* (Fourc.); *Philodromus aureolus* (Oliv.).

Pteromalus cavus Walker, 1835. Ent. Mag. 2: 477. ♂ ♀.

Pteromalus Bouchéanus Ratzeburg, 1844. Ichn. d. Forstins., v. 1, p. 196. ♀.

Cleonymus Clisiocampae Fitch, 1855. N. Y. State Agr. Soc. Trans. 15: 431.

♂ ♀.

Cheiopachus nigro-cyaneus Norton, 1869. Amer. Ent. Soc. Trans. 2: 327.

♀.

Pteromalus gelechia Webster, 1883. Ill. State Dept. Agr. Trans. (n. s.) 12: 151. ♂ ♀.

- Chiropachys nigrocyaneus* Cresson, 1887. Amer. Ent. Soc. Trans. (sup. vol.), p. 242. Emend.
- Pteromalus chionobae* Howard, 1889. In Scudder, Butterflies of Eastern U. S. and Canada, pp. 1872, 1889. ♀
- Arthrolytus apatellae* Ashmead, 1893. Ohio Agr. Expt. Sta. Tech. Ser. Bul. 1: 162. ♀.
- Arthrolytus pimplae* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 339. ♂ ♀. Biology: Fiske, 1903. N. H. Agr. Expt. Sta. Tech. Bul. 6: 182, 197, 205-206, 213, 220, 224-227.—Morris, Cameron, and Jepson, 1937. Bul. Ent. Res. 28: 383, 390-391.—Gontarski, 1939. Ztschr. f. Morph. u. Ökol. der Tiere 35: 203-220.—Boyce, 1941. Ent. Soc. Ontario Ann. Rpt. 71: 41.
- Taxonomy: Gahan, 1938. Ent. Soc. Wash. Proc. 40: 211.
- confusus** (Girault), n. comb. D. C.
- Coelopisthia confusa* Girault, 1916. Canad. Ent. 48: 246. ♀.
- daphne** Girault. Calif. Hosts: *Sympherobius barberi* (Banks); *S. californicus* Banks.
- Dibrachys daphne* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 9. ♀.
- saltans** (Ratzeburg). Md., N. Dak., Wash. Hosts: *Cladius isomerus* Nort.; in stem of *Stipa comata*.
- Pteromalus saltans* Ratzeburg, 1852. Ichn. d. Forstins., v. 3, p. 232. ♂ ♀.
- Coelopisthoidea cladiae* Gahan, 1913. Canad. Ent. 45: 179. ♂ ♀.
- Taxonomy: Gahan, 1938. Ent. Soc. Wash. Proc. 40: 212.

Genus EUPTEROMALUS Kurdjumov

- Eupteromalus* Kurdjumov, 1913. Rev. Russe d'Ent. 13: 12.
- Type: *Pteromalus nidulans* Thomson. Orig. desig.
- Nemicromelus* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 4.
- Type: *Merisus subapterus* Riley. Monob.
- americanus** Gahan. Mich., Iowa, N. Dak., Wash., Oreg., Calif. Host: *Phytophaga destructor* (Say).
- Eupteromalus americanus* Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 82. ♂ ♀.
- cognatus** Gahan. Ohio. Hosts: *Epeira foliata* (Fourc.); *E. undata* (Oliv.); *Philodromus aureolus* (Oliv.).
- Eupteromalus cognatus* Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 16. ♂ ♀.
- Biology: Auten, 1925. Ent. Soc. Amer. Ann. 18: 242.
- dubius** (Ashmead). D. C., Ohio, Ill., Iowa, Wis. Hosts: *Toxomerus polita* (Say); ?*Masicera myoidea* Desv.; *M. senilis* Meig.; dipterous puparium in *Ambrosia* stem; *Microplitis gortynae* Riley; *Lissonota* sp.
- Meraporus dubius* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 219. ♂ ♀.
- Biology: Breakey, 1930. Ent. Soc. Amer. Ann. 23: 186.
- leguminis** Gahan. Wyo., Utah, Idaho, Nev., Oreg. Hosts: *Bruchus pisorum* (L.); *Bathyplectes curculionis* (Thoms.); *B.* sp.
- Eupteromalus leguminis* Gahan, 1937. Ent. Soc. Wash. Proc. 39: 63. ♂ ♀.
- nidulans** (Thomson) (*Pteromalus egregius* American authors, not Foerster). New England, east and west coasts of Canada. Hosts: *Nygmyia phaeorrhoea* (Donov.); *Porthetria dispar* (L.); *Stilpnotia salicis* (L.); *Ceromasia senilis* Meig.; *Apanteles lacticolor* Vier.; *A. melanoscelus* (Ratz.); *A. solitarius* (Ratz.); *Meteorus versicolor* (Wesm.); *Rogas unicolor* (Wesm.).
- Pteromalus nidulans* Thomson, 1878. Hym. Scand., v. 5, p. 155. ♂ ♀.
- Biology: Howard and Fiske, 1911. U. S. Dept. Agr. Bur. Ent. Bul. 91: 61, 65, 69, 88, 262, 268-278, 309.—Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 28-29.—Proper, 1934. Jour. Agr. Res. 48: 360-375.—Jones, Webber, and Dowden, 1938. U. S. Dept. Agr. Cir. 459: 7-8, 14-24.
- sarcophagae** Gahan. Mich., Kans. Hosts: Mine of *Nepticula* sp. in *Scirpus occidentalis*; *Sarcophaga kellyi* Ald.
- Eupteromalus sarcophagae* Gahan, 1914. U. S. Natl. Mus. Proc. 48: 163. ♂ ♀.

subapterus (Riley). Ont. and N. Y. to N. C., Okla., and Minn.; Oreg. Hosts: *Phytophaga destructor* (Say); *Meromyza americana* Fitch; *Platygaster vernalis* (Myers).

Pteromalus? fulvipes Forbes, 1885. Ill. State Dept. Agr. Trans. 22: App. p. 47. ♂ ♀. Preocc.

Merisus (Homoporus) subapterus Riley, 1885. U. S. Natl. Mus. Proc. 8: 416. ♂ ♀.

Biology: Packard, 1916. Jour. Agr. Res. 6: 377-381.—McColloch, 1923. Kans. Agr. Expt. Sta. Tech. Bul. 11: 63, 67-69.

Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 75-82.

tachinae Gahan. Ont., Tenn., La. Hosts: *Cirphis unipuncta* (Haw.); *Archytas analis* (F.).

Eupteromalus tachinae Gahan, 1917. U. S. Natl. Mus. Proc. 53: 211. ♀.

viridescens (Walsh). N. H. to Va., Mo. and Iowa; La., Tex., Colo., Calif. Hosts: *Ampelocera myron* (Cram.); *Ceratomia catalpae* (Bdvl.); *Protoparce quinque maculata* (Haw.); *Smerinthus jamaicensis* (Drury); *Sphecoecina abbotii* (Swains.); *Cirphis unipuncta* (Haw.); *Papaipema nebris* (Guen.); *Hemerocampa leucostigma* (A. and S.); *Apanteles congregatus* (Say); *A. limenitidis* (Riley); *A. marginiventris* (Cress.); *A. militaris* (Walsh); *A. papaipemae* Mues.; *A. smerinthus* Riley; *A. spp.*; *Bracon caulicola* (Gahan); *B. lutus* Prov.; *Macrocentrus pallisteri* DeGant; *Microplitis catalpae* (Riley); *M. gortynae* Riley; *Bathyplectes curculionis* (Thoms.); *Ichneumon astutus* (Holmg.); *Horogenes insularis* (Cress.).

Glyphe viridascens Walsh, 1861. Ill. State Agr. Soc. Trans. 4: 264, 370. ♀.

Glyphe viridescens Walsh, 1865. Ill. State Agr. Soc. Trans. 5: 11, 483. Emend.

Biology: Balduf, 1929. Ohio Jour. Sci. 29: 226-227, 237.—Decker, 1935. Iowa State Coll. Jour. Sci. 9: 572, 575-576.

Taxonomy: Gahan, 1921 (1920). Ent. Soc. Wash. Proc. 22: 240.

Genus LARIOPHAGUS Crawford

Lariophagus Crawford, 1909. Ent. Soc. Wash. Proc. 11: 52.

Type: **Lariophagus texanus** Crawford. Monob.

Revision: Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 7.

distinguendus (Foerster). N. Y., Va., N. C., Tex. Hosts: *Lasioderma sericornes* (F.); *Stegobium panicea* (L.); *Rhyzopertha dominica* (F.); *Bruchus brachialis* Fahr.; *Sitophilus granarius* (L.); *S. oryza* (L.).

Pteromalus distinguendus Foerster, 1840. Beitr. Monog. Pteromalidae, p. 17. ♂.

Meraporus utilis Tucker, 1910. Canad. Ent. 42: 341. ♀.

Taxonomy: Gahan, 1921 (1920). Ent. Soc. Wash. Proc. 22: 239.—Waterston, 1921. Grain Pests (War) Com. [Gt. Brit.] Rpt. 9: 15, 19-24.

Biology: Hase, 1920 (1919). Gesell. f. Naturf. Freunde Sitzber., pp. 402-432.

dryorhizoxeni (Ashmead), n. comb. Fla. Host: Gall of *Belonocnema treatae* Mayr.

Macroglenes dryorhizoxeni Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 133. ♀.

texanus Crawford. Ga., Tex. Hosts: *Algarobius prosopis* (Lec.); *Callosobruchus maculatus* (F.); *Mimosestes sallaeci* (Sharp); *Anthonomus grandis* Boh.

Lariophagus texanus Crawford, 1909. Ent. Soc. Wash. Proc. 11: 51. ♂ ♀.

Biology: Pierce, Cushman, and Hood, 1912. U. S. Dept. Agr. Bur. Ent. Bul. 100: 42, 52-62.

Genus SCHIZONOTUS Ratzeburg

Schizonotus Ratzeburg, 1852. Ichn. d. Forstins., v. 3, p. 230.

Type: **Pteromalus sieboldi** Ratzeburg. Desig. by Ashmead, 1904.

Revision: Ferrière and Faure, 1925. Ann. des Epiphyt., v. 11, p. 233.

rotundiventris (Girault), n. comb. N. J., Va. Host: *Plagioderma versicolora* (Laich.).

Coelopisthia rotundiventris Girault, 1917 (1916). Insector Insectiae Menstruus 4: 113. ♀.

sieboldi (Ratzeburg). Maine to Va.; Fla., Minn. Hosts: *Chrysomela interrupta* (F.); *C. scripta* (F.); *Plagioderma versicolora* (Laich.).

Pteromalus (Schizonotus) sieboldi Ratzeburg, 1852. Ichn. d. Forstins., v. 3, p. 230. ♀.

Biology: Dowden, 1939. Jour. Agr. Res. 58: 581-592.

Genus **PSILOCERA** Walker

Psilocera Walker, 1833. Ent. Mag. 1: 371, 373.

Type: *Psilocera obscura* Walker. Monob.

Metopon Walker, 1834. Ent. Mag. 2: 302.

Type: (*Metopon atrum* Walker) = *Psilocera obscura* Walker. Monob.

Eupsilocera Westwood, 1839. Introduct. Mod. Class. Insects 2, Synopsis, p. 69. N. name.

Metopum Agassiz, 1846. Nomencl. Zool., p. 670. Emend.

Dichalysis Foerster, 1856. Hym. Stud., v. 2, pp. 52, 56. N. name.

californica (Ashmead), n. comb. Ga., Kans., Calif.

Metopon (!) *californicum* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 229.

deiphon (Walker). Fla.

Metopon deiphon Walker, 1843. Soc. Ent. France Ann. (2) 1: 161. ♀.

rufipes (Ashmead). N. H., D. C., Ga., Fla., Kans., S. Dak. Host: *Chlamisus plicata* (F.).

Metopon (!) *rufipes* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 229. ♂ ♀.

Genus **SCYMNOPHAGUS** Ashmead

Scymnophagus Ashmead, 1904. Carnegie Mus. Mem. 1: 319, 321.

Type: *Scymnophagus townsendi* Ashmead. Monob.

townsendi Ashmead. Ill. or Ind., Calif. Host: *Scymnus guttulatus* Lec.

Scymnophagus townsendi Ashmead, 1904. Carnegie Mus. Mem. 1: 319, 321.

♂ ♀.

Genus **XENOCREPIS** Foerster

Xenocrepis Foerster, 1856. Hym. Stud., v. 2, p. 64 (no species).

Type: *Caenocrepis arenicola* Thomson. Included by Ashmead, 1904.

Caenocrepis Thomson, 1878. Hym. Scand., v. 5, p. 50.

Type: *Caenocrepis arenicola* Thomson. Monob.

pura Mayr. Idaho, Wash. Host: *Ceutorhynchus assimilis* (Payk.).

Xenocrepis pura Mayr, 1904. Zool.-Bot. Gesell. Wien, Verh. 54: 584. ♂.

Genus **MERAPORUS** Walker

Meraporus Walker, 1834. Ent. Mag. 2: 298.

Type: *Meraporus graminicola* Walker. Desig. by Westwood, 1840.

Parmicromelus Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 4.

Type: (*Parmicromelus europaeus* Girault) = *Meraporus graminicola* Walker. N. syn. Monob.

requisitus Tucker. La. Host: *Sitophilus oryza* (L.).

Meraporus requisitus Tucker, 1910. Canad. Ent. 42: 344. ♂.

Genus **NEOPOLYCELIS** Hincks

Polycelis Thomson, 1878. Hym. Scand., v. 5, pp. 131, 143. Preocc.

Type: *Pteromalus consperus* Walker. Desig. by Ashmead, 1904.

Polyscelis Dalla Torre, 1897. Wien. Ent. Ztg. 16: 87. N. name. Preocc.

Neopolycelis Hincks, 1944. Roy. Ent. Soc., London, Proc. Ser. B: Taxonomy 13: 38. N. name.

Revision: Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 10-12.

modesta (Gahan), n. comb. Ont., Pa., Md., Va. Hosts: *Phytophaga destructor* (Say); *Platygaster vernalis* (Myers); *P. zosine* Wlkr.

Polyscelis modestus Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 11. ♂ ♀.

Biology: Myers, 1925 (1924). Jour. Agr. Res. 29: 289-295.

Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 67-70.

Morphology: Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 9-13.

websteri (Ashmead). Ind. Host: Gall on *Lactuca canadensis*.

Polyscelis Websteri Ashmead, 1894. Cincinnati Soc. Nat. Hist. Jour. 17: 52.

♂ ♀.

Biology: Webster, 1894. Cincinnati Soc. Nat. Hist. Jour. 17: 36.

Genus PSYCHOPHAGUS Mayr

Diglochis Thomson, 1878. Hym. Scand., v. 5, p. 156. Preocc.

Type: *Pteromalus omnivorus* Walker. Monob.

Psychophagus Mayr, 1904. Zool.-Bot. Gesell. Wien, Verh. 54: 598. N. name.

omnivorus (Walker). Ont., Que., New England, N. Y., N. J., Wis., Ohio. Hosts: *Vanessa atalanta* (L.); *Samia cecropia* (L.); *Diacrisia virginica* (F.); *Estigmene acraea* (Drury); *Utiethisa bella* (L.); *Achatodes zeae* (Harr.); *Catocala* sp.; *Macronoctua onusta* Grote; *Datana ministra* (Drury); *Ichthyura inclusa* (Hbn.); *Hemerocampa leucostigma* (A. and S.); *Nygmia phaeorrhoea* (Donov.); *Porthetria dispar* L.; *Stilpnotia salicis* (L.); *Malacosoma americanum* (F.); *M. disstria* (Hbn.); *Cnidocampa flavescens* (Wlkr.); *Grapholitha molesta* (Busck); *G. packardi* Zell.; *Tortrix packardiana* Fern.; *Compsilura concinnata* Meig.; *Diprion hercyniae* (Htg.).

Pteromalus omnivorus Walker, 1835. Ent. Mag. 3: 204. ♂ ♀.

Pteromalus Processioneae Ratzeburg, 1844. Ichn. d. Forstins., v. 1, p. 194. ♀.

tortricis (Brues), n. comb. Que., N. Y. Hosts: *Choristoneura fumiferana* (Clem.); *Apechthis ontario* (Cress.); *Itopectis conquisitor* (Say).

Nasonia tortricis Brues, 1910. Canad. Ent. 42: 259. ♂ ♀.

Biology: Dowden, Buchanan, and Carolin, 1948. Jour. Econ. Ent. 41: 459.

Taxonomy: Gahan, 1932. Ent. Soc. Amer. Ann. 25: 738.

Genus CECIDOSTIBA Thomson

Cecidostiba Thomson, 1878. Hym. Scand., v. 5, pp. 87, 92.

Type: *Cecidostiba rugifrons* Thomson. Desig. by Ashmead, 1904.

Revision: Crawford, 1912. U. S. Natl. Mus. Proc. 43: 169.

acuta (Provancher). Que., N. B., W. Va., Wash. Hosts: *Dendroctonus monticolae* Hopk.; *Polygraphus rufipennis* (Kby.).

Dinotus acutus Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 201. ♀.

Cecidostiba ashmeadi Crawford, 1912. U. S. Natl. Mus. Proc. 43: 170. ♀.

burkei Crawford. Calif., Wash. Host: *Dendroctonus brevicornis* Lec.

Cecidostiba burkei Crawford, 1912. U. S. Natl. Mus. Proc. 43: 170. ♀.

dendroctoni Ashmead. W. Va., Mont., Idaho, Wash. Hosts: *Cylindrocopturus furnissi* Buch.; *Dendroctonus frontalis* Zimm.; *D. monticolae* Hopk.; *D. pseudotsugae* Hopk.; *Ips grandicollis* (Eichh.); *Polygraphus rufipennis* (Kby.).

Cecidostiba dendroctoni Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 337. ♀.

polygraphi Ashmead. Va. Host: *Polygraphus rufipennis* (Kby.).

Cecidostiba polygraphi Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 338. ♂ ♀.

thomsoni Crawford. Mont., Calif. Hosts: *Pissodes* sp.; *Scolytus ventralis* Lec.

Cecidostiba thomsoni Crawford, 1912. U. S. Natl. Mus. Proc. 43: 171. ♂ ♀.

Genus CATOLACCUS Thomson

Catolaccus Thomson, 1878. Hym. Scand., v. 5, pp. 146, 152.

Type: (*Catolaccus cavigena* Thomson) = *Pteromalus ater* Ratzeburg. Monob.

Revision: Crawford, 1908. Ent. Soc. Wash. Proc. 9: 160.

aeneoviridis (Girault). Mass. to Fla., Tex., Utah and Calif., north to Wis. Hosts: *Celama sorghiella* (Riley); *Laphygma frugiperda* (A. and S.); *Oidaematophorus paleaceus* (Zell.); *Ancyliis comptana* (Froel.); *A. comptana fragariae* (W. and R.); *Rhyacionia frustrana* (Comst.); *Acleris minuta* (Rob.);

Archips rosaceana (Harr.); *Dichomeris marginella* (F.); ?*Keiferia lycopersicella* (Busck); *Coleophora malivorella* Riley; *C. pruniella* Clem.; *Callisto geminatella* (Pack.); *Bedellia sommentella* (Zell.); *Bucculatrix thurberiella* Busck; *Apanteles aristoteliae* Vier.; *A. congregatus* (Say); *A. marginiventris* (Cress.); *Hormius basalis* (Prov.); *Meteorus acronyctae* Mues.; *M. sp.*; *Rogas laphygmae* Vier.; *Bathyplectes curculionis* (Thoms.); *Campoplex argentifrons* (Cress.); *Casinaria limenitidis* (How.); *Hyposoter pilosulus* (Prov.).

Arthrolabus aeneoviridis Girault, 1911. *Canad. Ent.* 43: 351. ♂ ♀.

Dibrachys meteori Gahan, 1913. *U. S. Natl. Mus. Proc.* 46: 436. ♂ ♀

Biology: Vickery, 1929. *U. S. Dept. Agr. Tech. Bul.* 138: 21, 32-35, 38, 53-54.

Taxonomy: Girault, 1920. *U. S. Natl. Mus. Proc.* 58: 212.

fragariae Rohwer. Tenn., Ga. Hosts: *Anthonomus signatus* Say; *Apion decoloratum* Smith.

Catolaccus fragariae Rohwer, 1934. *Ent. Soc. Wash. Proc.* 36: 44. ♂ ♀.

hunteri Crawford. N. C., S. C., Miss., La., Tex., Ark. Hosts: *Acanthoscelides compressicornis* (Schaef.); *Anthonomus aeneolus* Dietz; *A. albopilosus* Dietz; *A. eugenii* Cano; *A. grandis* Boh.; *A. heterothecae* Pierce; *A. nebulosus* Lec.; *A. signatus* Say; *A. squamosus* Lec.; *Gerstaeckeria nobilis* (Lec.); *Smicraulax tuberculatus* Pierce; *Tachypterellus quadrigibbus* (Say); *Zygobaris xanthoxyli* Pierce.

Catolaccus hunteri Crawford, 1908 (1907). *Ent. Soc. Wash. Proc.* 9: 160.

♂ ♀.

Biology: Pierce, Cushman, and Hood, 1912. *U. S. Dept. Agr. Bur. Ent. Bul.* 100: 42, 51, 54-66.

kansensis (Girault). Kans. Hosts: ?Chrysopid; ?*Psorosina hammondi* (Riley); tephritid seed maggot from ironweed.

Habrocytus kansensis Girault, 1917. *Descr. Hym. Chalcidoid. Variorum cum Observ.* V, p. 3. ♀.

Genus ZATROPIS Crawford

Zatropis Crawford, 1908. *Ent. Soc. Wash. Proc.* 9: 159.

Type: *Zatropis catalpae* Crawford. Monob.

Revision: Crawford, 1921. *Ent. Soc. Wash. Proc.* 23: 171-172.

bruchivorus (Ashmead). Iowa, Ill., Kans. Host: *Acanthoscelides horni* (Pic).

Meraporus bruchivorus Ashmead, 1893. *Ohio Agr. Expt. Sta. Tech. Ser. Bul.* 1: 161. ♂ ♀.

catalpae Crawford. Ohio. Hosts: *Contarinia johnsoni* Sling.; *Itonida catalpae* (Comst.).

Zatropis catalpae Crawford, 1908 (1907). *Ent. Soc. Wash. Proc.* 9: 159. ♂ ♀.

Biology: Quaintance and Shear, 1921. *U. S. Dept. Agr. Farmers' Bul.* 1220: 11.

coeliodis (Ashmead). Conn., N. J., Va., Ga. Hosts: *Acanthoscelis acephalus* (Say); *Chalcodermus inaequicollis* Horn.

Catolaccus coeliodis Ashmead, 1896. *Amer. Ent. Soc. Trans.* 23: 226. ♂ ♀.

incertus (Ashmead). N. Y. to Ga., N. Mex. and Colo. Hosts: *Acanthoscelides horni* (Pic); ?*A. longistilus* (Horn); *Bruchus brachialis* Fahr.; *Anthonomus aeneolus* Dietz; *A. albopilosus* Dietz; *A. aphanostephi* Pierce; *A. disjunctus* Lec.; *A. eugenii* Cano; *A. fulvus* Lec.; *A. grandis* Boh.; *A. nigrinus* Boh.; *A. signatus* Say; *Apion crassum* Fall; *A. decoloratum* Smith; *A. griseum* Smith; *A. nigrum* Smith; *Auleutes tenuipes* Lec.; *Baris cuneipennis* Casey; *Ceutorhynchus* sp.; *Chalcodermus aeneus* Boh.; *C. inaequicollis* Horn; *Desmoris fulvus* (Lec.); *Rhynchaenus pallicornis* (Say); *Sitophilus oryza* (L.); *Smicraulax tuberculatus* Pierce; *Tachypterellus consors cerasi* List; *T. quadrigibbus* (Say); *Zygobaris xanthoxyli* Pierce.

Catolaccus incertus Ashmead, 1893. *In* Chittenden, *U. S. Dept. Agr. Insect Life* 5: 186. ♂ ♀.

Biology: Pierce, Cushman, and Hood, 1912. *U. S. Dept. Agr. Bur. Ent. Bul.* 100: 42, 51-67, 91-92.

Morphology: Snodgrass, 1910. *U. S. Natl. Mus. Proc.* 39: 65.

nigroaeneus (Ashmead). Conn., Va., Kans. Hosts: ?*Auleutes tenuipes* (Lec.); dipterous gall on box elder.

Catolaccus nigroaeneus Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 338.

♂ ♀.

Biology: Brandhorst, 1943. Kans. Acad. Sci. Trans. 46: 169.

perdubius (Girault). Minn. Host: *Anthonomus signatus* Say.

Catolaccus perdubius Girault, 1916. Canad. Ent. 48: 114. ♂ ♀.

tortricidis Crawford. Pa., Calif. Hosts: *Etiella zinckenella* (Treit.); *Polychrosis viteana* (Clem.).

Zatropis tortricidis Crawford, 1921. Ent. Soc. Wash. Proc. 23: 172. ♂ ♀.

Genus CAENACIS Foerster

Caenacis Foerster, 1856. Hym. Stud., v. 2, p. 64. No species.

Type: *Caenacis grandiclava* Thomson. Desig. by Ashmead, 1904.

asinus Girault. Calif.

Caenacis asinus Girault, 1917. New Chalcid Flies, p. 3. ♀.

Genus PSEUDOCATOLACCUS Masi

Pseudocatolaccus Masi, 1908. Lab. Zool. Gen. e. Agr. Portici Bol. 3: 138.

Type: *Pseudocatolaccus asphondyliae* Masi. Monob.

americanus Gahan. Ariz. Host: *Asphondylia websteri* Felt.

Pseudocatolaccus americanus Gahan, 1919. Ent. Soc. Amer. Ann. 12: 164.

♂ ♀.

Genus MUSCIDIFURAX Girault and Sanders

Muscidifurax Girault and Sanders, 1910. Psyche 17: 146.

Type: *Muscidifurax raptor* Girault and Sanders. Monob.

raptor Girault and Sanders. Ill., Tex. Hosts: *Callitroga macellaria* (F.); *Musca domestica* L.; *Phormia regina* (Meig.).

Muscidifurax raptor Girault and Sanders, 1910. Psyche 17: 145. ♂ ♀.

Biology: Crandall, 1939. Ent. Soc. Amer. Ann. 32: 652.—DeBach and Smith, 1941. Jour. Econ. Ent. 34: 741-745.—DeBach, 1943. Pan-Pacific Ent. 19: 112-118.

Genus NASONIA Ashmead

Nasonia Ashmead, 1904. Carnegie Mus. Mem. 1: 317.

Type: *Nasonia brevicornis* Ashmead. Monob.

Mormoniella Ashmead, 1904. Carnegie Mus. Mem. 1: 316, 317.

Type: (*Mormoniella brevicornis* Ashmead)=*Nasonia brevicornis* Ashmead. Monob.

Revision: Brues, 1910. Canad. Ent. 42: 260.

The first reviser of this genus (Brues, 1910) selected the name *Nasonia*, although *Mormoniella* has page priority. Brues' selection is valid according to article 28 of the Zoological Code.

peratripes Girault. N. C.

Nasonia peratripes Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 1. ♀.

vitripennis (Walker). Cosmopolitan. Hosts: *Piophilha casei* (L.); *Fannia femoralis* (Stein); *Musca domestica* L.; *M. sp.*; *Ophyra aenescens* (Wd.); *O. leucostoma* (Wd.); *Synthesiomia nudiseta* V. d. W.; *Apaulina avium* (Shan. and Dobr.); *A. metallica* (Tns.); *A. sialia* (Shan. and Dobr.); *Calliphora* spp.; *Callitroga macellaria* (F.); *Phaenicia caesar* (L.); *P. eximia* (Wd.); *P. mexicana* (Macq.); *P. sericata* (Mg.); *Phormia regina* (Meig.); *Sarcophaga* spp.; *Hypoderma* sp.

Pteromalus vitripennis Walker, 1836. Ent. Mag. 3: 492. ♀.

Pteromalus abnormis Boheman, 1858. Öfvers. Svenska Vetensk. Akad. Forh. 15: 58. ♂ ♀.

Mormoniella brevicornis Ashmead, 1904. Carnegie Mus. Mem. 1: 315, 382. ♀.

Nasonia brevicornis Ashmead, 1904. Carnegie Mus. Mem. 1: 317. ♀.

- Biology: Girault and Sanders, 1910. *Psyche* 17: 9-28.—Tiegs, 1922. *Roy. Soc. So. Austral. Trans. and Proc.* 46: 319-527.—Roberts, 1933. *Ecology* 14: 307.—Roberts, 1935. *Jour. Agr. Res.* 50: 481, 491-492.—Jacobi, 1939. *Arch. Néerland. de Zool.* 3: 197-282.—DeBach and Smith, 1941. *Ecology*, v. 22, pp. 365-368.—Van der Merwe, 1943. *Ent. Soc. So. Africa Jour.* 6: 48-64.—Moursi, 1946. *Soc. Fouad 1^{er} Ent. [Soc. Roy. Ent. d'Égypte]* Bul. 30: 39-59.
- Taxonomy: Gahan, 1927. *U. S. Natl. Mus. Proc.* 71 (4): 5.—Gahan and Peck, 1946. *Wash. Acad. Sci. Jour.* 36: 316.
- Morphology: Evans, 1933. *Bul. Ent. Res.* 24: 400-403.

Genus BRUCHOBIUS Ashmead

- Bruchobius* Ashmead, 1904. *Carnegie Mus. Mem.* 1: 314, 315.
Type: *Bruchobius laticeps* Ashmead. Monob.
- Sphaerakis* Masi, 1924. *Mus. Civ. Stor. Nat. Genova Ann.* 51: 157.
Type: *Sphaerakis mayri* Masi. Monob.
- laticeps* Ashmead. *Cosmopolitan*. Hosts: *Acanthoscelides oblectus* (Say); *Bruchus pisorum* (L.); *Callosobruchus maculatus* (F.).
- Bruchobius laticeps* Ashmead, 1904. *Carnegie Mus. Mem.* 1: xi, 313. ♀.
- Biology: Paddock and Reinhard, 1919. *Tex. Agr. Expt. Sta. Bul.* 256: 80-81.
- Taxonomy: Waterston, 1921. *Grain Pests (War) Com. [Gt. Brit.] Rpt.* 9: 14-16.
- mayri* (Masi). N. C. Host: *Bruchus brachialis* Fahr.
- Sphaerakis Mayri* Masi, 1924. *Mus. Civ. Stor. Nat. Genova Ann.* 51: 157.
♂ ♀.

Genus PTEROMALUS Swederus

- Pteromalus* Swederus, 1795. *Svenska Vetensk. Akad. Handl.* 16: 201.
Type: *Ichneumon puparum* Linnaeus. Desig. by Westwood, 1840.
- archippi* Howard, ?Mich., Vt., N. H., N. J., N. C., La. Hosts: *Papilio ajax* L.; *Danaus plexippus* (L.); *Basilarchia archippus* (Cram.); *B. arthemis astyanax* (F.).
- Pteromalus archippi* Howard, 1889. *In* Scudder, *Butterflies of Eastern U. S. and Canada*, pp. 1872, 1891. ♀.
- Biology: Schaffner and Grisvold, 1934. *U. S. Dept. Agr. Misc. Pub.* 188: 6, 153.
- cassotis* Walker. Fla.
Pteromalus Cassotis Walker, 1847. *Ann. Mag. Nat. Hist.* (1) 19: 393. ♀.
- coeruleiventris* (Ashmead), n. comb. N. Y., Mass., D. C., Kans., Ill. Host: *Hemerocampa leucostigma* (A. and S.).
- Sphegigaster coeruleiventris* Ashmead, 1888. *Kans. Agr. Expt. Sta. Bul.* 3: App. p. VI. ♀.
- Pteromalus cuproideus* Howard, 1897. *U. S. Dept. Agr. Div. Ent. Tech. Ser.* 5: 28, 55. ♂ ♀. N. syn.
- Biology: Girault, 1908. *Psyche* 15: 89-90, 94-96.
- cratylus* Walker. Fla.
Pteromalus Cratylus Walker, 1847. *Ann. Mag. Nat. Hist.* (1) 19: 392. ♀.
- damo* Walker. Fla.
Pteromalus Damo Walker, 1847. *Ann. Mag. Nat. Hist.* (1) 19: 395. ♀.
- dipsas* Walker. Fla.
Pteromalus Dipsas Walker, 1847. *Ann. Mag. Nat. Hist.* (1) 19: 394. ♀.
- doryssus* Walker. Fla.
Pteromalus Doryssus Walker, 1847. *Ann. Mag. Nat. Hist.* (1) 19: 395.
♂ ♀.
- dymnus* Walker. Fla.
Pteromalus Dymnus Walker, 1847. *Ann. Mag. Nat. Hist.* (1) 19: 397. ♀.
- epicles* Walker. Fla.
Pteromalus Epicles Walker, 1847. *Ann. Mag. Nat. Hist.* (1) 19: 394. ♀.
- eryx* Walker. Fla.
Pteromalus Eryx Walker, 1847. *Ann. Mag. Nat. Hist.* (1) 19: 397. ♂.

- euryimi** Gahan. Tenn., Kans., Utah, Ariz., Calif. Host: *Colias philodice eurytheme* Bdl.
- Pteromalus euryimi* Gahan, 1913. U. S. Natl. Mus. Proc. 46: 435. ♂ ♀.
Biology: Wildermuth, 1914. U. S. Dept. Agr. Bul. 124: 21-23.
- eurypon** Walker. Fla.
Pteromalus Eurypon Walker, 1847. Ann. Mag. Nat. Hist. (1) 19: 398. ♀.
- euthymus** Walker. Fla.
Pteromalus Euthymus Walker, 1847. Ann. Mag. Nat. Hist. (1) 19: 393.
♂.
- fuscipes** (Provancher). Canada, N. H., N. Y., ?N. J. Host: *Nymphalis antiopa* (L.).
Semiotellus fuscipes Provancher, 1881. Nat. Canad. 12: 295. ♀.
- hemileuca** Gahan. N. Mex. Host: *Hemileuca oliviae* Ckll.
Pteromalus hemileuca Gahan, 1917. U. S. Natl. Mus. Proc. 53: 210. ♀.
- hermeas** Walker. Fla.
Pteromalus Hermeas Walker, 1847. Ann. Mag. Nat. Hist. (1) 19: 394. ♀.
- hybreas** Walker. Fla.
Pteromalus Hybreas Walker, 1847. Ann. Mag. Nat. Hist. (1) 19: 397. ♀.
- lausus** Walker. Fla.
Pteromalus Lausus Walker, 1847. Ann. Mag. Nat. Hist. (1) 19: 392 ♀.
- oeax** Walker. Fla.
Pteromalus Oeax Walker, 1847. Ann. Mag. Nat. Hist. (1) 19: 395. ♀.
- orontas** Walker. Fla.
Pteromalus Orontas Walker, 1847. Ann. Mag. Nat. Hist. (1) 19: 396. ♀.
- puparum** (Linnaeus). Throughout Canada and U. S. Hosts: *Papilio ajax* L.; *Colias philodice* (Godt.); *Eurema lisa* (Bdl. and Lec.); *Pieris protodice* (Bdl. and Lec.); *P. rapae* (L.); *Agraulis vanillae* (L.); *Basilarchia archippus* (Cram.); *Nymphalis antiopa* (L.); *Polygonia satyrus* (Edw.); *Vanessa atalanta* (L.); *V. cardui* (L.); *V. caryae* (Hbn.); *Proteides clarus* (Cram.); *Lambdina fiscellaria* (Guen.); *Coleophora salmani* Heinr.; *Thyridopteryx ephemeraeformis* (Haw.); *Bracon gelechia* Ashm.; *B. spp.*; *Rogas stigmator* (Say); *R. sp.*; *Hyposoter fugitivus* (Say); *Phobocampe clisiocampae* (Weed); *Dibrachys cavus* (Wlkr.); *Sceliphron* sp.
- Ichneumon puparum* Linnaeus, 1758. Syst. Nat., ed. 10, v. 1, p. 567.
Pteromalus brassicae Packard, 1877. U. S. Geol. and Geog. Survey Rpt. 9: 747. ♀.
- Pteromalus pieridis* Provancher, 1881. Nat. Canad. 12: 296. ♂ ♀. N. syn.
Biology: Essig, 1931. A Hist. of Ent., pp. 331-333, 390.—Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 7, 153.—Whiting, 1940. Amer. Nat. 74: 377-379.
- Taxonomy: Masi, 1908. Lab. Zool. Gen. e Agr. Portici Bol. 3: 119-122.
- vanessae** Howard. Ont., Maine, N. Y., Mass., Conn., R. I., N. J., W. Va., Ill. Colo. Hosts: *Papilio ajax* L.; *P. cresphontes* Cram.; *P. palamedes* (Drury); *P. thoas* L.; *Ascia monuste* (L.); *Nymphalis antiopa* (L.); *Polygonia comma* (Harr.); *P. interrogationis* (F.); *Malacosoma disstria* Hbn.
- Pteromalus puparum* var. *vanessae* Howard, 1889. In Scudder, Butterflies of Eastern U. S. and Canada, pp. 1872, 1890, 1891. ♀.
Biology: Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 6, 154.

Genus HABROCYTUS Thomson

Habrocytus Thomson, 1878. Hym. Scand., v. 5, pp. 88, 109.

Type: *Pteromalus albipennis* Walker. Desig. by Ashmead, 1904.

Revision: Girault, 1917. Canad. Ent. 49: 178-181.

acutiventris Peck, n. name. Canada.

Pteromalus acutus Provancher, 1881. Nat. Canad. 12: 297. ♀. Preocc.

Pteromalus canadensis Dalla Torre, 1898. Cat. Hym., v. 5, p. 115. N. name. Preocc. by Ashmead, 1887.

americus Girault. U. S.

Habrocytus americanus Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 3. ♀.

analis (Ashmead), n. comb. Calif. Host: *Hylaeus varifrons* (Cress.).

Aetroxys analis Ashmead, 1895. In Davidson, Psyche 7: 316. ♂ ♀.

anthonomi (Ashmead), n. comb. Conn., N. J., D. C., Tex. Hosts: ?*Lasioderma serricorne* (F.); ?*Anthonomus grandis* Boh.; *A. nigrinus* Boh.; *A. signatus* Say.

Catolaccus anthonomi Ashmead, 1893. In Chittenden, U. S. Dept. Agr. Insect Life 5: 185. ♂ ♀.

arkansensis Girault. Ark.

Habrocytus arkansensis Girault, 1917. Canad. Ent. 49: 180, 182. ♂ ♀.

aulacis Girault. Ohio. Hosts: ?*Aulacidea* gall; stem of *Lactuca canadensis*.

Habrocytus aulacis Girault, 1917. Canad. Ent. 49: 180, 181. ♀.

bedeguaris (Thomson). Ont., Colo., B. C. Host: *Diplolepis rosae* (L.).

Etroxys (Habrocytus) Bedeguaris Thomson, 1878. Hym. Scand., v. 5, p. 123. ♂ ♀.

Taxonomy: Callan, 1944. Roy. Ent. Soc. London, Proc. Ser. B. Taxonomy 13: 90.

borrowi Girault. Conn., Colo.

Habrocytus borrowi Girault, 1917. Canad. Ent. 49: 178, 179, 182. ♀.

britannicus Girault, emend. B. C.

Habrocytus britannicus (!) Girault, 1926. Insecutor Inscitiae Menstruus 14: 132. ♀.

canadensis (Ashmead), n. comb. Ont., N. H., N. J. Host: Gall of *Xanthohera forticorne* (O. S.).

Megastigma (!) *canadensis* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 186. ♂.

capreae (Linnaeus). Europe; ?Alaska.

Cynips Capreae Linnaeus, 1761. Fauna Suecica, Ed. 2, p. 388.

cerealellae (Ashmead). Cosmopolitan. Host: *Sitotroga cerealella* (Oliv.).

Catolaccus cerealellae Ashmead, 1902. Psyche 9: 345. ♂ ♀.

Biology: Noble, 1932. Calif. Univ. Ent. Pubs. 5: 311-354.—Fulton, 1933. Ent. Soc. Amer. Ann. 26: 536.

Taxonomy: Crawford, 1908 (1907). Ent. Soc. Wash. Proc. 9: 160.

coloradensis (Ashmead), n. comb. Colo.

Rhopalicus coloradensis Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 27, 45. ♀.

franciscanus Girault. Calif.

Habrocytus franciscanus Girault, 1917. Canad. Ent. 49: 180, 181. ♀.

giraulti Peck, n. name. Ont.

Habrocytus canadensis Girault, 1917. Canad. Ent. 49: 179, 181, 182. ♀. Preoce. by Ashmead, 1887.

languriae Ashmead. Conn., N. J., Va., La., Ariz. Hosts: *Languria angustata* (Beauv.); *L. mozardi* Latr.; *Dirabius rectirostris* (Lec.); *Epiblema strenuana* (Wlkr.); larva ex *Ambrosia artemisiaefolia* stem.

Habrocytus languriae Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 220. ♂ ♀.

Biology: Wildermuth and Gates, 1920. U. S. Dept. Agr. Bul. 889: 19.

Taxonomy: Gahan, 1919. U. S. Natl. Mus. Proc. 55: 127.

lividus Gahan. Colo. Host: *Tachypterellus consors cerasi* List.

Habrocytus lividus Gahan, 1931. Wash. Acad. Sci. Jour. 21: 37. ♂ ♀.

Biology: List, 1932. Colo. Agr. Expt. Sta. Bul. 385: 63.

medicaginis Gahan. Conn., Man., Minn., S. Dak., Kans., N. Mex., Ariz., Utah, Nev., Calif., Idaho, Oreg. Host: *Bruchophagus gibbus* (Boh.).

Habrocytus medicaginis Gahan, 1914. U. S. Natl. Mus. Proc. 48: 163. ♀.

Biology: Urbahns, 1916. Jour. Agr. Res. 7: 147-153.—Urbahns, 1920. U. S. Dept. Agr. Bul. 812: 18.—Sorenson, 1934. Utah Agr. Expt. Sta. Bul. 250: 50 (*bruchophagi*).

melanicus (Provancher), n. comb. Canada.

Semiotellus melanicus Provancher, 1881. Nat. Canad. 12: 294. ♂ ♀.

obscuripes Ashmead. Minn., Colo. Hosts: *Anthonomus signatus* Say; *Diplolepis* spp.; various rose galls.

Habrocytus obscuripes Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 26, 45. ♀.
Taxonomy: Girault, 1917. Canad. Ent. 49: 182.

onerati (Fitch). N. Y., N. J. Hosts: ?*Disholcaspis quercus-globulus* (Fitch);
? *Synergus oneratus* Harr.

Pteromalus onerati Fitch, 1859. N. Y. State Agr. Soc. Trans. 18: 812.

phycidis Ashmead. Ont., Que., New England, N. Y., Pa., Del., Wis., B. C. Hosts: *Acrobasis rubrifasciella* (Pack.); *Dioryctria reniculella* (Grote); *Choristoneura fumiferana* (Clem.); *Tortrix packardiana* Kearf.; *Coleophora laricella* (Hbn.); *C. malivorella* Riley; *C. pruniella* Clem.; *Apanteles melanoscelus* (Ratz.); *Macrocentrus cerasoranæ* Vier.; *Meteorus versicolor* (Wesm.); *Hyposoter fugitivus* (Say).

Habrocytus phycidis Ashmead, 1898. Ent. Soc. Wash. Proc. 4: 157. ♀.

Habrocytus dux Girault, 1917. Canad. Ent. 49: 181, 182. ♀.

Biology: Beacher, 1947. Ent. Soc. Amer. Ann. 40: 532-544.

Taxonomy: Gahan, 1930. U. S. Natl. Mus. Proc. 77 (8): 8.

piercei Crawford. N. Y., Conn., W. Va., La., Tex., Colo. Hosts: *Acanthoscelides bisignatus* (Horn); *A. compressicornis* (Schaf.); *Anthonomus grandis* Boh.; *A. nebulosus* Lec.; *Tachypterellus consors cerasi* List; *T. quadrigibbus* (Say); *Coleophora malivorella* Riley; larva ex fruit of *Rhus*.

Habrocytus piercei Crawford, 1911. U. S. Natl. Mus. Proc. 40: 443. ♀.

Biology: List, 1932. Colo. Agr. Expt. Sta. Bul. 385: 59-61.—Hammer, 1936. N. Y. State Agr. Expt. Sta. Tech. Bul. 240: 45.

purpureiventris (Ashmead). Kans. Host: Tephritid seed maggot from ironweed.

Syntaxis (!) purpureiventris Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VI. ♂ ♀.

quinquefasciatus Girault. "East. U. S."

Habrocytus quinquefasciatus Girault, 1916. Ent. Soc. Amer. Ann. 9: 298. ♂ ♀.

Taxonomy: Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 5.

rhodobaeni Ashmead. Va., Kans. Host: *Rhodobaenus tredecimpunctatus* (Ill.).

Habrocytus rhodobaeni Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 220. ♀.

rosae Girault. N. Y., Conn., Colo., B. C. Hosts: Galls of *Diplolepis fusiformans* (Ashm.); *D. ignota* (O. S.).

Habrocytus rhodobaeni var. **rosae** Girault, 1917. Canad. Ent. 49: 180, 181. ♀.

simillimus Gahan. Ariz. Host: *Agromyza gibsoni* Mall.

Habrocytus simillimus Gahan, 1919. U. S. Natl. Mus. Proc. 55: 127. ♂ ♀.

thyridopterigis Howard. Maine, N. H., Conn., Va., N. C., Mo., Ill., Wis. Hosts:

Hemerocampa leucostigma (A. and S.); *Rhyacionia buoliana* (Schiff.); *R. frustrana* (Comst.); *Coleophora malivorella* Riley; *C. pruniella* Clem.; *C. salmani* Heinr.; *Thyridopteryx ephemeræformis* (Haw.); *Xyela* sp. on loblolly pine; *Campoplex frustranae* Cush.; *Hyposoter fugitivus* (Say); *Itoplectis conquisitor* (Say); *Phobetes thyridopteryx* Riley; *Spilochalcis maria* (Riley).

Habrocytus thyridopterigis Howard, 1897. U. S. Dept. Agr. Div. Ent. Tech. Ser. 5: 34. ♀.

Biology: Cushman, 1927. Jour. Agr. Res. 34: 617.—Doner, 1936. Ent. Soc. Amer. Ann. 29: 230, 234.

timaea (Walker), n. comb. Fla.

Pteromalus Timaea Walker, 1847. Ann. Mag. Nat. Hist. (1) 19: 396. ♀.

Genus ANISOPTEROMALUS Ruschka

Anisopteromalus Ruschka, 1912. Zool.-Bot. Gesell. Wien, Verh. 42: 243.

Type: (*Anisopteromalus mollis* Ruschka) = *Pteromalus calandrae* Howard. Monob.

Aplastomorpha Crawford, 1913. U. S. Natl. Mus. Proc. 45: 252. N. syn.

Type: (*Aplastomorpha pratti* Crawford) = *Pteromalus calandrae* Howard. Monob.

calandrae (Howard), n. comb. Cosmopolitan. Hosts: *Lasioderma serricornis* (F.); *Stegobium paniceum* (L.); *Callosobruchus maculatus* (F.); *Caulophilus latinasus* (Say); *Sitophilus granarius* (L.); *S. oryza* (L.); *Ephestia elutella* (Hbn.).

Pteromalus calandrae Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 273. ♂.

Meraporus Vandinei Tucker, 1910. Canad. Ent. 42: 342. ♂ ♀.

Aplastomorpha pratti Crawford, 1913. U. S. Natl. Mus. Proc. 45: 252. ♂ ♀.
Biology: Cotton, 1923. Jour. Agr. Res. 23: 549-556.—Back and Cotton, 1938. U. S. Dept. Agr. Farmers' Bul. 1260 (rev.): 41-42.—Reed and Vinzant, 1942. U. S. Dept. Agr. Cir. 635: 12.

Taxonomy: Waterston, 1921. Grain Pests (War) Com. [Gt. Brit.] Rpt. 9, pp. 14, 17.—Gahan, 1923. Ent. Soc. Wash. Proc. 25: 188.

Genus TRIMEROMICRUS Gahan

Trimeromicrus Gahan, 1914. U. S. Natl. Mus. Proc. 48: 161.

Type: *Trimeromicrus maculatus* Gahan. Monob.

maculatus Gahan. Ill., S. Dak., Kans., N. Mex., Ariz., Calif. Hosts: *Desmoris fulvus* (Lec.); *Asphondylia websteri* Felt; *Bruchophagus gibbus* (Boh.).

Trimeromicrus maculatus Gahan, 1914. U. S. Natl. Mus. Proc. 48: 162. ♂ ♀.

Biology: Gahan, 1919. Ent. Soc. Amer. Ann. 12: 165.—Urbahns, 1919. Jour. Agr. Res. 16: 172-173.—Urbahns, 1920. U. S. Dept. Agr. Bul. 812: 18.

Genus SYSTELLOGASTER Gahan

Systellogaster Gahan, 1917. U. S. Natl. Mus. Proc. 53: 209.

Type: *Systellogaster ovivora* Gahan. Monob.

ovivora Gahan. Md., Ill. Host: *Blatta orientalis* L.

Systellogaster ovivora Gahan, 1917. U. S. Natl. Mus. Proc. 53: 209. ♂ ♀.

Genus PARADIBRACHYS Girault

Paradibrachys Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 1.

Type: *Paradibrachys guizoti* Girault. Monob.

guizoti Girault. Calif.

Paradibrachys guizoti Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 1. ♀.

Genus ENDOMYCHOBIUS Ashmead

Endomychobius Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 227.

Type: *Endomychobius flavipes* Ashmead. Monob.

flavipes Ashmead. D. C. Host: *Endomychus biguttatus* Say.

Endomychobius flavipes Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 227. ♂ ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 212.

Genus HYPOPTEROMALUS Ashmead

Hypopteromalus Ashmead, 1900. In Smith, Ins. of N. J., sup., p. 559.

Type: *Pteromalus tabacum* Fitch. Monob.

inimicus Muesebeck. Ont., New England, W. Va., Wis. Hosts: *Coleophora malivorella* Riley; *C. pruniella* Clem.; *Epinotia nanana* (Treit.); *Exartema punctanum* Wlsm.; *Apanteles lacteicolor* Vier.; *A. melanoscelus* (Ratz.).

Hypopteromalus inimicus Muesebeck, 1927. Jour. Agr. Res. 34: 332. ♂ ♀.
Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 28.—Proper, 1934. Jour. Agr. Res. 48: 361.—Doner, 1936. Ent. Soc. Amer. Ann. 29: 226.

percussor Girault. Colo., Calif., Wash. Hosts: *Zothea tranquilla* (Grote); *Apanteles smerinhi* Riley; *Meteorus acronyctae* Mues.; *Hyposoter pilosulus* (Prov.).

Hypopteromalus percussor Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 118.

♀.

Hypopteromalus percussor Girault. Essig, 1926. Ins. of West. No. Amer., p. 823. Emend.

tabacum (Fitch). Que., New England, N. J., Ohio, W. Va., N. C., Fla., Ill., Iowa, Kans. Hosts: *Ampeloea myron* (Cram.); *Ceratonia catalpae* (Bdvl.); *Protoparce* sp.; *P. sexta* (Johan.); *Hyphantria cunea* (Drury); *Coleophora maltivorella* Riley; larvaevorid; *Pikonema alaskensis* (Roh.); *Apanteles congregatus* (Say); *A. melanoscelus* (Ratz.); *Microplitis ceratoniae* Riley.

Pteromalus Tabacum Fitch, 1864. N. Y. State Agr. Soc. Trans. 23: 792. ♀.

Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 12, 28.—
Fulton, 1940. Ent. Soc. Amer. Ann. 32: 231-244.

Taxonomy: Gahan, 1921 (1920). Ent. Soc. Wash. Proc. 22: 241.

Tribe METASTENINI

Genus HEMITRICHUS Thomson

Hemitrichus Thomson, 1878. Hym. Scand., v. 5, pp. 50, 54.

Type: *Hemitrichus rufipes* Thomson. Monob.

Uriella Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 221.

Type: *Uriella rufipes* Ashmead. Monob.

rufipes Thomson. Pa., D. C., Ohio, Ind., Ill., Mich. Hosts: Beetle feeding in rat dung; ?*Pyrausta futilalis* (Led).

Dimachus (Hemitrichus) rufipes Thomson, 1878. Hym. Scand., v. 5, p. 54.

♀.

Uriella rufipes Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 222. ♂ ♀.

Taxonomy: Girault, 1916. Canad. Ent. 48: 408.

Genus NORBANUS Walker

Norbanus Walker, 1843. Soc. Ent. France Ann. (2) 1: 159.

Type: *Norbanus dysaules* Walker. Desig. by Ashmead, 1904.

Arthrolysis Foerster, 1856. Hym. Stud., v. 2, p. 52. No species. N. syn.

Type: *Pteromalus scabriculus* Nees. Desig. by Ashmead, 1904.

Picroscytus Thomson, 1878. Hym. Scand., v. 5, p. 50, 58. N. syn.

Type: *Pteromalus scabriculus* Nees. Monob.

Stylophorella Ashmead, 1904. Carnegie Mus. Mem. 1: 275. N. syn.

Type: *Stylophorella perplexa* Ashmead. Monob.

dysaules Walker. Fla.

Norbanus dysaules Walker, 1843. Soc. Ent. France Ann (2) 1: 158. ♂.

perplexus (Ashmead), n. comb. Tex.

Stylophorella perplexa Ashmead, 1904. Carnegie Mus. Mem. 1: 275, 389. ♀.

Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 316.

pisius Walker. Fla.

Norbanus pisius Walker, 1843. Soc. Ent. France Ann. (2) 1: 160. ♀.

Genus METASTENUS Walker

Metastenus Walker, 1834. Ent. Mag. 2: 301.

Type: *Metastenus concinnus* Walker. Monob.

acanthocini Ashmead. W. Va., Fla. Host: *Acanthocinus obsoletus* (Oliv.).

Metastenus (?) *acanthocini* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 198.

♂ ♀.

Biology: Hopkins, 1893. W. Va. Agr. Expt. Sta. Bul. 32: 226.

Taxonomy: Crawford, 1909. Canad. Ent. 41: 99.

callidii (Ashmead), n. comb. N. J., Va. Host: *Callidium antennatum* Newm.

Aetroxys callidii Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 223. ♀.

coeruleus Ashmead. Kans.

Metastenus coeruleus Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App p. VI. ♀.

facialis (Provancher), n. comb. Ont.

Charitopus facialis Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 203. ♂.

Genus NEOCATOLACCUS Ashmead

Neocatolaccus Ashmead, 1904. Carnegie Mus. Mem. 1: 320, 322.

Type: *Catolaccus tylodermae* Ashmead. Monob.

moneilemae Gahan. Tex. Host: *Moneilema ulkei* Horn.

Neocatolaccus moneilemae Gahan, 1936. U. S. Natl. Mus. Proc. 83: 484. ♂ ♀.

tylodermae (Ashmead). N. Y., N. H., Mass., Conn., N. J., D. C., W. Va., Ohio, Ind., Ill., Kans., Tex. Hosts: *Ampelogypter sesostris* (Lec.); *Cylindrocapturus longulus* (Lec.); *Lixus musculus* Say; *L. parvus* Lec.; *L. scrobicollis* Boh.; *Trichobaris texana* Lec.; *Tyloderma foveolata* Say; larva ex stem of *Ambrosia artemisiaefolia*.

Catolaccus tylodermae Ashmead, 1893. Ohio Agr. Expt. Sta. Tech. Ser. Bul. 1: 161. ♂ ♀.

Genus EURYDINOTELOIDES Girault

Eurydinoteloides Girault, 1913. Arch. f. Naturgesch. 79A (6): 55.

Type: *Eurydinoteloides americana* Girault. Monob.

albiclava Girault, emend. Md.

Eurydinoteloides albiclavus Girault, 1917. Chalcidoidea Nova Marilandensis III, p. 5. ♀.

Genus MEGATRYDYMUS Girault

Megatrydymus Girault, 1917. New Chalcid Flies, p. la.

Type: *Megatrydymus taciti* Girault. Monob.

taciti Girault. West. U. S. Ex gall.

Megatrydymus taciti Girault, 1917. New Chalcid Flies, p. la. ♂.

Genus ACAENACIS Girault

Acaenacis Girault, 1917. New Chalcid Flies, p. la.

Type: *Semiotellus ficigeræ* Ashmead. Monob.

ficigeræ (Ashmead). Fla. Host: Gall of *Disholcaspis virens* (Ashm.)

Semiotellus ficigeræ Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xvii. ♂ ♀.

Tribe CLEONYMINI

Genus TOMICOBIA Ashmead

Tomicobia Ashmead, 1899. Ent. Soc. Wash. Proc. 4: 203 (no species).

Type: *Tomicobia tibialis* Ashmead. Included by Ashmead, 1904.

Ipocoelius Ruschka, 1924. Ent. Tidskr. 45: 6.

Type: *Ipocoelius seitneri* Ruschka. Orig. desig.

tibialis Ashmead. W. Va., N. C., N. Dak., Idaho, Calif. Hosts: *Ips calligraphus* (Germ.); *I. confusus* (Lec.); *I. grandicollis* (Eichh.); *I. oregonis* (Eichh.); *I. pini* (Say); *Orthotomicus caelatus* (Eichh.); ?*Pityophthorus puberulus* Lec.; ?*P. pulchellus* (Eichh.).

Tomicobia tibialis Ashmead, 1904. Carnegie Mus. Mem. 1: 283. ♀.

Taxonomy: Gahan, 1938. Ent. Soc. Wash. Proc. 40: 221-222.

Genus HEYDENIA Foerster

Heydenia Foerster, 1856. Hym. Stud., v. 2, pp. 46, 48, 49.

Type: *Heydenia pretiosa* Foerster. Monob.

unica Cook and Davis. Mont., Mich., W. Va., Va., N. C. Hosts: *Dendroctonus frontalis* Zimm.; ?*Ips avulsus* (Eichh.); ?*I. latidens* (Lec.); ?*Dendroctonus obesus* (Mann.); ?*Phloeosinus dentatus* (Say); ?*P. tazodii* Blackm.; ?*Pityophthorus burkei* Blackm.; ?*P. knechteli* Swaine; ?*Polygraphus rufipennis* (Kby.); *Scolytus rugulosus* (Ratz.); ?*Pissodes strobi* (Peck).

Heydenia unica Cook and Davis, 1891. Mich. Agr. Expt. Sta. Bul. 73: 15. ♂ ♀.

Genus **EPISTENIA** Westwood

Epistenia Westwood, 1832. In Griffith, Cuvier's Animal Kingdom 15 (Insecta 2), p. 432.

Type: *Epistenia coeruleata* Westwood. Monob.

Dasyglenes Ashmead, 1888. Canad. Ent. 20: 173-174.

Type: *Dasyglenes osmiae* Ashmead. Monob.

coeruleata Westwood. Ga.

Epistenia coeruleata Westwood, 1832. In Griffith, Cuvier's Animal Kingdom 15 (Insecta 2), p. 432.

odyneri Ashmead. Calif. Host: *Leptochilus rufobasilaris* (Ashm.).

Epistenia odyneri Ashmead, 1896. In Davidson, Psyche 7: 336. ♀.

osmiae (Ashmead). N. J., ?Fla. Host: *Osmia* sp. in *Catalpa* twigs.

Dasyglenes osmiae Ashmead, 1888. Canad. Ent. 20: 174. ♀.

polita (Say), n. comb. Va.

Spalangius (!) *politus* Say, 1828. Contrib. Maclur. Lyc. Phila. 1: 79. ♀.

regalis Cockerell. Colo. Host: Eumenid.

Epistenia regalis Cockerell, 1934. Psyche 39: 228. ♀.

Genus **CLEONYMUS** Latreille

Cleonymus Latreille, 1809. Gen. Crust. Ins., v. 4, p. 29.

Type: *Diptolepis depressa* Fabricius. Desig. by Latreille, 1810.

californicus Girault. Calif.

Cleonymus californicus Girault, 1917. Jour. Ent. and Zool. 9: 11. ♀.

nigriclavus Girault. Fla.

Cleonymus nigriclavus Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 6. ♀.

Genus **PTINOBIUS** Ashmead

Ptinobius Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 11.

Type: *Charitopus magnificus* Ashmead. Monob.

Revision: Rohwer, 1919. Ent. Soc. Wash. Proc. 21: 4-6.

agrili Rohwer. Calif. Host: *Agrilus angelicus* Horn.

Ptinobius agrili Rohwer, 1919. Ent. Soc. Wash. Proc. 21: 5. ♂ ♀.

californicus Crawford. Calif.

Ptinobius californicus Crawford, 1917 (1916). Insector Inscitiae Menstruus 4: 142. ♀.

magnificus (Ashmead). N. J., W. Va., Va., Kans., Tex. Hosts: *Agrilus ruficollis* (F.); *Amphicerus bicaudatus* (Say); *Tessaropa tenuipes* (Hald.); *Lixus scrobicollis* Boh.

Charitopus magnificus Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. IV. ♀.

Ptinobius dysphagae Girault, 1915. Ent. News 26: 130. ♂.

Biology: Hopkins, 1891. W. Va. Agr. Expt. Sta. Bul. 15: 84.

Taxonomy: Girault, 1917 (1916). Insector Inscitiae Menstruus 4: 142, 144.

texanus Crawford. Tex. Host: *Araecerus fasciculatus* (Deg.).

Ptinobius texanus Crawford, 1917 (1916). Insector Inscitiae Menstruus 4: 142. ♂ ♀.

Genus **CHEIROPACHUS** Westwood

Cheiropachus Westwood, 1828. Zool. Jour. 4: 23.

Type: (*Diptolepis quadrum* Fabricius) = *Sphex colon* Linnaeus. Monob.

Cheiropachys Haliday, 1833. Ent. Mag. 1: 268. Emend.

Pachychirus Agassiz, 1846. Nomencl. Zool., Index Univ., p. 777. Emend. Preoc.

Chiropachys Vollenhoven, 1871. Schetsen Hym., v. 3, pl. 10. Emend.

Tropidogastra Ashmead, 1904. Carnegie Mus. Mem. 1: 323.

Type: *Tropidogastra arizonensis* Ashmead. Monob.

Revision: Gahan, 1938. Ent. Soc. Wash. Proc. 40: 219-220.

- arizonensis** (Ashmead). N. C., Tex., N. Mex., Ariz., Calif., Oreg. Host: *Phloeosinus* sp. reared from red cedar, juniper, and *Cercocarpus ledifolius*.
Tropidogastra arizonensis Ashmead, 1904. Carnegie Mus. Mem. 1: 323, 392.
 ♀.
Dinarmus arizonicus Girault, 1917 (1916). Insector Inscitiae Menstruus 4: 109. ♀.
- brunneri** Crawford. Mont. Host: *Pissodes* sp.
Cheirpachys brunneri Crawford, 1912. U. S. Natl. Mus. Proc. 43: 165.
 ♂ ♀.
- colon** (Linnaeus). Ont. and N. H. to Ala.; Calif., Oreg., Wash., B. C. Hosts: *Magdalis aenescens* Lec.; *Phloeosinus canadensis* Swaine; *Scolytus multi-striatus* (Marsh.); *S. rugulosus* (Ratz.).
Sphex Colon Linnaeus, 1858. Syst. Nat., ed. 10, p. 571.
 Biology: Russo, 1930. R. Lab. Ent. Agr. Portici Bol. 2: 181-195.
 Taxonomy: Ferrière, 1948. Schweiz. Ent. Gesell. Mitt. 21: 522-523.
- obscuripes** Brues. Ont. to N. C. and Ill. Hosts: *Phloeotribus liminaris* (Harr.); *Scolytus rugulosus* (Ratz.).
Cheirpachys obscuripes Brues, 1910. Wis. Nat. Hist. Soc. Bul. 8: 80. ♀.

Family EURYTOMIDAE

Phylogeny: Bugbee, 1936. Ent. Amer. 16: 169-222.

Genus ISOSOMODES Ashmead

- Isosomodes* Ashmead, 1888. Ent. Amer. 4: 42, 43 (no species).
 Type: *Isosoma gigantea* Ashmead. Included by Ashmead, 1894.
- giganteus** (Ashmead). D. C., Va., Fla.
Isosoma gigantea Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 127. ♂.

Genus HARMOLITA Motschulsky

- Isosoma* Walker, 1832. Ent. Mag. 1: 13, 14. Preocc.
 Type: *Eurytoma longula* Dalman. Desig. by Westwood, 1840.
- Harmolita* Motschulsky, 1863. Soc. Imp. Nat. Moscou Bul. 36 (2): 58.
 Type: *Harmolita longicornis* Motschulsky. Monob.
- Xanthosoma* Ashmead, 1888. Ent. Amer. 4: 42, 43 (no species). N. syn.
 Type: *Xanthosoma nigricornis* Ashmead. Included by Ashmead, 1894.
- Isosomocharis* Ashmead, 1888. Ent. Amer. 4: 42, 43 (no species). N. syn.
 Type: *Isosomocharis sulcata* Ashmead. Included by Ashmead, 1894.
- Harmolyta* Dalla Torre, 1898. Cat. Hym., v. 5, p. 154. Emend.
- Urios* Girault, 1911. N. Y. Ent. Soc. Jour. 19: 175. N. syn.
 Type: (*Urios vestali* Girault) = *Harmolita grande* form *minutum* (Howard).
- Isthmosoma* Hedicke, 1920. Arch. f. Naturgesch. 86A (11): 165. N. name.
 Revisions: Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 433-471.—Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 7-8 (generic characters).—Gahan, 1922. Ent. Soc. Wash. Proc. 24: 33-58 (world hosts).—Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 1-25.

The members of this genus are commonly called joint worms. Their larvae are gall-formers, feeding in the stems of grains and grasses.

- agropyrocola** Phillips and Emery. *Agropyron* spp.
Harmolita agropyrocola Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 458. ♀.
- agropyrophila** Phillips and Emery. From Atlantic west to Kans. Host: *Agropyron repens*.
Harmolita agropyrophila Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 450. ♂ ♀.
 Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 20.

- agrostidis** (Howard). Calif. Host: *Agrostis* sp.
Isosoma agrostidis Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 12. ♀.
- ainsliei** Phillips. S. Dak. Host: *Elymus* sp.
Harmolita ainsliei Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 4, 10. ♂ ♀.
- albomaculata** (Ashmead). N. H. to Tenn. and Mich.; Kans., Nebr., and N. Dak.
 Host: *Phleum pratense*.
Isosoma albomaculatum Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 329. ♂ ♀.
 Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 15-16.—Phillips and Poos, 1921. Jour. Agr. Res. 21: 421.—Phillips and Poos, 1927. Jour. Agr. Res. 34: 475, 483.
- atlantica** Phillips and Emery. N. Y., Mich., Ind. Host: *Agropyron* sp.
Harmolita atlantica Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 461. ♂ ♀.
 Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 19-20.—Phillips and Poos, 1921. Jour. Agr. Res. 21: 409, 416, 421.—Phillips and Poos, 1927. Jour. Agr. Res. 34: 475, 483.
- bambusae** Phillips. Ga. Host: Bamboo.
Harmolita bambusae Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 20. ♀.
- bromi** (Howard). Calif. Host: *Bromus ciliatus*.
Isosoma bromi Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 11. ♂ ♀.
- bromicola** (Howard). Conn., Calif. Host: *Bromus ciliatus*.
Isosoma bromicola Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 17. ♂ ♀.
- californica** (Howard). Calif. Hosts: ?*Eriocoma hymenoides*; wild grass stems.
Isosoma californicum Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 10. ♂ ♀.
- captiva** (Lintner). N. Y. Host: ?Wheat.
Isosoma captivum Lintner, 1888. N. Y. State Mus. Nat. Hist. Rpt. 41: 34. ♂ ♀.
 Taxonomy: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 16.
- cinnae** Phillips and Poos. Ohio. Host: *Cinna arundinacea*.
Harmolita cinnae Phillips and Poos, 1922. Kans. Univ. Sci. Bul. 14: 352. ♂ ♀.
- comatae** Phillips. N. Dak. Host: *Stipa comata*.
Harmolita comatae Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 9. ♀.
- dactylicola** Phillips and Emery. N. Y. and Mass. to Va. and Mich.; Tenn., Utah.
 Host: *Dactylis glomerata*.
Harmolita dactylicola Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 446. ♂ ♀.
 Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 16.—Phillips and Poos, 1927. Jour. Agr. Res. 34: 475, 483.
- dakotae** Phillips, emend. N. Dak. Host: *Elymus* sp.
Harmolita dakota Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 14. ♂ ♀.
- danthoniae** Phillips. Mich. Host: *Danthonia spicata*.
Harmolita danthoniae Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 18. ♀.
- elymi** (French). N. Y., Mich., Va., Ohio, Ind., Ill., Utah. Hosts: *Elymus canadensis*; *E. glaucus*; *E. virginicus*.
Isosoma Elymi French, 1882. Canad. Ent. 14: 10. ♀.
 Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 20.—Phillips and Poos, 1927. Jour. Agr. Res. 34: 475.
- elymicola** Phillips and Emery. N. Y., Va., Ohio, Ind., Ill., Mich., Mo. Hosts: *Elymus* spp.
Harmolita elymicola Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 460. ♂ ♀.

Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 21.—Phillips and Poos, 1921. Jour. Agr. Res. 21: 409, 416, 421.

elymivora Phillips and Emery. Va., Ohio, Ind., Ill., Ark., Kans. Hosts: *Elymus* spp.

Harmolita elymivora Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 464. ♂ ♀.

Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 21.—Phillips and Poos, 1921. Jour. Agr. Res. 21: 421.

elymophaga Phillips and Emery. Calif., Wash. Hosts: *Elymus condensatus*; *E. triticoides*.

Harmolita elymophaga Phillips, 1927. Ent. Soc. Wash. Proc. 29: 127. ♂ ♀.

elymophila Phillips and Emery. Calif. Hosts: *Elymus* spp.

Harmolita elymophila Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 462. ♂ ♀.

elymophthora Phillips and Emery. Nebr., N. Dak. Hosts: *Elymus* spp.

Harmolita elymophthora Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 465. ♂ ♀.

Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 22–23.

elymoxena Phillips and Emery. Calif. Host: *Elymus glaucus*.

Harmolita elymoxena Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 459. ♂ ♀.

festuceae Phillips and Emery. N. Y., N. J., Pa., Ohio, Va. Hosts: *Festuca elatior*; *F.* sp.

Harmolita festuceae Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 454. ♂ ♀.

Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 18–19.—Phillips and Poos, 1927. Jour. Agr. Res. 34: 475, 483.

flavicoxa Phillips. N. Mex. Host: *Elymus* sp.

Harmolita flavicoxa Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 13. ♂ ♀.

gahani Phillips. S. Dak. Host: *Elymus* sp.

Harmolita gahani Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 18. ♀.

gillettei Phillips and Emery. Colo.

Harmolita gillettei Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 467. ♀.

grandis form *grandis* (Riley). Wherever wheat is grown in No. Amer. The species is commonly known as the wheat strawworm. Host: Wheat.

Isosoma grande Riley, 1884. Brooklyn Ent. Soc. Bul. 7: III, errata. ♀.

Biology: Webster and Reeves, 1909. U. S. Dept. Agr. Bur. Ent. Cir. 106: 1–11.—Gossard, 1911. Ohio Agr. Expt. Sta. Bul. 233: 66.—Doane, 1916. Calif. State Com. Hort. Monthly Bul. 5: 69–72.—Phillips and Poos, 1921. Jour. Agr. Res. 21: 409, 421.—Knowlton, 1931. Jour. Econ. Ent. 24: 414–416.—Knowlton, 1932. Jour. Econ. Ent. 25: 1169–1170.—Knowlton and Janes, 1933. Utah Agr. Expt. Sta. Bul. 243: 1–8.

grandis form *minuta* (Howard). Wherever wheat is grown in No. Amer. This is the vernal, apterous form. Host: Wheat.

Isosoma tritici Riley, 1882. Amer. Nat. 16: 247. ♀. Preocc.

Isosoma grande form *minutum* Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2-10. N. name.

Urios vestali Girault, 1911. N. Y. Ent. Soc. Jour. 19: 176. ♂. N. syn.

Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 6–8.—Knowlton and Janes, 1933. Utah Agr. Expt. Sta. Bul. 243: 3.

hageni (Howard). Mass. Host: *Agropyron repens*.

Isosoma hageni Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 12. ♀.

hesperus Phillips and Emery. N. Dak., S. Dak., Nebr., Kans., Utah. Hosts: *Elymus* spp.

Harmolita hesperus Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 457. ♂ ♀.

Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 22–23.

- holci** Phillips. Oreg. Host: *Holcus* sp.
Harmolita holci Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 19. ♂ ♀.
- hordei** (Harris). Ont., Que. to N. C. and Ill.; Kans., Colo. Host: Barley.
Eurytoma Hordei Harris, 1830. New England Farmer 9: 2 (including footnote).
Pteromalus? fulvipes Fitch, 1859. N. Y. State Agr. Soc. Jour. 10: 114.
Eurytoma flavipes Fitch, 1862 (1861). N. Y. State Agr. Soc. Trans. 21: 845.
 ♂ ♀. Preocc.
 Biology: Gossard, 1911. Ohio Agr. Expt. Sta. Bul. 233: 70.—Phillips, 1920. U. S. Dept. Agr. Bul. 808: 11–13.
- jonesi** Phillips. Calif. Host: *Elymus* sp.
Harmolita jonesi Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 15. ♂ ♀.
- kingi** Phillips. Sask. Host: *Hordeum jubatum*.
Harmolita kingi Phillips, 1927. Ent. Soc. Wash. Proc. 29: 128. ♂ ♀.
- koebelei** Phillips. Calif.
Harmolita koebelei Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 11. ♀.
- lolii** Gahan. Calif. Hosts: *Lolium multiflorum*; *L. temulentum*.
Harmolita lolii Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 9. ♂ ♀.
- longipetiolata** Phillips. N. Dak. Host: *Stipa comata*.
Harmolita longipetiolata Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 16.
 ♀.
- maculata** (Howard). N. Y. and Mass. to Va., Ky., Ill., and Mich. Host: *Bromus secalinus*.
Isosoma maculatum Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 15. ♀.
 Biology: McConnell, 1918. Jour. Econ. Ent. 11: 170.—Phillips and Poos, 1921. Jour. Agr. Res. 21: 421.—Phillips, 1920. U. S. Dept. Agr. Bul. 808: 19.—Phillips and Poos, 1927. Jour. Agr. Res. 34: 475, 483–484.
- minuenda** Phillips. N. Dak. Host: *Elymus* sp.
Harmolita minuenda Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 6. ♀.
- montana** (Ashmead), n. comb. Colo., Mont.
Isosoma montanum Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 329. ♀.
- neocaptiva** Peck, n. name. N. Y., Ind., Ill. Host: *Poa pratensis*.
Isosoma captivum Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 13. ♂ ♀. Preocc. by Lintner, 1888.
 Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 16–17, 23.
- nigricornis** (Ashmead), n. comb. Fla.
Xanthosoma nigricornis Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 320.
 ♀.
- occidentalis** Phillips and Emery. N. Mex. Host: *Agropyron* sp.
Harmolita occidentalis Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 465. ♂ ♀.
 Biology: Phillips and Poos, 1921. Jour. Agr. Res. 21: 421.
- opuntiae** Muesebeck. Ariz. Host: *Hilaria mutica*.
Harmolita opuntiae Muesebeck, 1932. Ent. Soc. Wash. Proc. 34: 110. ♂ ♀.
 Biology: Muesebeck, 1933 (1932). Ent. Soc. Wash. Proc. 34: 158.
- oregonensis** Phillips, emend. Oreg. Host: *Elymus* sp.
Harmolita oregon Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 14. ♀.
- ovata** Phillips and Emery. Kans. Host: *Elymus* sp.
Harmolita ovata Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 458.
 ♂ ♀.
 Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 22–23.
- pacifica** Phillips. Calif.
Harmolita pacifica Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 12. ♂ ♀.
- panicum** Phillips and Poos. Va. Host: *Panicum clandestinum*.
Harmolita panicum Phillips and Poos, 1922. Kansas Univ. Sci. Bul. 14: 351.
 ♂ ♀.
 Biology: Phillips and Poos, 1921. Jour. Agr. Res. 21: 421.

- phalaridis** Phillips and Poos. N. Y., S. Dak. Host: *Phalaris arundinacea*; *P.* sp.
Harmolita phalaridis Phillips and Poos, 1922. Kans. Univ. Sci. Bul. 14: 351.
 ♂ ♀.
- phyllostachitis** Gahan. Fla. Host: *Phyllostachys bambusoides*.
Harmolita phyllostachitis Gahan, 1922. Ent. Soc. Wash. Proc. 24: 55. ♀.
- poacola** Gahan. Conn., Ind. Host: *Poa pratensis*.
Harmolita poae Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 445.
 ♂ ♀. Preocc.
Harmolita poacola Gahan, 1922. Ent. Soc. Wash. Proc. 24: 46, 52. N. name.
 Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 17-18.
- poaphila** Phillips and Emery, emend. Colo. Hosts: *Poa lucida*; *P.* sp.
Harmolita poaphila Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 463.
 ♂ ♀.
- poosi** Phillips. Va.
Harmolita poosi Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 10. ♀.
- rufipes** Phillips and Emery. Ill., Nebr., Kans., N. Mex., Utah. Host: *Elymus* spp.
Harmolita rufipes Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 453.
 ♂ ♀.
 Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 21-23.
- sativi** Phillips. Ill. Host: Wheat.
Harmolita sativi Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 7. ♀.
- secale** (Fitch). N. Y., Pa., Va., Ohio, Ind., Mich., Kans., Nebr., Utah. Host: Rye.
Eurytoma Secale Fitch, 1861. Amer. Agr. 20: 235-236.
 Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 13.
- stipicola** Phillips. N. Dak. Host: *Stipa comata*.
Harmolita stipicola Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 8. ♀.
- stipiphaga** Phillips. N. Dak. Host: *Stipa comata*.
Harmolita stipiphaga Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 17. ♀.
- stipiphila** Phillips. N. Dak.
Harmolita stipiphila Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 16. ♀.
- sulcata** (Ashmead), n. comb. Fla.
Isosomocharis sulcata Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 331. ♀.
- tibialis** (Ashmead), n. comb. S. Dak., Mont., Oreg. Hosts: *Phalaris arundinacea*;
P. sp.
Isosomorpha tibialis Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 331. ♂ ♀.
Harmolita phalaricola Phillips and Poos, 1922. Kans. Univ. Sci. Bul. 14: 353.
 ♀. N. syn.
- tritici** (Fitch). East. No. Amer., Nebr., Kans., Utah, Calif., Oreg. This species
 is commonly known as the wheat jointworm. Host: Wheat.
Pteromalus? tritici Fitch, 1859. N. Y. State Agr. Soc. Jour. 10: 115.
Decatoma basilaris Provancher, 1881. Nat. Canad. 12: 290. ♂ ♀.
Isosoma nigrum Cook, 1885. Rural New Yorker 44: 314. ♂ ♀.
 Biology: Pettit, 1907. Mich. Agr. Expt. Sta. Bul. 244: 106-109.—Phillips and Poos,
 1940. U. S. Dept. Agr. Farmers' Bul. (rev.) 1006: 1-12.—Chamberlain,
 1941. U. S. Dept. Agr. Tech. Bul. 784: 1-46.
- utahensis** Phillips. Utah. Host: ?Wheat.
Harmolita utahensis Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 11. ♀.
- vaginicola** (Doane). Que., Ont. to Va., Ohio and Mich; Utah, Oreg., Wash. Host:
 Wheat.
Isosoma vaginicola Doane, 1916. Jour. Econ. Ent. 9: 399. ♀.
 Biology: Knowlton and Janes, 1933. Utah Agr. Expt. Sta. Bul. 243: 9.
- websteri** (Howard). Mass., N. Y., Pa., Va., Ohio, Ind., Ill., La., Utah, Calif. Host:
 Rye.
Isosoma websteri Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2:
 15. ♀.
Isosoma hirtifrons Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2:
 16. ♀.
Isosoma fitchi Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 20.
 ♂ ♀.

Biology: Phillips and Poos, 1927. Jour. Agr. Res. 34: 483.—Knowlton, 1932. Jour. Econ. Ent. 25: 1171-1172.—Knowlton and Janes, 1933. Utah Agr. Exp. Sta. Bul. 243: 9-10.

Genus AXIMA Walker

Axima Walker, 1862. Ent. Soc. London Trans. (3) 1 (pt. 4): 373.

Type: *Axima spinifrons* Walker. Monob.

zabriskiei Howard. N. Y., N. J., Mich., Mo. Hosts: *Ceratina calcarata* Rob.; nest of *C. dupla* Say.

Axima zabriskiei Howard, 1890. U. S. Dept. Agr. Insect Life 2: 365. ♂ ♀.

Genus MACRORILEYA Ashmead

Macrorileya Ashmead, 1900. In Smith, N. J. State Bd. Agr. Ann. Rpt. 27 (sup.); 555.

Type: *Rileya oecanthi* Ashmead. Monob.

oecanthi (Riley). N. J., Va., N. C., Nebr., Calif. Hosts: *Oecanthus californicus* Sauss.; *O. nigricornis quadripunctatus* Beut.; *O. niveus* (Deg.); *O. sp.*

Rileya oecanthi Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 321. ♂ ♀.

Biology: Smith, 1930. Calif. Univ. Pubs., Ent. 5: 165-172.

Genus RILEYA Ashmead

Rileya Ashmead, 1888. Ent. Amer. 4: 42 (no species).

Type: *Rileya cecidomyiae* Ashmead. Included by Ashmead, 1888.

Ashmeadia Howard, 1889. Canad. Ent. 21: 59. N. name.

Tragiicola Brèthes, 1918. Soc. Ent. France Bul., p. 83. N. syn.

Type: *Tragiicola haumani* Brèthes. Monob.

Revision: Gahan, 1918. Ent. Soc. Wash. Proc. 20: 136.

americana Girault. Mo. Host: Itonidid gall on *Helenium autumnale*.

Rileya americana Girault, 1916. Canad. Ent. 48: 339. ♀.

cecidomyiae Ashmead. Conn., N. J., N. C., Fla., Ill., Kans. Hosts: *Dasyneura* sp. on *Helianthus*; itonidid gall on *Baccharis halimifolia*; itonidid in *Crataegus* seeds.

Rileya cecidomyiae Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. III. ♂ ♀.

compressiventris Gahan. Tex. Host: Gall of *Asphondylia* sp. on *Mimosa*.

Rileya compressiventris Gahan, 1918. Ent. Soc. Wash. Proc. 20: 143. ♂ ♀.

hegeli Girault. Fla.

Rileya hegeli Girault, 1916. Canad. Ent. 48: 340. ♀.

heterogaster Gahan. Tex. Host: Gall of *Asphondylia* sp. on *Mimosa*.

Rileya heterogaster Gahan, 1918. Ent. Soc. Wash. Proc. 20: 141. ♂ ♀.

Morphology: Bugbee, 1936. Ent. Amer. 16: 179.

mellea Ashmead. Fla. Host: Itonidid on skunk bush.

Rileya mellea Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 321. ♀.

opuntiae Gahan. Tex. Host: *Asphondylia opuntiae* Felt.

Rileya opuntiae Gahan, 1936. U. S. Natl. Mus. Proc. 83: 482. ♀.

piercei Crawford. Ariz.

Rileya piercei Crawford, 1914. Ent. Soc. Wash. Proc. 16: 29. ♂.

similaris Gahan. Tex. Host: Gall of *Asphondylia* sp. on "Mimosa tree" (possibly *Leucaena pulverulenta* or *Mimosa Lindheimeri*).

Rileya similaris Gahan, 1918. Ent. Soc. Wash. Proc. 20: 148. ♂ ♀.

tegularis Gahan. Ariz. Host: *Asphondylia* sp. ex stem galls on *Pluchea borealis* and on *Suaeda* sp.

Rileya tegularis Gahan, 1918. Ent. Soc. Wash. Proc. 20: 147. ♂ ♀.

Genus BEPHRATOIDES Brues

Bephratoides Brues, 1908. Wis. Nat. Hist. Soc. Bul. 6: 158.

Type: *Bephratoides maculatus* Brues. Monob.

agrili (Ashmead), n. comb. N. J., Va. Host: *Agrilus otiosus* Say.
Eurytoma agrili Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 325. ♀.

maculatus Brues. Tex.

Bephratoides maculatus Brues, 1909 (1908). Wis. Nat. Hist. Soc. Bul. 6: 158.
 ♀.

Genus BEPHRATA Cameron

Bephrata Cameron, 1884. Biol. Cent.-Amer. Hym., v. 1, p. 109.

Type: *Bephrata ruficollis* Cameron. Monob.

Bephratoides Girault, 1913. Arch. f. Naturgesch. 79A (6): 60. Preocc. N.
 syn.

Type: *Bephrata paraguayensis* Crawford. Monob.

Bephratelloides Girault, 1913. Ent. News 24: 459. N. name. N. syn.

cubensis Ashmead. So. Fla.

Bephrata cubensis Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 321. ♀.

Genus PRODECATOMA Ashmead

Prodecatoma Ashmead, 1904. Carnegie Mus. Mem. 1: 261, 263, 463.

Type: *Prodecatoma flavescens* Ashmead. Orig. desig.

cooki (Howard), n. comb. N. Y., Conn., Ohio, Mich., Calif. Seed hosts: *Psedera quinquefolia*; *Vitis californica*; wild and cultivated grapes.

Decatomeidea cooki Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser.
 2: 23. ♂ ♀.

Prodecatoma phytophaga Crosby, 1909. Canad. Ent. 41: 50. ♂ ♀. N. syn.

Biology: Crosby, 1909. N. Y. (Cornell) Agr. Expt. Sta. Bul. 265: 382.

Morphology: Bugbee, 1936. Ent. Amer. 16: 178.

Genus PHYLLOXEROXENUS Ashmead

Phylloxeroxenus Ashmead, 1888. Ent. Amer. 4: 42, 43 (no species).

Type: *Eurytoma phylloxerae* Ashmead. Included by Ashmead,
 1894.

phylloxerae (Ashmead). Fla. Host: Orange-colored dipterous larva in gall of *Phylloxera caryae-scissa* Riley.

Eurytoma phylloxerae Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p.
 xxx. ♀.

Genus CHRYSEIDA Spinola

Chryseida Spinola, 1840. Rev. Zool. 3: 18.

Type: *Chryseida superciliosa* Spinola. Monob.

inopinata Brues. Tex. Host: *Oncideres putator* Thoms.

Chryseida inopinata Brues, 1907. Wis. Nat. Hist. Soc. Bul. 5: 103. ♀.

Genus EURYTOMA Illiger

Eurytoma Illiger, 1807. Mag. Insektenk., v. 6, 192.—Illiger, 1807. *In Rossi*,
 Fauna Etrusca, ed. 2, v. 2, p. 128.

Type: (*Chalcis abrotani* Panzer) = *Pteromalus appendigaster*
 Swederus. Desig. by Westwood, 1840.

Decatoma Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 151.

Type: *Diplolepis adonidum* Rossi. Desig. by Ashmead, 1904.

Tetramesa Walker, 1848. List Hym. Brit. Mus., v. 2, pp. 104, 154.

Type: *Tetramesa iarbax* Walker. Monob.

Ennetoma Dahlbom, 1857. Öfvers. Svenska Vetensk. Akad. Forh. 14: 292.

Type: (*Chalcis abrotani* Panzer) = *Pteromalus appendigaster*
 Swederus. Desig. by Gahan and Fagan, 1923.

Eurytomocharis Ashmead, 1888. Ent. Amer. 4: 42, 43 (no species). N. syn.

Type: *Eurytomocharis minuta* Ashmead. Included by Ashmead,
 1894.

Evoxsoma Ashmead, 1888. Ent. Amer. 4: 42, 43 (no species). N. syn.

Type: *Systole brachyptera* Ashmead. Included by Ashmead, 1894.

Enneatoma Dalla Torre, 1898. Cat. Hym., v. 5, p. 332. Emend.

Evoxsoma Dalla Torre, 1898. Cat. Hym., v. 5, p. 345. Emend.

Bephratella Girault, 1913. Arch. f. Naturgesch. 79 (6): 95.

Type: *Bephratella nympa* Girault. Orig. desig.

abatos Walker. Fla.

Eurytoma abatos Walker, 1843. Soc. Ent. France Ann. (2) 1: 152. ♀.

abnormicornis Walsh. Fla., Ill., Kans.

Eurytoma abnormicornis Walsh, 1870. Amer. Ent. and Bot. 2: 299. ♀.

abnormis (Ashmead). N. Y., N. C., Tex., Kans. Host: ?*Stephanoderes dissimilis* (Zimm.).

Isosoma abnormis Ashmead, 1896. Amer. Soc. Ent. Trans. 23: 219. ♀.

albipes Ashmead. N. C., Fla., Miss. Host: *Asphondylia globulus* O. S.

Eurytoma albipes Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxxi. ♂ ♀.

appendigaster (Swederus). Ont., New England, N. J., Pa. Wis. Hosts: *Blastodacna curvilineella* Chamb.; *Grapholitha molesta* (Busck); *Rhyacionia buoliana* (Schiff.); *Coleophora pruniella* Clem.; *Compsilura concinnata* (Meig.); *Apanteles glomeratus* (L.); *A. lacticolor* Vier.; *A. melanoscelus* (Ratz.); *A. solitarius* (Ratz.); *Macrocentrus ancylivorus* Roh.; *Meteorus versicolor* (Wesm.); *Glypta* sp.; *Phobocampe disparis* (Vier.).

Pteromalus Appendigaster Swederus, 1795. Svenska Vetensk. Akad. Handl. 16: 217.

Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 12, 20–21.—Rosenberg, 1934. Bul. Ent. Res. 25: 244–246.

ashmeadi Peck, n. name. Fla.

Eurytomocharis minuta Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 327. ♂ ♀. Preocc. by Walker, 1832.

Taxonomy: Girault, 1916. Canad. Ent. 48: 337–338.

atripes Gahan. N. Y., Pa., N. J., Ohio, Tenn., N. Dak., Oreg., Wash. Hosts: *Phytophaga destructor* (Say); *Cephus cinctus* Nort.

Eurytoma atripes Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 36. ♂ ♀.

Morphology: Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 8, 11–13.

auriceps auriceps Walsh. N. Y., N. J., Va., Fla., Ill., Kans. Hosts: *Acraspis erinacei* (Beut.); gall of *A. hirta* (O. S.); gall of *Amphibolips spongifica* (O. S.); gall of *Callirhytis rugosa* (Ashm.); gall of *Diplolepis radicum* (O. S.).

Eurytoma auriceps Walsh, 1870. Amer. Ent. and Bot. 2: 299. ♂ ♀.

Biology: Triggerson, 1914. Ent. Soc. Amer. Ann. 7: 9–11.

auriceps seminatrix Walsh. Kans. Host gall: *Callirhytis seminator* (Harr.).

Eurytoma auriceps var. *seminatrix* Walsh, 1870. Amer. Ent. and Bot. 2: 299. ♂ ♀.

bicolor Walsh. N. J., W. Va., Mich., Ill., Mo. Hosts: *Scolytus rugulosus* (Ratz.); *Sphex (Isodontia) harrisi* (Fern.); stem gall of *Typha latifolia*; twig galls of black oak.

Eurytoma bicolor Walsh, 1870. Amer. Ent. and Bot. 2: 298. ♂ ♀.

bigeloviae Ashmead. Colo. Host: *Tephrella bigeloviae* Ckll.

Eurytoma bigeloviae Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 25, 45. ♀.

bolteri bolteri Riley. Vt. south to N. C. and west to Kans. Hosts: *Gnorimoschema gallaesolidaginis* (Riley); *Solidago* sp.

Eurytoma Bolteri Riley, 1869. Mo. State Bd. Agr. Ann. Rpt. 4: 177. ♂ ♀.

Biology: Leiby, 1922. N. Y. Ent. Soc. Jour. 30: 93.

Morphology: Snodgrass, 1910. U. S. Natl. Mus. Proc. 39: 65.

bolteri parva Phillips. N. Y., Va., Ohio, Ind., Mo., Utah, Oreg. Hosts: Lepidopterous galls on *Solidago*; *Harmolita tritici* (Fitch).

Eurytoma bolteri var. *parva* Phillips, 1918. U. S. Dept. Agr. Farmers' Bul. 1006: 11, 14. ♀.

Biology: Phillips, 1927. Jour. Agr. Res. 34: 743–758.—Chamberlain, 1941. U. S. Dept. Agr. Tech. Bul. 784: 25–29, 32–35.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 207–208.

brachyptera (Ashmead), n. comb. Fla.

Systole brachyptera Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 126. ♀.

californica Ashmead. Calif. Host: Gall of *Callirhytis pomiformis* (Ashm.).

Eurytoma californica Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 195. ♂ ♀.

chalcidiformis Girault. Calif.

- Eurytoma chalcidiformis* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 3. ♀.
- cleri* Ashmead. W. Va.
Eurytoma cleri Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 323. ♀.
- conica* Provancher. Ont.
Eurytoma conica Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 192. ♀.
 Taxonomy: Provancher, 1888. Addit. Corr. Faune Ent. Canada Hym., p. 438.
- crassineura* Ashmead. Ont., Conn., N. J., W. Va., Colo. Hosts: *Scolytus rugulosus* (Ratz.); scolytids.
Eurytoma crassineura Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 324, 326, 327. ♂ ♀.
- cretheis* Walker. Fla.
Eurytoma cretheis Walker, 1843. Soc. Ent. France Ann. 2 (1): 150. ♀.
- diastrophii* Walsh. Que. south to N. J. and west to Colo. Hosts: Galls of *Callachna gibba* (Loew); *Diastrophus cuscuteaformis* (O. S.); *D. nebulosus* (O. S.).
Eurytoma diastrophii Walsh, 1870. Amer. Ent. and Bot. 2: 299. ♂ ♀.
- dorcaschemae* Ashmead. Conn., N. C., Kans. Hosts: *Dorcaschema alternatum* (Say); *?Phloeotribus frontalis* (Oliv.).
Eurytoma dorcaschemae Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. II. ♂ ♀.
- eragrostidis* (Howard), n. comb. Ind., Ill. Hosts: Insects in *Agrostis alba*; *Eragrostis poaeoides*.
Eurytomocharis eragrostidis Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 21. ♂ ♀.
- floridana* (Ashmead). Fla.
Lamprostylus (?) *floridanus* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 193. ♂.
- gigantea* Walsh. N. W. T., Ont., Que., Maine, N. H., N. Y., Ill., Minn., Kans., Colo. Hosts: *?Eurosta solidaginis* (Fitch); inquiline in *E. solidaginis* gall.
Eurytoma gigantea Walsh, 1870. Amer. Ent. and Bot. 2: 300. ♀.
Callimome Duckeri Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 194.
Ormyrus elongatus Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 194.
Ormyrus prolongatus Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 194.
 Biology: Hughes, 1934. Ent. News 45: 119-122.
 Taxonomy: Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 194, 198.
- hecale* Walker. Fla.
Eurytoma hecale Walker, 1843. Soc. Ent. France Ann. (2) 1: 151. ♀.
- illinoisensis* Girault. Ill., S. Dak. Host: *Elymus* sp.
Eurytoma illinoisensis Girault, 1920. U. S. Natl. Mus. Proc. 58: 206. ♀.
- incerta* Fullaway. Calif. Host: Large, pointed rose gall.
Eurytoma incerta Fullaway, 1912. N. Y. Ent. Soc. Jour. 20: 277. ♂ ♀.
- iphis* Walker. Fla.
Eurytoma iphis Walker, 1846. List Hym. Brit. Mus., v. 1, p. 85. ♀.
- juniperina crosbyi* Marcovitch. N. Y. Host: Berry of *Juniperus virginiana*.
Eurytoma juniperinus (!) var. *Crosbyi* Marcovitch, 1915. Ent. Soc. Amer. Ann. 8: 168. ♀.
- juniperina juniperina* Marcovitch. N. H., N. Y., Conn., Del., Minn. Host: Berry of *Juniperus virginiana*.
Eurytoma juniperinus (!) Marcovitch, 1915. Ent. Soc. Amer. Ann. 8: 166. ♂ ♀.
- lanulae* Fitch. N. Y., N. J. Hosts: *Andricus flocci* (O.S.); galls on willows; woolly galls on oak leaves.
Eurytoma lanulae Fitch, 1859. N. Y. State Agr. Soc. Trans. 18: 817.
- lycti* Ashmead. Va. Host: *Lyctus striatus* Melsh.
Eurytoma lycti Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 325. ♀.
- maculipes* (Ashmead). Canada, Fla. Host: Gall of *Belonocnema treatae* Mayr.
Decatoma maculipes Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 126. ♀.

maga Girault. ?Nearctic.

Eurytoma hegeli var. *maga* Girault, 1920. U. S. Natl. Mus. Proc. 58: 207.
♀. *E. hegeli* appears to be a *nomen nudum*.

magdalidis Ashmead. N. J., Va., Colo. Host: *Magdalis armicollis* (Say).

Eurytoma magdalidis Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 326. ♀.

medicaginis Gahan. Ariz. Host: *Asphondylia websteri* Felt.

Eurytoma medicaginis Gahan, 1919. Ent. Soc. Amer. Ann. 12: 159. ♂ ♀.

minnesotae Girault, emend. Minn. Host: In *Agropyron* sp.

Eurytoma minnesota Girault, 1916. Canad. Ent. 48: 338. ♂ ♀.

muhlenbergiae (Howard), n. comb. Mo., Mont. Host: *Muhlenbergia diffusa*.

Isosomorpha muhlenbergiae Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 20. ♀.

neomexicana Girault. Kans., N. Mex. Hosts: Grain-infesting insect; seed of *Sideranthus spinulosus*.

Eurytoma neomexicana Girault, 1920. U. S. Natl. Mus. Proc. 58: 205. ♂ ♀.

nevadensis (Ashmead), n. comb. Nev.

Isosoma nevadense Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 330. ♂.

nigricoxa Provancher. Ont.

Eurytoma nigricoxa Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 192. ♀.

obtusilobae Ashmead. Fla. Host: *Cynips* gall on *Quercus stellata*.

Eurytoma obtusilobae Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xii. ♂ ♀.

obtusiventris Gahan. Ont., N. Y., Mass., N. C., Miss., La., Kans. Hosts: *Eurosta solidaginis* Fitch; *Tephritis finalis* (Loew).

Eurytoma obtusiventris Gahan, 1934. Ent. News 45: 117. ♂ ♀.

Biology: Hughes, 1934. Ent. News 45: 119-122.

orchidearum (Westwood). Cosmopolitan. Hosts: Bulbs, stems, leaves and buds of many kinds of orchids.

Isosoma Orchidearum Westwood, 1869. Gardeners' Chron., p. 1230. ♂ ♀.

Biology: Moore, 1916. N. J. Agr. Expt. Sta. Bul. 308: 3-12.

pachyneuron Girault. N. C., Calif. Hosts: *Scolytus rugulosus* (Ratz.); *Harmolita elymophaga* P. and E.; *H.* sp.

Eurytoma pachyneuron Girault, 1916. Canad. Ent. 48: 337. ♀.

pater Girault. N. Y., Va., Ohio, Okla., Kans. Host: *Harmolita tritici* (Fitch).

Eurytoma pater Girault, 1920. U. S. Natl. Mus. Proc. 58: 207. ♀.

Biology: Brandhorst, 1943. Kans. Acad. Sci. Trans. 46: 174.

phloeosini Ashmead. N. J., W. Va., N. C. Host: *Phloeosinus dentatus* (Say).

Eurytoma phloeosini Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 327. ♂.

phloeotribi Ashmead. N. J., W. Va., N. C. Hosts: ?*Phloeotribus dentifrons* (Blackm.); *P. frontalis* (Oliv.); *Pityophthorus liquidambarus* Blackm.; ?*Pseudopityophthorus minutissimus* (Zimm.); ?*P. pruinosis* (Eichh.); ?*Scolytus muticus* Say; ?*Stephanoderes dissimilis* (Zimm.).

Eurytoma phloeotribi Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 326. ♀.

phoebus Girault. Pa., Md., Va., Kans., S. Dak., Oreg., Wash. Hosts: *Phytophaga destructor* (Say); *Harmolita tritici* (Fitch); *H.* sp. ex *Elymus canadensis*; *Elymus canadensis*.

Eurytoma phoebus Girault, 1920. U. S. Natl. Mus. Proc. 58: 204. ♀.

Biology: Chambers, 1941. U. S. Dept. Agr. Tech. Bul. 784: 40.

Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 33-36.

phoenix Girault. Calif.

Eurytoma phoenix Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 11. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 204.

pissodis Girault. N. S. to Va., to Minn. and to Ont.; Idaho Hosts: *Pissodes strobi* (Peck); *Coeloides* sp.

Eurytoma pissodis Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 88. ♂ ♀.

- Biology: Taylor, 1929. *Ent. Amer.* 9: 208, 228-237.—Taylor, 1929. *Ent. Amer.* 10: 46-50, 60-62.
- polygraphi** (Ashmead), n. comb. Va Hosts: ?*Polygraphus rufipennis* (Kby.).
Decatomidea polygraphi Ashmead, 1894. *Amer. Ent. Soc. Trans.* 21: 322. ♀.
- prunicola globulicola** Walsh. Ill. Hosts: *Amphibolips prunus* (Walsh); *Disholcaspis quercus-globulus* (Fitch).
Eurytoma prunicola var. *globulicola* Walsh, 1870. *Amer. Ent. and Bot.* 2: 299. ♀.
- prunicola prunicola** Walsh. D. C., Ill., Ont.
Eurytoma prunicola Walsh, 1870. *Amer. Ent. and Bot.* 2: 298. ♂ ♀.
- punctiventris** Walsh. Mich., Ill. Hosts: Galls of *Callirhytis batatoides* (Ashm.); *Disholcaspis mamma* (Cress.); *D. quercus-globulus* (Fitch).
Eurytoma punctiventris Walsh, 1870. *Amer. Ent. and Bot.* 2: 299. ♀.
- pythes** Walker. Fla.
Eurytoma pythes Walker, 1843. *Soc. Ent. France Ann.* 2 (1): 154. ♀.
- querci** Fullaway. Calif. Hosts: Galls of *Acraspis guadalupensis* (Full.); *Andricus lasius* (Ashm.).
Eurytoma querci Fullaway, 1912. *N. Y. Ent. Soc. Jour.* 20: 278. ♂ ♀.
- querci-globuli** (Fitch). N. Y., N. J. Host: *Disholcaspis quercus-globulus* (Fitch).
Macroglenes Querci-globuli Fitch, 1859. *N. Y. State Agr. Soc. Trans.* 18: 812.
- querci-pisi** (Fitch). N. Y., N. J., Fla. Hosts: *Acraspis pezomachoides* (O. S.); *Disholcaspis spongiosa* (Karsch).
Macroglenes Querci-pisi Fitch, 1859. *N. Y. State Agr. Soc. Trans.* 18: 819.
- rhois** Crosby. N. Y., Conn., Pa., D. C., Ohio to La. and Kans.; Fla. Hosts: Seeds of *Rhus copallina*; *R. glabra*; *R. hirta*; *R. spp.*
Eurytoma rhois Crosby, 1909. *Canad. Ent.* 41: 52. ♂ ♀.
Biology: Crosby, 1909. *N. Y. (Cornell) Agr. Expt. Sta. Bul.* 265: 385-388.
- sculpta** Ashmead. Fla.
Eurytoma sculpta Ashmead, 1887. *Amer. Ent. Soc. Trans.* 14: 195. ♀.
- seminis** Bugbee. Okla., Kans. Host: Seeds of *Rhus trilobata*.
Eurytoma seminis Bugbee, 1941. *Kans. Ent. Soc. Jour.* 14: 98. ♂ ♀.
- solenozopheriae** Ashmead. Maine, Conn., N. J., Ont. Host: *Hemadas nubilipennis* (Ashm.).
Eurytoma solenozopheriae Ashmead, 1887. *Amer. Ent. Soc. Trans.* 14: 196. ♂ ♀.
Biology: Driggers 1927. *N. Y. Ent. Soc. Jour.* 35: 254-258.
- stigma** Ashmead. Conn., Calif. Host: *Stigmus inordinatus* Fox.
Eurytoma stigma Ashmead, 1895. *In Davidson, Psyche* 3: 271. ♂ ♀.
- studiosa** Say. Ont., Que., N. Y., N. J., Conn., Ind., Ill., Kans., Colo., N. Mex. Hosts: *Mordellistena nigricans* (Melsh.) in galls of *Eurosta solidaginis* Fitch; *Euura orbitalis* Nort.; *E. salicicola* Smith; *Acraspis erinacei* (Beut.); galls of *Phylloxera caryae-fallax* Riley, *P. caryae-globuli* Walsh, *Lasioptera solidaginis* O. S., *Rhabdophaga batatas* Walsh, *R. brassicoides* O. S., *R. cornuta* Walsh, and *R. strobiloides* Walsh; dipterous gall on *Leptilon canadense*; galls of *Euura nodus* Walsh, *E. salicis-ovulum* (D. T.), *E. perturbans* (Walsh), *Nematus hospes* (Walsh), *Acraspis hirta* (O. S.), *Amphibolips spongifica* (O. S.), *Callirhytis seminator* (Harr.), *Diastrophus fragariae* Beut., *Dryocosmus palustris* (O. S.), and *Xanthoteras forticorne* (Walsh).
Eurytoma studiosa Say, 1836. *Boston Jour. Nat. Hist.* 1: 272. ♀.
Biology: Walsh, 1870. *Amer. Ent. and Bot.* 2: 299.
Morphology: Triggerson, 1914. *Ent. Soc. Amer. Ann.* 7: 9.
- succinipedis** Ashmead. Fla., La., Kans. Host: Gall of *Disholcaspis succinipes* (Ashm.).
Eurytoma succinipedis Ashmead, 1881. *Amer. Ent. Soc. Trans.* 9: Proc. p. xxxi. ♂ ♀.
- teredon** Walker. Fla.
Eurytoma teredon Walker, 1843. *Soc. Ent. France Ann.* (2) 1: 153 ♂ ♀.

tomici Ashmead. Conn., N. Y., W. Va., Fla., Calif., Wash. Hosts: *Cylindrocopturus eatoni* Buch.; *C. furnissi* Buch.; ?*Pityogenes plagiatus* (Lec.); *Epiblema strenuana* (Wlkr.).

Eurytoma tomic Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 325. ♂.

triodiae (Howard), n. comb. N. Y., D. C., Va. Hosts: *Agrostis alba*; *A. sp.*; *Tridens flavus*

Eurytomocharis triodiae Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 21. ♂ ♀.

tylodermatis Ashmead. Ont., east. U. S.; Wis. to La., Tex. and Colo. Hosts: *Araecerus fasciculatus* (Deg.); *Amblycerus robiniae* (F.); *Bruchus brachialis* Fahr.; *Mimosestes sellae* (Sharp); *Anthonomus disjunctus* Lec.; *A. grandis* Boh.; *A. heterothecae* Pierce; *A. squamosus* Lec.; *Apion segnipes* Say; *Chalcodermus aeneus* Boh.; *Conotrachelus elegans* Boh.; *Cylindrocopturus longulus* Lec.; *Lixus musculus* Say; *L. scrobicollis* Boh.; *Macrorhoptus sphaeralciae* Pierce; *Orthoris crotchii* Lec.; *Tachypterellus consors cerasi* List; *T. quadrigibbus* (Say); *T. quadrigibbus magnus* List; *Trichobaris texana* Lec.; *T. trinotata* (Say); *Tyloderma foveolata* Say; *Epiblema strenuana* (Wlkr.); *Grapholitha molesta* (Busck); *G. packardi* (Zell.); *G. prunivora* (Walsh); *Laspeyresia caryana* (Fitch); *Rhyacionia buoliana* (Schiff.); *R. frustrana* (Comst.); *Mompha eloisella* (Clem.); *Coleophora malivorella* Riley; *Bucculatrix fuscicola* Braun; *Meromyza americana* Fitch; *Xyela* sp. on loblolly pine; *Bracon mellitor* Say; *Glypta* sp.; *Aulacidea podagrae* (Bassett); *Entedon tachypterelli* Gahan; *Cracca virginiana* L.

Eurytoma tylodermatis Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 218. ♂ ♀.

Biology: List, 1932. Colo. Agr. Expt. Sta. Bul. 385: 54-59.—Hammar, 1936. N. Y. State Agr. Expt. Sta. Tech. Bul. 240: 44-45.

vagabunda Ashmead. Fla.

Eurytoma vagabunda Ashmead, 1881. Canad. Ent. 13: 134. ♀.

vitis (Saunders), n. comb. Ont., N. Y., Conn., N. J., N. C., Ohio, Mo., Iowa. Host: Grape seeds.

Isosoma vitis Saunders, 1869. Canad. Ent. 2: 25. ♂ ♀.

Biology: Crosby, 1909. N. Y. (Cornell) Agr. Expt. Sta. Bul. 265: 380.

Genus EUDECATOMA Ashmead

Decatoma Auct., nec Spinola.

Eudecatoma Ashmead, 1888. Ent. Amer. 4: 42, 43 (no species).

Type: *Decatoma batatoides* Ashmead. Included by Ashmead, 1894.

Decatomidea Ashmead, 1888. Ent. Amer. 4: 42, 43.

Type: *Decatomidea xanthochroa* Ashmead. Desig. by Ashmead, 1894.

Revision: Balduf, 1932. U. S. Natl. Mus. Proc. 79: 1-95 (*Decatoma*).

Nomenclature: Hincks, 1944. Roy. Ent. Soc. London, Proc., Ser. B, 13 (3-4): 37.

amsterdamensis (Girault), n. comb. Que., N. Y., Oreg. Hosts: *Kermes* sp. on rose; *Phytophaga destructor* (Say); *Ditropinotus aureoviridis* Cwfd.; *Eurytoma parva* Phill.; *Harmolita atlantica* P. and E.; *H. hordei* (Harr.); *H. tritici* (Fitch).

Decatoma amsterdamensis Girault, 1917. Deser. Stellarum Nov., p. 10. ♂ ♀.

Biology: Chamberlain, 1941. U. S. Dept. Agr. Tech. Bul. 784: 29, 40.

Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 38-41.

arizonica (Balduf), n. comb. Ariz. Host: Gall of *Andricus ruginosus* Bass.

Decatoma foliatae var. *arizonica* Balduf, 1932. U. S. Natl. Mus. Proc. 79 (29): 82. ♂ ♀.

autumnalis (Girault), n. comb. Calif.

Decatoma autumnalis Girault, 1920. U. S. Natl. Mus. Proc. 58: 209. ♀.

batatoides (Ashmead). N. J., Fla. Host: Gall of *Callirhytis batatoides* (Ashm.).

Decatoma batatoides Ashmead, 1881. Canad. Ent. 13: 136.

bicolor (Ashmead), n. comb. Fla., La. Host: Gall of *Belonocnema treatae* Mayr.

- Decatoma bicolor* Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxxii. ♀.
- catesbaei* (Ashmead), n. comb. Fla. Host: Gall of *Bassettia catesbaei* (Ashm.).
- Decatoma catesbaei* Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxxii. ♀.
- Decatoma catesbii* Dalla Torre, 1898. Cat. Hym., v. 5, p. 327. Emend.
- compressa* (Girault), n. comb. Calif.
- Decatoma compressa* Girault, 1920. U. S. Natl. Mus. Proc. 58: 209. ♀.
- disholcaspis* (Balduf), n. comb. Tex., Colo., N. Mex., Ariz. Host galls: *Adleria* sp.; *Andricus ruginosus* Bass.; *Disholcaspis cinerosa* (Bass.); *D.* sp.
- Decatoma disholcaspis* Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 23. ♂ ♀.
- dorsalis* (Fitch). Mass., N. Y. to D. C. and Kans., Fla., La., Tex. Gall hosts: *Acraspis erinacei* (Beut.); *Andricus aciculatus* Beut.; *A. flocci* (O. S.); *A. petiolicola* (O. S.); *Callirhytis tumifica* (O. S.); *Disholcaspis mamma* (Cress.); *D. quercus-globulus* (Fitch); *Neuroterus majalis* (O. S.); *Xanthoterus forticorne* (O. S.).
- Spalangia Querci-lanae* var. *dorsalis* Fitch, 1859. N. Y. State Agr. Soc. Trans. 18: 816.
- dubia doanei* (Fullaway), n. comb. Colo., Utah, Calif. Host galls: *Disholcaspis canescens* (Bass.); *D. chrysolepidis* (Beut.); *D. corallina* (Bass.); *D. eldoradensis* (Beut.); *D. plumbella* Kinsey.
- Decatoma doanei* Fullaway, 1912. N. Y. Ent. Soc. Jour. 20: 279. ♀.
- dubia dubia* (Walsh), n. comb. Ont., Mass., R. I., Conn., N. J., Mich., N. C., Ga., Ala., Mo., Tex., Ariz., Utah. Hosts: Galls of *Belonocnema fossoria* Weld; *Callirhytis punctata* O. S.; *Disholcaspis mamma* (Cress.); *D. quercus-globulus* (Fitch); *D. spongiosa* (Karsch); *Dryocosmus imbricariae* (Ashm.).
- Decatoma varians* var. *dubia* Walsh, 1870. Amer. Ent. and Bot. 2: 300. ♂ ♀.
- dubia rufosa* (Balduf), n. comb. N. Y., Va., S. C., Ga., Fla., Ala., Ill., Tex. Host galls: *Belonocnema fossoria* Weld; *Disholcaspis mamma* (Cress.); *D. quercus-globulus* (Fitch); *D. spongiosa* (Karsch).
- Decatoma dubia rufosa* Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 41. ♂ ♀.
- flammeiventris* (Girault), n. comb. Colo., N. Mex. Hosts: *Prodoxus quinque-punctellus* (Chamb.); *P. y-inversus* Riley.
- Decatoma flammeiventris* Girault, 1920. U. S. Natl. Mus. Proc. 58: 208. ♂ ♀.
- flava* (Ashmead), n. comb. Mass. and N. Y. to N. C. and Mo.; Tex., N. Mex. Hosts: *Acraspis erinacei* (Beut.); *A. macrocarpae* Bass.; *A. pezomachoides* (O. S.); *Andricus aciculatus* Beut.; *A. murtfeldtae* Ashm.; *A. petiolicola* O. S.; *A. tubularius* Weld; *Callirhytis seminator* (Harr.); *Dryocosmus floridensis* (Beut.); *Loxaulus humilis* (Weld); *Neuroterus noxiosus* (Bass.); *N. quercus-batulus* (Fitch).
- Decatoma flava* Ashmead, 1881. Canad. Ent. 13: 134. ♂ ♀.
- Biology: Triggerson, 1914. Ent. Soc. Amer. Ann. 7: 8-9.
- flavipes* (Balduf), n. comb. Ariz. Host: Gall of *Dryocosmus coxii* (Bass.).
- Decatoma flavipes* Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 52. ♂ ♀.
- floridae* (Girault), emend.; n. comb. Fla. Host: ?*Andricus flocci* (O. S.).
- Decatoma florida* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 6. ♀.
- Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 208.
- foliatae* (Ashmead), n. comb. Va., Fla., Mo., Ill. Hosts: Galls of *Andricus foliatus* Ashm.; *Callirhytis flavipes* (Gill.); *Disholcaspis quercus-globulus* (Fitch); *Dryocosmus imbricariae* (Ashm.).
- Decatoma foliatae* Ashmead, 1881. Canad. Ent. 13: 136. ♂ ♀.
- globuli* (Balduf), n. comb. Ill. Hosts: Galls of *Andricus ruginosus* Bass.; *A. tecturnarum* Kinsey; *Disholcaspis eldoradensis* (Beut.); *D. quercus-globulus* (Fitch); *D. spongiosa* (Karsch); *D.* sp.; *Xanthoterus forticorne* (O. S.).
- Decatoma globuli* Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 47. ♂ ♀.

- gracilis** (Fullaway), n. comb. Calif. Host: Gall of *Andricus californicus* Ashm.
Decatoma gracilis Fullaway, 1912. N. Y. Ent. Soc. Jour. 20: 280. ♂.
- isis** (Girault), n. comb. Calif. Hosts: Galls of *Andricus californicus* Ashm.; *A. chrysolepidicola* (Ashm.); *A. spectabilis* Kinsey; *Callirhytis pomiformis* (Ashm.); *C. suttoni* (Ashm.).
Decatoma isis Girault, 1917. Descr. Stellarum Nov., p. 10. ♀.
- lanae** (Ashmead), n. comb. Fla. Host: Gall of *Callirhytis turnerii* (Ashm.).
Decatoma lanae Ashmead, 1881. Canad. Ent. 13: 135. ♂ ♀.
- lobatae** (Balduf), n. comb. Calif. Hosts: Galls of *Andricus wiltzae* Full.; *Neuroterus varians* Kinsey.
Decatoma lobatae Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 45. ♀.
- marylandica** (Girault), n. comb. N. S., Md., D. C. Host: Gall of *Neuroterus quercus-batatus* (Fitch).
Decatoma marylandica Girault, 1916. Brooklyn Ent. Soc. Bul. 11: 112. ♀.
- michiganica** (Girault), n. comb. Mich.
Decatoma michiganica Girault, 1920. U. S. Natl. Mus. Proc. 58: 209. ♀.
- mimosae** (Balduf), n. comb. Ariz. Host: Stem gall on *Mimosa biuncifera*.
Decatoma mimosae Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 25. ♂ ♀.
- nigriceps excrucians** (Walsh), n. comb. Ill. Host: Gall of *Callirhytis seminator* (Harr.).
Decatoma nigriceps var. *excrucians* Walsh, 1870. Amer. Ent. and Bot. 2: 301. ♂ ♀.
- nigriceps nigriceps** (Walsh), n. comb. Mass., Conn., Va., Ill., Mo., Kans. Hosts: Galls of *Callirhytis tumifica* (O. S.); *Disholcaspis mamma* (Cress.); *Xanthotera forticorne* (O. S.).
Decatoma nigriceps Walsh, 1870. Amer. Ent. and Bot. 2: 300. ♂ ♀.
- novascotiae** (Balduf), n. comb. N. S., Va. Hosts: Galls of *Callirhytis cornigera* (O. S.); *Neuroterus quercus-batatus* (Fitch).
Decatoma novascotiae Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 50. ♂ ♀.
- nubilistigma** (Walsh), n. comb. Que., N. Y., Mass., N. J., Ill., Kans. Host: ?*Rhabdophaga batatas* Walsh.
Decatoma nubilistigma Walsh, 1870. Amer. Ent. and Bot. 2: 301. ♂ ♀.
- occidentalis flavifrons** (Balduf), n. comb. Ariz. Host: Gall on an evergreen oak.
Decatoma occidentalis var. *flavifrons* Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 61. ♂.
- occidentalis occidentalis** (Balduf), n. comb. Conn., Colo., N. Mex., Ariz., Calif. Hosts: Galls of *Adleria weldi* (Beut.); *A. sp.*; *Andricus chrysolepidicola* (Ashm.); *A. lasius* (Ashm.); *A. lasius areolaris* Kinsey; *A. ruginosus* Bass.; *A. sp.*, *Antron echinus* (Ashm.); *Disholcaspis canescens* (Bass.); *D. corallina* (Bass.); *D. truckeensis* (Ashm.).
Decatoma occidentalis Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 58. ♂ ♀.
- pezomachoides** (Balduf), n. comb. Ohio. Host: Gall of *Acraspis pezomachoides* (O. S.).
Decatoma pezomachoides Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 69. ♀.
- pomiformis** (Balduf), n. comb. Calif. Host: Gall of *Callirhytis pomiformis* (Ashm.).
Decatoma pomiformis Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 70. ♂ ♀.
- querci** (Ashmead), n. comb. Fla. Host: Dipterous gall on *Quercus catesbaei*.
Decatoma querci Ashmead, 1881. Canad. Ent. 13: 135. ♂.
- querci-lanae** (Fitch). Canada, N. Y. to Fla.; Ariz., Tex., Colo. Host galls: ?*Acraspis erinacei* (Beut.); *A. inflata* (Kinsey); ?*A. pezomachoides* (O. S.); *Andricus aciculatus* Beut.; *A. flocci* (O. S.); *A. murfeldtae* Ashm.; *A. pattoni* (Bass.); *A. petiolicola* (O. S.); *Callirhytis flavipes* (Gill.); *C. scitula* (O. S.); *C. seminator* (Harr.); *C. tumifica* (O. S.); *Disholcaspis mamma* (Cress.); *D. quercus-globulus* (Fitch); *Neuroterus majalis* (O. S.); *N. quercus-batatus* (Fitch); *N. ?saltarius* Weld; *Xanthotera forticorne* (O. S.).

- Spalangia Querci-lanae* Fitch, 1859. N. Y. State Agr. Soc. Trans. 18: 816.
Decatoma hyalipennis Walsh, 1870. Amer. Ent. and Bot. 2: 301. ♂ ♀.
Decatoma flavicollis Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xiii. ♂ ♀. Precoe.
Decatoma floridana Smith, 1886. Ent. Amer. 2: 19. N. name.
quinqueseptae (Balduf), n. comb. Calif. Host: Gall of *Andricus petiolicola* (O. S.).
Decatoma quinqueseptae Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 78. ♂ ♀.
salutaris (Crosby), n. comb. N. Y. Host: *Nepticula slingerlandella* Kearf.
Derostenus salutaris Crosby, 1911. Canad. Ent. 43: 414. ♂.
 Biology: Crosby, 1911. N. Y. (Cornell) Agr. Expt. Sta. Bul. 308: 222-223.
simplicistigma (Walsh), n. comb. Ill., Kans., Colo. Hosts: Galls of *Acraspis erinacei* (Beut.); *Andricus petiolicola* (O. S.).
Decatoma simplicistigma Walsh, 1870. Amer. Ent. and Bot. 2: 301. ♂ ♀.
subimmaculata (Girault), n. comb. Calif. Host galls: *Andricus lasius* (Ashm.); *A. lasius sublasius* Kinsey; *A. spectabilis* Kinsey; *Callirhytis pomiformis* (Ashm.); *C. sp.*; *Disholcaspis truckeeensis* (Ashm.); ? *Heteroecus dasydactyli* (Ashm.); ? *H. melanoderma* Kinsey; *H. pacificus* (Ashm.).
Decatoma subimmaculata Girault, 1917. Jour. Ent. and Zool. 9: 11. ♀.
texana (Balduf), n. comb. Tex.
Decatoma texana Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 22. ♂ ♀.
vacciniicola (Balduf), n. comb. Ont., Que. to Va. and Ill., La. Host: Gall of *Hemadas nubilipennis* (Cwfd.).
Decatoma vacciniicola Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 12. ♂ ♀.
 Biology: Glick, 1939. U. S. Dept. Agr. Tech. Bul. 673: 45.
varians (Walsh) n. comb. Ont. to Va.; Ill., Mo., Fla., La., Tex., Colo., Calif. Hosts: Galls of ? *Acraspis erinacei* (Beut.); ? *Amphibolips inanis* (O. S.); ? *A. spongifica* (O. S.); *Andricus chrysolepidicola* Ashm.; *A. chrysolepidicola* var. *pugnis* Kinsey; *Callirhytis frequens* (Gill.); *C. gemmaria* (Ashm.); *C. punctata* (O. S.); ? *Disholcaspis bassetti* (Gill.); *D. eldoradensis* (Beut.); ? *D. mamma* (Cress.); *D. quercus-globulus* (Fitch); *Dryocosmus imbricariae* (Ashm.); ? *D. palustris* (Ashm.); *Sphaeroterus caepuliforme* (Beut.).
Decatoma varians Walsh, 1870. Amer. Ent. and Bot. 2: 300. ♂ ♀.
Decatoma phellos Ashmead, 1881. Canad. Ent. 13: 136. ♂.
Decatoma kelloggi Fullaway, 1912. N. Y. Ent. Soc. Jour. 20: 278. ♂ ♀.
wiltzae (Balduf), n. comb. Conn., Ariz., Calif. Hosts: Galls of *Andricus wiltzae* Full.; ? *Rhodites fusiformans* Ashm.
Decatoma wiltzae Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 83. ♂ ♀.
xanthochroa (Ashmead), n. comb. Fla., Tex. Hosts: Galls of *Andricus murtfeldtae* Ashm.; *Callirhytis flavipes* (Gill.).
Decatomidea xanthochroa Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 322. ♀.
Decatoma brevilobae Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 56. ♂ ♀.
 N. syn.

Genus SYSTOLE Walker

Systole Walker, 1832. Ent. Mag. 1: 13, 22.

Type: *Systole albipennis* Walker. Monob.

minuta Ashmead. Fla.

Systole minuta Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 319. ♂ ♀.

Genus BRUCHOPHAGUS Ashmead

Bruchophagus Ashmead, 1888. Ent. Amer. 4: 42, 43. No species.

Type: *Bruchophagus borealis* Ashmead. Desig. by Ashmead, 1894.

Systolodes Ashmead, 1888. Ent. Amer. 4: 42, 43. No species.

Type: *Systolodes brevicornis* Ashmead. Included by Ashmead, 1894.

- borealis** Ashmead. Ont. Host: *Bruchus* sp.
Bruchophagus borealis Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 328.
 ♂ ♀.
 Taxonomy: Girault, 1916. Canad. Ent. 48: 338.
- gibbus** (Boheman). Commonly known as the clover seed chalcid. Cosmopolitan; common throughout North America. Seed hosts: ?*Astragalus douglasii*; ?*Hosackia puberula*; *Medicago arabica*; *M. hispida denticulata*; ?*Oxytropis lamberti*; alfalfa; burr clover; crimson clover; mammoth red clover; red clover.
Eurytoma gibba Boheman, 1836 (1835). Svenska Vetensk. Akad. Handl. 56: 244. ♀.
Eurytoma funebris Howard, 1880. U. S. Dept. Agr. Ann. Rpt. for 1879, p. 196. ♂ ♀.
Systolodes brevicornis Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 320. ♂ ♀.
 Biology: Wildermuth, 1931. U. S. Dept. Agr. Farmers' Bul. 1642: 1-14.—Smith, 1943. Kans. State Bd. Agr. Rpt. 62 (255); 395.—Sorenson, 1944. Jour. Econ. Ent. 37: 373.—Schull, 1944. Idaho Agr. Expt. Sta. Bul. 252: 15, 56.
- mexicanus** Ashmead. N. Mex. Hosts: *Acanthoscelides alboscuteclatus* (Horn); *Bruchus* sp. on *Lotus* pods; *Callosobruchus chinensis* (L.).
Bruchophagus mexicanus Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 328.
 ♂ ♀.
- noctua** Girault. Ariz.
Bruchophagus noctua Girault, 1917. New Chalcid Flies, p. 1a.

Family PODAGRIONIDAE Peck, New Family

Subfamily PODAGRIONINAE

Genus PODAGRION Spinola

- Podagrion* Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 147.
 Type: *Podagrion splendens* Spinola. Monob.
- Palmon* Dalman, 1825. Svenska Vetensk. Akad. Handl. 46: 388.
 Type: *Palmon bellator* Dalman. Desig. by Gahan and Fagan, 1923.
- Priomerus* Walker, 1833. Ent. Mag. 1: 116, 118
 Type: (*Priomerus pachymerus* Walker)=*Podagrion splendens* Walker. Monob.
- Pachytomus* Westwood, 1847. Ent. Soc. London Trans. 4 (4): 260.
 Type: *Pachytomus klugianus* Westwood. Monob.
- Notopodion* Dahlbom, 1857. Öfvers. Svenska Vetensk. Akad. Forh. 14: 295.
 Type: *Podagrion splendens* Spinola. Desig. by Gahan and Fagan, 1923.
- Bactrischion* A. Costa, 1857. Accad. delle Sci. Fis. e Mat. Napoli Mem. (A) 2: 223.
 Type: (*Bactrischion bicoloratum* Costa)=*Podagrion splendens* Spinola. Monob.
- Notopodium* Schulz, 1906. Spolia Hym., p. 144. Emend.
Podagrion Schulz, 1906. Spolia Hym., p. 150. Emend.

The members of this genus parasitize the eggs of mantids.

- crassiclava** Gahan. Tex., Ariz. Hosts: *Mantis* sp.; *Stagmomantis limbata* (Hahn).
Podagrion crassiclava Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 6. ♂ ♀.
- mantis** Ashmead. N. J. to Fla., La., Tex., Mo., Kans., Ariz. Hosts: *Mantis* eggs, *Stagmomantis carolina* (Johan.), ?*S. limbata* (Hahn), *Tenodera angustipennis* Sauss., *T. aridifolia sinensis* Sauss.
Podagrion mantis Ashmead, 1886. Canad. Ent. 18: 57. ♀.
 Biology: Breland, 1941. Ent. Soc. Amer. Ann. 34: 99-133.

Subfamily CHALCEDECTINAE

Genus CHALCEDECTUS Walker

Chalcedectus Walker, 1852. Ann. Mag. Nat. Hist. (2) 10: 47.

Type: *Chalcedectus maculicornis* Walker. Monob.

Chalcedectus Dalla Torre, 1898. Cat. Hym., v. 5, pp. 186, 569. Emend.

texanus Brues Tex.

Chalcedectes (!) *texanus* Brues, 1907. Wis. Nat. Hist. Soc. Bul. 5: 106. ♂.

Genus EUCHRYSIA Westwood

Euchrysia Westwood, 1874. Thesaurus Ent. Oxon., p. 139.

Type: *Euchrysia cleptidea* Westwood. Desig. by Ashmead, 1904.

Revision: Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 14-15.

hyalinipennis Ashmead. N. C., Mo., Tex., Calif. Hosts: *Chrysobothris deleta* Lec.;
?Phloeotribus frontalis (Oliv.).

Euchrysia hyalinipennis Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 231. ♀.

maculipennis Ashmead. Calif.

Euchrysia maculipennis Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 232. ♂.

similis Girault. Kans.

Euchrysia similis Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 15. ♀.

Family CHALCIDIDAE

Subfamily HALTICHELLINAE

See comment under *Haltichella*.

Genus HALTICHELLA Spinola

Haltichella Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 148.

Type: *Chalcis pusilla* Fabricius. Desig. by Westwood, 1840.

Halticella Stephens, 1829. Nomencl. Brit. Ins., p. 36. Emend.

Revision: Gahan, 1927. Jour. Agr. Res. 34: 545.

Kerrich and Menon (1949, Ent. Monthly Mag. 85: 207-211) have questioned the identity of *Chalcis pusilla* F. and its status as genotype of *Haltichella*. Their findings may affect the current usage of the names *Haltichella*, *Haltichellinae*, *Brachymeria*, and *Brachymeriinae*.

americana Howard. D. C.

Haltichella americana Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 9, 36. ♀.

longicornis Ashmead. S. C., Fla. Host: *Grapholitha molesta* (Busck).

Halticella longicornis Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 185. ♀.

Biology: Nettles, 1934. Jour. Econ. Ent. 27: 815-816.

onatas (Walker). Fla., Kans. Host gall: *Xanthoteras politum* (Bass.).

Hockeria onatas Walker, 1843. Soc. Ent. France Ann. (2) 1: 146. ♀.

perpulchra (Walsh). N. Y., Ill., Mo. Host: *Apanteles militaris* (Walsh).

Hockeria perpulchra Walsh, 1861. Prairie Farmer (n. s.) 8: 258.

rhyacioniae Gahan. Mass., Va., Nebr. Hosts: *Rhyacionia frustrana* (Comst.);
R. frustrana bushnellii (Busck).

Haltichella rhyacioniae Gahan, 1927. Jour. Agr. Res. 34: 545. ♂ ♀.

Biology: Underhill, 1943. Va. Agr. Expt. Sta. Bul. 349: 12.

xanticles (Walker). Que. to Fla., Ill., Ohio, Kans., Nebr. Hosts: *Rhyacionia buoliana* (Schiff.); *Bucculatrix canadensisella* Chamb.; *Solenobia walshella* Clem.; *Apanteles melanoscelus* (Ratz.).

Hockeria xanticles Walker, 1843. Soc. Ent. France Ann. (2) 1: 147. ♀.

Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 18.—Swenk, 1927. Nebr. Agr. Expt. Sta. Res. Bul. 40: 45-46.

Genus STOMATOCERAS Kirby

Stomatoceras Kirby, 1883. Linn. Soc. London, Jour., Zool. 17: 54, 62.

Type: *Halticella liberator* Walker. Monob.

Irichohaltichella Girault, 1912. Linn. Soc. N. S. Wales Proc. 36: 637.

Type: *Irichohaltichella pilosella* Cameron. Monob.

Stomatocerooides Girault, 1913. Canad. Ent. 45: 140.

Type: *Stomatocerooides bicolor* Girault. Orig. desig.

rubrum eriense Wallace. N. J., N. C., Tex., Okla., Kans., N. Dak. Hosts: *Myrmeleon immaculatus* Deg.; myrmeleonid.

Stomatoceras rubra var. *erriense* Wallace, 1942. Carnegie Mus. Ann. 29: 31.
♂ ♀.

rubrum rubrum Ashmead. Tex., Ariz.

Stomatocera (!) *rubra* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 332. ♀.

tenuicorne Girault. Ariz.

Stomatoceras tenuicornis Girault, 1918. Ent. News 29: 127. ♀.

unipunctatipennis americense Girault. N. J.

Stomatoceras unipunctatipennis americensis Girault, 1918. Ent. News 29: 127. ♀.

unipunctatipennis unipunctatipennis Girault. W. Va.

Stomatoceras unipunctatipennis Girault, 1918. Ent. News 29: 127. ♀.

Genus SCHWARZELLA Ashmead

Schwarzella Ashmead, 1904. Carnegie Mus. Mem. 1: 256.

Type: *Schwarzella arizonensis* Ashmead. Monob.

arizonensis Ashmead. Ariz.

Schwarzella arizonensis Ashmead, 1904. Carnegie Mus. Mem. 1: 256, 388.
♂.

Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 316.

Subfamily BRACHYMERIINAE

See comment under *Haltichella*, p. 584.

Genus ACANTHOCHALCIS Cameron

Acanthochalcis Cameron, 1884. Biol. Cent.-Amer., Hym., v. 1, p. 100.

Type: *Acanthochalcis nigricans* Cameron. Monob.

nigricans Cameron. N. Mex., Ariz. Host: ?*Chrysobothris femorata* (Oliv.).

Acanthochalcis nigricans Cameron, 1884. Biol. Cent.-Amer., Hym., v. 1, p. 100. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 193.

unispinosa Girault. Tex.

Acanthochalcis unispinosa Girault, 1917. New Chalcid Flies, p. 5.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 194.

Genus PHASGONOPHORA Westwood

Phasgonophora Westwood, 1832. In Griffith, Cuvier's Animal Kingdom 15 (Insecta 2), p. 432, pl. 77, fig. 2.

Type: *Phasgonophora sulcata* Westwood. Monob.

Phasgonophora Dalla Torre, 1898. Cat. Hym., v. 5, p. 371. Emend.

sulcata Westwood. N. Y. to Fla., Ariz., Calif., and Ore. Hosts: *Agrilus anxius* Gory; *Chrysobothris femorata* (Oliv.); ?*C. sezsignata* (Say); ?*Papilio* sp.; ?*Telea polyphemus* (Cram.).

Phasgonophora sulcata Westwood, 1832. In Griffith, Cuvier's Animal Kingdom 15 (Insecta 2), p. 432. ♀.

Smicra gigantea Ashmead, 1881. Canad. Ent. 13: 90. ♀.

Biology: Blackman and Stage, 1924. N. Y. State Col. Forestry, Syracuse Univ., Tech. Pub. 17: 19, 22, 25.—Rhoads, 1924. In Blackman and Stage, N. Y.

State Col. Forestry, Syracuse Univ., Tech. Pub. 17: 188.
 Taxonomy: Burks, 1940. U. S. Natl. Mus. Proc. 88: 351.

Genus TRIGONURA Sichel

- Trigonura* Sichel, 1865. Soc. Ent. France Ann. (4) 5: 376.
 Type: *Trigonura crassicauda* Sichel. Monob.
Centrochalcis Cameron, 1913. Indian Forest Rec. 4: 92. Preocc.
 Type: *Centrochalcis ruficaudis* Cameron. Monob.
Centrochalcidea Gahan and Fagan, 1923. U. S. Natl. Mus. Bul. 124: 28. N. name.
- californica** Rohwer. Calif. Host: *Chrysobothris mali* Horn.
Trigonura californica Rohwer, 1917. U. S. Natl. Mus. Proc. 53: 171. ♂ ♀.
- elegans** (Provancher), n. comb. Que., Ill.
Phasgonophora elegans Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 191. ♀.
- hicoriae** Rohwer. N. Y., Conn. Hosts: *Chrysobothris femorata* (Oliv.); *C. sexsignata* (Say); *Magdalis armicollis* (Say); *M. barbata* (Say); ?*Scolytus multistriatus* (Marsh.).
Trigonura hicoriae Rohwer, 1919. Canad. Ent. 51: 160. ♂ ♀.
 Biology: Kaston, 1937. Conn. Agr. Expt. Sta. Bul. 396: 358.
- tarsata** (Dalla Torre). Que., N. H., N. Y., W. Va., Va. Host: *Pissodes strobi* (Peck).
Chalcis tarsalis Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 332. ♂. Preocc.
Chalcis tarsata Dalla Torre, 1898. Cat. Hym., v. 5, p. 393. N. name.

Genus BRACHYMERIA Westwood

See comment under *Haltichella*, p. 584.

- Brachymeria* Westwood, 1829. In Stephens, Nomencl. Brit. Ins., v. 1, p. 36.
 Type: *Chalcis minuta* Fabricius. Desig. by Westwood, 1840.
- Tumidicoxa* Girault, 1911. Zool. Jahrb. Abt. f. System. 31: 378.
 Type: *Tumidicoxa nigra* Girault. Orig. desig.
- Ceyxia* Girault, 1911. Zool. Jahrb. Abt. f. System. 31: 382.
 Type: *Ceyxia fumipennis* Girault. Orig. desig.
- Brachepitelia* Girault, 1913. Canad. Ent. 45: 106.
 Type: *Brachepitelia rubripes* Girault. Monob.
- Pseudepitelia* Girault, 1913. Canad. Ent. 45: 104.
 Type: *Pseudepitelia rubrifemur* Girault. Orig. desig.
- Tumidicoxella* Girault, 1913. Roy. Soc. So. Austral. Trans. 37: 74.
 Type: *Tumidicoxella nigricoxa* Girault. Orig. desig.
- Tumidicoxoides* Girault, 1913. Arch. f. Naturgesch. 79A (6): 86.
 Type: *Tumidicoxoides kurandaensis* Girault. Monob.
- Revisions: Crawford, 1910. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 19: 14 (*Chalcis*).—
 Burks, 1936. Ill. State Acad. Sci. Trans. 29: 251–254 (Ill.).
- belfragei** (Crawford), n. comb. Tex.
Chalcis belfragei Crawford, 1910 (1909). Ent. Soc. Wash. Proc. 11: 205. ♀.
- coloradensis** (Cresson). Ont., N. C. to Fla., Tex. and Sask. Hosts: *Melanoplus bivittatus* (Say); *M. femur-rubrum* (Deg.); *M. mexicanus* (Sauss.); *Sarcophaga kellyi* Ald.
Chalcis femorata Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 143. ♀. Preocc.
Chalcis coloradensis Cresson, 1872. Amer. Ent. Soc. Trans. 4: 60. ♂.
Chalcis Dalmanni (!) Thomson, 1875. Hym. Scand., v. 4, p. 17. ♂ ♀. N. name.
- Biology: Burks, 1941. Ill. State Acad. Sci. Trans. 33: 208.—Smith, 1944. Canad. Ent. 76: 29–32.
- columbiana** (Howard). D. C.
Chalcis columbiana Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 8, 36. ♀.

compsilurae (Crawford). New England, Ill., Wis. Hosts: *Nygmia phaeorrhoea* (Donov.); *Ennomos subsignarius* (Hbn.); *Achaetoneura aletia* (Riley); *A. frenchii* (Will.); *Carcelia amplexa* (Coq.); *C. laxifrons* Vill.; *Compsilura concinnata* (Meig.); *Exorista larvarum* (L.); *Pelatachina pellucida* Coq.; *Phorocera agilis* R.-D.; *P. claripennis* Macq.; *Sturmia nidicola* Tns.; *S. scutellata* (R.-D.); *Pikonema alaskensis* (Roh.).

Chalcis compsilurae Crawford, 1911. U. S. Natl. Mus. Proc. 41: 272. ♂ ♀. Biology: Dowden, 1935. Jour. Agr. Res. 50: 495-523.—Flanders, 1944. Jour. Econ. Ent. 37: 409-410.

fonscolombei (Dufour). Throughout south. U. S.; Md., Ill., Kans. Hosts: Tephritid seed maggot from ironweed; *Synthesiomia nudiseta* Wulp; *Calliphora coloradensis* Hough; *Callitroga macellaria* (F.); *Phaenicia mexicana* (Macq.); *P. sericata* (Meig.); *Phormia regina* (Meig.); *Sarcophaga carnaria* (L.); *S. haemorrhoidalis* (Fall.); *S. impar* Ald.; *S. plinthopyga* Wied.

Chalcis Fonscolombei Dufour, 1841. Soc. Ent. France Ann. 10: 12. Biology: Roberts, 1935. U. S. Dept. Agr. Tech. Bul. 365: 1-22. Morphology: Parker, 1924. Soc. Ent. France Ann. 93: 264, 297.

hammari (Crawford). S. C., Mo., Tex., N. Mex. Hosts: *Ancylics comptana fragariae* W. and R.; *Grapholitha molesta* (Buseck); *Archips argyrospila* (Wlkr.); *Filatima monotaeniella* (Bott.).

Chalcis hammari Crawford, 1915. Insector Inscitiae Menstruus 3: 89. ♂ ♀. Biology: Nettles, 1934. Jour. Econ. Ent. 27: 815-816.

incerta (Cresson). Fla.

Chalcis incerta Cresson, 1865. Ent. Soc. Phila. Proc. 4: 101. Biology: Needham, 1948. Ecol. Monog. 18: 446.

louisianae (Girault), emend; n. comb. La. Host: *Pseudococcus citri* (Risso).

Chalcis louisiana Girault, 1917. Deser. Stellarum Nov., p. 6. ♀.

ovata abiesae (Girault). Calif. Hosts: *Phryganidia californica* Pack.; *Malacosoma californicum* (Pack.).

Chalcis ovata var. ***abiesae*** Girault, 1917. Deser. Stellarum Nov., p. 19. ♂ ♀. Taxonomy: Rohwer, 1918. Ent. Soc. Wash. Proc. 20: 18.

ovata ovata (Say). Que. to Fla., Tex., and Nebr.; N. Mex. to Calif. and Oreg. Hosts: *Papilio zelicaon* Lucas; *Colias philodice eurytheme* (Bdvl.); *Agraulis vanillae* (L.); *Asterocampa clyton* (Bdvl. and Lec.); *Nymphalis antiopa* (L.); *N. californica* (Bdvl.); *Hemileuca oliviae* Ckll.; *Alabama argillacea* (Hbn.); *Anomis erosa* Hbn.; *Anticarsia gemmatilis* Hbn.; *Heliothis armigera* (Hbn.); *Phryganidia californica* Pack.; *Hemerocampa leucostigma* (A. and S.); *H. osleri* (Barnes); *H. vetusta* (Bdvl.); *Nygmia phaeorrhoea* (Donov.); *?Porthetria dispar* L.; *?Cingilia caternaria* (Drury); *Deuteronomos magnarius* (Guen.); *Lambdina fiscellaria* (Hulst); *Philtraea elegantaria* (Hy. Edw.); *Desmia funeralis* (Hbn.); *Diaphania hyalinata* (L.); *D. nitidalis* (Stoll); *Pyrausta penitatis* (Grote); *Ancylics comptana* (Froel.); *Grapholitha molesta* (Buseck); *Acleris minuta* (Rob.); *Archips argyrospila* (Wlkr.); *A. rosaceana* (Harr.); *Homona fervidana* (Wlkr.); *Anacamptis fragariella* Buseck; *Gnorimoschema gallae-solidaginis* (Riley); *Thyridopteryx ephemeraeformis* (Haw.); pomegranate bagworm; *Exorista larvarum* (L.).

Chalcis ovata Say, 1824. In Keating, Narr. Long's 2nd Exped., App., p. 326. Biology: Howard, 1897. U. S. Dept. Agr. Div. Ent. Tech. Ser. 5: 25-28.—Snodgrass, 1917. Ind. State Ent. Ann. Rpt. 9: 180, 188-189.

pedalis (Cresson). Tex., Fla. Hosts: *Olycella junctolineella* (Hulst); *Melitara prodenialis* Wlkr.

Chalcis pedalis Cresson, 1872. Amer. Ent. Soc. Trans. 4: 60. ♀.

robustus (Cresson). Fla. Hosts: *Papilio cresphontes* Cram.; *Lymire edwardsi* (Grote); *Megalopyge opercularis* (A. and S.).

Chalcis robusta Cresson, 1865. Ent. Soc. Phila. Proc. 4: 101.

slossonae (Crawford), n. comb. Fla.

Chalcis slossonae Crawford, 1910 (1909). Ent. Soc. Wash. Proc. 11: 205. ♂ ♀.

tachinae (Howard), n. comb. N. H., N. J. Host: *Melanoplus mexicanus mexicanus* (Sauss.).

Chalcis tachinae Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 8, 32, 36.
♀.

tegaris (Cresson). Ill., Tex., Wyo. Host: *Ceracia dentata* (Coq.).

Chalcis tegularis Cresson, 1872. Amer. Ent. Soc. Trans. 4: 60. ♀.

Subfamily DIRHININAE

Revision: Burks, 1936. Natl. Acad. Sci. Proc. 22: 284-286.

Genus DIRHINUS Dalman

Dirhinus Dalman, 1818. Svenska Vetensk. Akad. Handl. 39: 75.

Type: *Dirhinus excavatus* Dalman. Monob.

Dirrhinus Dalman, 1823. Analecta Ent., p. 29. Emend.

Eniaca Kirby, 1883. Linn. Soc. London, Jour., Zool. 17: 54, 57.

Type: (*Chrysis*? *hesperidum* Rossi) = *Chalcis cornigera* Jurine.
Monob.

Hontalia Cameron, 1884. Biol. Cent.-Amer., Hym., v. 1, p. 112.

Type: *Hontalia caerulea* Cameron. Orig. desig.

Pareniaca Crawford, 1913. U. S. Natl. Mus. Proc. 45: 312.

Type: *Pareniaca schwarzi* Crawford. Orig. desig.

Revision: Burks, 1947. Ent. Soc. Wash. Proc. 49: 136-140.

paolii Burks, emend. Ind.

Dirhinus paoli Burks, 1947. Ent. Soc. Wash. Proc. 49: 137. ♂.

perideus Burks. Ill.

Dirhinus perideus Burks, 1947. Ent. Soc. Wash. Proc. 49: 138. ♂.

schwarzi (Crawford). Tex., Ariz., Calif. Hosts: *Olycella junctolineella* (Hulst);
Melittara sp.; dipterous larvae.

Pareniaca schwarzi Crawford, 1913. U. S. Natl. Mus. Proc. 45: 312. ♀.

texanus (Ashmead). N. C., Tenn., Ala., Tex., Kans. Hosts: Dipterous larvae;
Sarcophaga plinthopyga Wied.

Eniaca texana Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 217. ♀.

Biology: Roberts, 1935. Jour. Agr. Res. 50: 481, 490-491.

Subfamily CHALCIDINAE

Revision: Burks, 1940. U. S. Natl. Mus. Proc. 88: 237-354.

Genus METADONTIA Ashmead

Metadontia Ashmead, 1888. Ent. Amer. 4: 87 (no species).

Type: (*Smicra montana* Ashmead) = *Chalcis amoena* Say. In-
cluded by Ashmead, 1904.

Plagiosmicra Cameron, 1904. Invertebrata Pacifica, v. 1, p. 56.

Type: (*Plagiosmicra ashmeadi* Cameron) = *Chalcis amoena*
Say. Monob.

Revision: Burks, 1940. U. S. Natl. Mus. Proc. 88: 260-263.

amoena (Say). D. C. to Fla., Tex., and Kans.; Ariz., Calif. Hosts: *Strymon cecrops*
(F.); *S. melinus* (Hbn.).

Chalcis amoena Say, 1836. Boston Jour. Nat. Hist. 1: 270.

Smicra montana Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 183. ♂.

Genus CHALCIS Fabricius

Chalcis Fabricius, 1789 (1787). Mantissa Insectorum, v. 1, p. 272.

Type: (*Chalcis sispes* Fabricius) = *Sphex myrifex* Sulzer. Desig.
by Latreille, 1810.

Smiera Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 147.

Type: (*Chalcis sispes* Fabricius) = *Sphex myrifex* Sulzer. Desig.
by Ashmead, 1904.

Smicra Spinola, 1837. Mag. Zool. 7 Cl. IX, explan. pl. 180. Emend.

Revision: Burks, 1940. U. S. Natl. Mus. Proc. 88: 243-260.

- barbara** (Cresson). N. H., Conn., Mass., N. J.; Fla., Tex.; Ill. to N. Dak., Colo., Wyo. Host: *Odontomyia* sp.
Smicra barbara Cresson, 1872. Amer. Ent. Soc. Trans. 4: 47. ♂.
Smicra rufofemorata Cresson, 1872. Amer. Ent. Soc. Trans. 4: 39, 191. ♂.
- canadensis** (Cresson). Ont., N. Y., W. Va., Ill., Mich. Hosts: ?*Magdalis olya* (Hbst.); *Odontomyia vertebrata* Say; *O. sp.*
Smicra canadensis Cresson, 1872. Amer. Ent. Soc. Trans. 4: 39. ♂.
- divisa** (Walker). Kans., Okla., Ariz., Oreg.
Smiera divisa Walker, 1861. Jour. Ent. 1: 178. ♂ ♀.
- flebilis** (Cresson). Maine to N. J.; Ont., Ill., Minn.
Smicra flebilis Cresson, 1872. Amer. Ent. Soc. Trans. 4: 39, 40. ♂.
- lasia** Burks. Calif.
Chalcis lasia Burks, 1940. U. S. Natl. Mus. Proc. 88: 248. ♂ ♀.
- megalomis** Burks. Ill., Colo.
Chalcis megalomis Burks, 1940. U. S. Natl. Mus. Proc. 88: 250. ♀.
- microgaster** Say. Ont., Pa., Ohio, Ill., Okla., Tex., Minn., Wis.
Chalcis microgaster Say, 1824. In Keating, Narr. Long's 2nd Exped., App. p. 326. ♂.
- neptis** Burks. Colo., N. Mex., Utah, Oreg., Wash.
Chalcis neptis Burks, 1940. U. S. Natl. Mus. Proc. 88: 251. ♂ ♀.
- phoenicapoda** Burks. Canada, Ga., Fla., Colo.
Smicra rufipes Kirby, 1883. Linn. Soc. London, Jour., Zool. 17: 70. Preocc.
Chalcis phoenicapoda Burks, 1940. U. S. Natl. Mus. Proc. 88: 257. ♀.
 N. name.

Genus **SPILOCHALCIS** Thomson

Spilochalcis Thomson, 1876 (1875). Hym. Scand., v. 4, p. 15.

Type: *Chalcis xanthostigma* Dalman. Monob.

Diplodontia Ashmead, 1888. Ent. Amer. 4: 87.

Type: (*Smicra carolina* Ashmead)=*Chalcis nigricornis* Fabricius.
 Desig. by Ashmead, 1904.

Eustypiura Ashmead, 1904. Carnegie Mus. Mem. 1: 251, 253, 412.

Type: *Eustypiura bicolor* Ashmead. Orig. desig.

Enneasmicra Ashmead, 1904. Carnegie Mus. Mem. 1: 252, 253, 449.

Type: *Smicra exinaniens* Walker. Orig. desig.

Octosmicra Ashmead, 1904. Carnegie Mus. Mem. 1: 252, 253, 450.

Type: *Octosmicra laticeps* Ashmead. Orig. desig.

Heptasmicra Ashmead, 1904. Carnegie Mus. Mem. 1: 252, 253, 451.

Type: *Smicra obliterans* Walker. Orig. desig.

Hexasmicra Ashmead, 1904. Carnegie Mus. Mem. 1: 252, 254, 454.

Type: *Smicra transversa* Walker. Orig. desig.

Pentasmicra Ashmead, 1904. Carnegie Mus. Mem. 1: 252, 254, 455.

Type: *Pentasmicra brasiliensis* Ashmead. Orig. desig.

Tetrasmicra Ashmead, 1904. Carnegie Mus. Mem. 1: 252, 254, 456.

Type: *Smicra concitata* Walker. Orig. desig.

Trismicra Ashmead, 1904. Carnegie Mus. Mem. 1: 252, 254, 456.

Type: *Smicra contracta* Walker. Monob.

Revision: Burks, 1940. U. S. Natl. Mus. Proc. 88: 243, 263-343.

albifrons (Walsh). Common throughout U. S.; Ont., B. C. Hosts: *Chalepus dorsalis* Thunb.; *Exema dispar* Lac.; *Hemerocampa leucostigma* (A. and S.); *Ancyliis comptana* (Froel.); *A. comptana fragariae* (W. and R.); *A. divisana* Wlkr.; *Arogalea cristifasciella* (Chamb.); *Cremona cotoneaster* Busck; *Plutella maculipennis* (Curt.); *Argyresthia thuiella* (Pack.); *Coleophora fletcherella* Fern.; *C. laricella* (Hbn.); *C. malivorella* Riley; *C. pruniella* Clem.; *C. salmani* Heinr.; ?*Bedellia somnuleutella* Zell.; *Apanteles marginiventris* (Cress.); *A. militaris* (Walsh); *Gelis minimus* Walsh; borer in ragweed stem.

Chalcis albifrons Walsh, 1861. Ill. State Agr. Soc. Trans. 4: 364, 369.

Spilochalcis torvina ancylae Girault, 1920. U. S. Natl. Mus. Proc. 58: 192.

♂ ♀.

Biology: Beacher, 1947. Ent. Soc. Amer Ann. 40: 533-544.

- apais** Burks. Tex. Host: Microlepidopteron on *Lantana horrida*.
Spilochalcis apais Burks, 1940. U. S. Natl. Mus. Proc. 83: 315. ♀.
- arcana** (Cresson). Mass., Del., N. Dak., Colo.
Smicra arcana Cresson, 1872. Amer. Ent. Soc. Trans. 4: 44. ♂.
Smicra enausta Cresson, 1872. Amer. Ent. Soc. Trans. 4: 46. ♂.
- bioculata** (Cresson). Fla., Tex., Kans., Colo.
Smicra bioculata Cresson, 1872. Amer. Ent. Soc. Trans. 4: 43. ♂.
Smicra bioculata var. *faceta* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 43. ♂.
- clora** Burks. Tex., Ark.
Spilochalcis clora Burks, 1940. U. S. Natl. Mus. Proc. 88: 306. ♂.
- coxalis** (Cresson). N. Y. to Ga.; Mo., Iowa.
Smicra coxalis Cresson, 1872. Amer. Ent. Soc. Trans. 4: 45. ♂.
Spilochalcis virens Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 6. ♂.
- delicata** (Cresson). La., Tex.
Smicra delicata Cresson, 1872. Amer. Ent. Soc. Trans. 4: 54. ♀.
- delumbis** (Cresson). Widespread throughout U. S. and Canada. Hosts: *Ancylis comptana* (Froel.); *A. comptana fragariae* (W. and R.); *Anacamptis fragariella* Busek; *Chlamisus plicata* (F.); *Lema nigrovittata* (Guér.); *L. trilineata* (Oliv.).
Smicra delumbis Cresson, 1872. Amer. Ent. Soc. Trans. 4: 40. ♂ ♀.
 Biology: Chamberlin, 1933. Ent. Soc. Wash. Proc. 35: 106-107.
- dema** Burks. Ind., Mo., N. Mex. Host: *Frumenta nundinella* (Zell.).
Spilochalcis dema Burks, 1940. U. S. Natl. Mus. Proc. 88: 330. ♂ ♀.
- dorsata** (Cresson). N. C., Fla., Ill., Mo., Kans., Tex.
Smicra dorsata Cresson, 1872. Amer. Ent. Soc. Trans. 4: 49. ♀.
Spilochalcis missouriensis Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 6. ♀.
- elachis** Burks. Fla.
Spilochalcis elachis Burks, 1940. U. S. Natl. Mus. Proc. 88: 294. ♀.
- enocki** Ashmead. La.
Spilochalcis enocki Ashmead, 1904. Carnegie Mus. Mem. 1: 439. ♀.
- eubule** (Cresson). Ga.
Smiera Eubule Cresson, 1865. Ent. Soc. Phila. Proc. 4: 93.
- exornata** (Cresson). Tex. Host: ?*Mimorista flavidissimalis* (Grote).
Smicra exornata Cresson, 1872. Amer. Ent. Soc. Trans. 4: 50. ♂.
- femorata** (Fabricius). Ga., Fla., Tex.
Crabro femoratus Fabricius, 1775. Systema Ent., p. 375.
Smiera ignea Cresson, 1865. Ent. Soc. Phila. Proc. 4: 92.
Smicra mirabilis Cresson, 1872. Amer. Ent. Soc. Trans. 4: 53. ♂.
- flammeola** (Cresson). Tex.
Smicra flammeola Cresson, 1872. Amer. Ent. Soc. Trans. 4: 48. ♂ ♀.
- flavopicta** (Cresson). N. Y. to Fla., Tex., Kans. and Ill.; Colo., N. Mex., Ariz., Calif., Oreg. Hosts: *Anthonomus grandis* Boh.; *Celama sorghiella* (Riley); *Phalonia* sp.; *Acrobasis* sp.; *Homoeosoma electellum* (Hulst); *Eurukuttarus confederata* (Grote); *Ancylis comptana* (Froel.); ?*Epiblema scudderiana* (Clem.); ?*E. tripatitana* (Zell.); *Rhyacionia frustrana* (Comst.); *Argyrotaenia velutinana* (Wlkr.); *Sparganothis sulfuriana* (Clem.); *Anacamptis fragariella* Busek.; *Meteorus laphygmae* Vier.
Smiera flavopicta Cresson, 1865. Ent. Soc. Phila. Proc. 4: 99.
Smicra delira Cresson, 1872. Amer. Ent. Soc. Trans. 4: 41. ♂.
Smicra decem-punctata Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxix. ♀.
Smicra mendica Cresson. 1872. Amer. Ent. Soc. Trans. 4: 41. ♂.
 Biology: Reinhard, 1938. Tex. Agr. Expt. Sta. Bul. 559: 31-32.—Underhill, 1943. Va. Agr. Expt. Sta. Bul. 349: 12.—Needham, 1948. Ecol. Monog. 18: 446.
- hirtifemora** (Ashmead). D. C., N. C., Ga., Fla., Tenn., Ohio, Ill., Tex. Hosts: *Mesogramma polita* (Say); *M. polygonastyla* (Metc.); *Platyichirus* sp.;

Apanteles marginiventris (Cress.); *A. sp.*

Smicra hirtifemora Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. x. ♂.

igneoides (Kirby). N. H. to Fla.; Ind., Ill., S. Dak., Kans., Okla., Tex., N. Mex. Calif., Mont., Alta. Hosts: *Heliothis armigera* (Hbn.); *Laphygma frugiperda* (A. and S.); *Mineola indigenella* (Zell.); *Gretchena deludana* (Clem.); *Eurukuttarus confederata* (Grote).

Smicra igneoides Kirby, 1883. Linn. Soc. London Jour., Zool. 17: 71.

Smicra vittata Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. x. ♀.

Spilochalcis mesillae Cockerell, 1897. Ann. Mag. Nat. Hist. (6) 19: 403. ♀.

juxta (Cresson). Md., Ill., Kans., Tex.

Smicra juxta Cresson, 1872. Amer. Ent. Soc. Trans. 4: 54. ♀.

lanieri (Guérin). Fla.

Chalcis Lasnierii Guérin, 1845. Iconogr. Règne Anim. Ins., p. 412.

Chalcis lanieri Guérin, 1857. In de la Sagra, Hist. Fis. Polit. y Nat. Cuba v. 7, p. 753. Emend.

lecta (Cresson). Tex.

Smicra lecta Cresson, 1872. Amer. Ent. Soc. Trans. 4: 44. ♂ ♀.

leptis Burks. Calif., Nev., Idaho. Hosts: *Ancylics comptana* (Froel.); *Spilonota ocellana* (D. and S.); *Archips argyrosbila* (Wlkr.); *Zelleria haimbachi* Busek

Spilochalcis leptis Burks, 1940. U. S. Natl. Mus. Proc. 88: 340. ♂ ♀.

maria (Riley). East. and Cent. U. S.; Ariz. Hosts: *Callosamia promethea* (Drury); *Philosamia cynthia* (Drury); *Rothschildia* sp.; *Samia cecropia* (L.); *Telega polyphemus* (Cram.); *Thyridopteryx ephemeriformis* (Haw.).

Chalcis maria Riley, 1870. Amer. Ent. 2: 101. ♂ ♀.

Chalcis mariae Riley, 1872. Mo. State Bd. of Agr. Ann. Rpt. 7: 109. 123. Emend.

Biology: Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 26, 152.

melana Burks. Ill.

Spilochalcis melana Burks, 1940. U. S. Natl. Mus. Proc. 88: 316. ♂ ♀.

nigricornis (Fabricius). N. H. to S. C.; Ind., Ill., La., Tex., Nebr., S. Dak., N. Dak. Hosts: *Adoneta spinuloides* (H.-S.); *Limacodes* sp.; *Parasa indetermina* (Bdvl.).

Chalcis nigricornis Fabricius, 1798. Sup. Ent. System. p. 243.

Chalcis bracata Sanborn, 1863 (1862). Mass. Bd. Agr. Rpt. 10: 172. ♀.

Smicra bracata coaequalis Cresson, 1872. Amer. Ent. Soc. Trans. 4: 46. ♂.

Smicra carolina Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 183. ♂.

Dipodontia secunda Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 10. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 194. ♀.

nortonii (Cresson). N. Y. to N. C., Ill., Tex. Hosts: *Limacodes* sp.; *Phobetrion pithecium* (A. and S.); *Prolimacodes badia* (Hbn.).

Smicra Nortonii Cresson, 1872. Amer. Ent. Soc. Trans. 4: 45. ♂.

odontotae Howard. N. J., D. C., N. C. Host: *Chalepus dorsalis* Thunb.

Spilochalcis odontotae Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 7, 32. ♂.

Biology: Chittenden, 1902. U. S. Dept. Agr. Div. Ent. Bul. 38: 82.

pallens (Cresson). S. C., Tex. Hosts: *Apanteles marginiventris* (Cress.); *Meteorus laphygmae* Vier.; *Rogas laphygmae* Vier.

Smiera pallens Cresson, 1865. Ent. Soc. Phila. Proc. 4: 96.

Smiera pallens Cresson, 1865. Ent. Soc. Phila. Proc. 4: 196. Emend.

Biology: Vickery, 1929. U. S. Dept. Agr. Tech. Bul. 138: 21, 32-35, 50-52, 58.

pallipes (Smith). Fla., Minn. Host: *Archips semifera* (Wlkr.).

Chalcis flavipes Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xi. ♂. Preocc.

Chalcis pallipes Smith, 1886. Ent. Amer. 2: 19. N. name.

Chalcis pallidipes Dalla Torre, 1898. Cat. Hym., v. 5, p. 391. Emend.

phais Burks. Tex. Host: ?Citheroniid.

Spilochalcis phais Burks, 1940. U. S. Natl. Mus. Proc. 88: 307. ♂ ♀.

- phoenica** Burks. Tex. Host: *Chlosyne lacinia crocale* (Edw.).
Spilochalcis phoenica Burks, 1940. U. S. Natl. Mus. Proc. 88: 278. ♂ ♀.
- sanguiniventris** (Cresson). Va., N. C., Ga., Fla., Tex. Hosts: *Exema conspera* (Mann.); ?*Prodenia eridania* (Cram.).
Smicra sanguiniventris Cresson, 1872. Amer. Ent. Soc. Trans. 4: 36, 43. ♀.
Smicra sanguineiventris Dalla Torre, 1898. Cat. Hym., v. 5, p. 381. Emend.
- side** (Walker). Throughout U. S. and Canada. Hosts: *Hypera nigrirostris* (F.); *H. rumicis* (L.); *Rhynchaenus pallicornis* (Say); *Laphygma frugiperda* (A. and S.); *Hulstia undulatella* (Clem.); *Ancylys comptana* (Froel.); *A. divisana* (Wlkr.); *Grapholitha molesta* (Busck); *Argyrotaenia velutinana* (Wlkr.) *Anarsia lineatella* Zell.; *Exoteleia pinigoliella* (Chamb.); *Recurvaria piceaella* Kearf.; *Plutella maculipennis* (Curt.); *Argyresthia thuiella* Pack.; *Choreutis silphiella* Grote; *Coleophora fletcherella* Fern.; *C. laricella* (Hbn.); *C. malivorella* Riley; *C. pruniella* Clem.; *C. salmani* Heinr.; *Bucculatrix thurberiella* Busck; *Apanteles congregatus* (Say); *S. melanoscelus* (Ratz.); *A. militaris* (Walsh); *Meteorus laphygmae* Vier.; *M. versicolor* (Wesm.); *Campoletis argentifrons* (Cress.); *Horogenes insularis* (Cress.); *H. plutellae* (Vier.).
Smicra side Walker, 1843. Soc. Ent. France Ann. (2) 1: 145. ♀.
Smicra torvina Cresson 1872. Amer. Ent. Soc. Trans. 4: 40. ♀.
 Biology: Vickery, 1929. U. S. Dept. Agr. Tech. Bul. 138: 21, 32-33, 52-53, 58.—
 Doner, 1936. Ent. Soc. Amer. Ann. 29: 234.
- subobsoleta** (Cresson). N. Dak. to Ill., Tex. and Mont.
Smicra subobsoleta Cresson, 1872. Amer. Ent. Soc. Trans. 4: 42. ♂.
- tanais** Burks. Tex., Calif. Host: *Gnorimoschema* sp.
Spilochalcis tanais Burks, 1940. U. S. Natl. Mus. Proc. 88: 309. ♂ ♀.
- transitiva** (Walker). Ga., Fla.
Smiera transitiva Walker, 1862. Ent. Soc. London Trans. (3) 1: 371. ♀.
Smiera pulchra Cresson, 1865. Ent. Soc. Phila. Proc. 4: 94.
- xantha** Burks. Tex., N. Mex., Ariz.
Spilochalcis xantha Burks, 1940. U. S. Natl. Mus. Proc. 88: 320. ♀.
- xanthostigma** (Dalman). Ont. Host: *Coleophora laricella* (Hbn.).
Chalcis xanthostigma Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 141.
 Taxonomy: Graham, 1944. Ent. Soc. Ontario Ann. Rpt. 74: 49.

Genus CERATOSMICRA Ashmead

- Sayiella* Ashmead, 1904. Carnegie Mus. Mem. 1: 251, 253. Preocc.
 Type: *Smicra debilis* Say. Monob.
- CeratOMICRA* Ashmead, 1904. Carnegie Mus. Mem. 1: 251, 253.
 Type: *CeratOMICRA petiolata* Ashmead. Monob.
- Mischosmicra* Ashmead, 1904. Carnegie Mus. Mem. 1: 251, 253.
 Type: *Mischosmicra kahlii* Ashmead. Monob.
- Melanosmicra* Ashmead, 1904. Carnegie Mus. Mem. 1: 251, 253, 447.
 Type: *Melanosmicra immaculata* Ashmead. Orig. desig.
- Eusayia* Ashmead, 1904. Ent. Soc. Wash. Proc. 6: 126. N. name.
 Revision: Burks, 1940. U. S. Natl. Mus. Proc. 88: 343-351.
- debilis** (Say). R. I. to Minn. and Kans.; Fla., Iowa, and Tex. Hosts: *Apanteles delicatus* How.; *A. hyphantriae* Riley; *A. melanoscelus* (Ratz.); *Meteorus hyphantriae* Riley; *Casinarina limenitidis* How.
Chalcis debilis Say, 1836. Boston Jour. Nat. Hist. 1: 271.
Smicra longipetiola Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. x.
 ♂.
- Mischosmicra Kahlii* Ashmead, 1904. Carnegie Mus. Mem. 1: 250, 381. ♀.
- immaculata** (Cresson). Tex. Host: *Meteorus* sp.
Smiera immaculata Cresson, 1865. Ent. Soc. Phila. Proc. 4: 97.
- meteori** Burks. N. Y. and Mass. to N. C., Tenn. and Ill.; La., Tex. Hosts: *Laphygma frugiperda* (A. and S.); *Apanteles delicatus* How.; *A.* sp.; *Meteorus hyphantriae* Riley; *M.* sp.; *Casinarina limenitidis* How.
CeratOMICRA meteori Burks, 1940. U. S. Natl. Mus. Proc. 88: 346. ♂ ♀.

paya Burks. Ill., Kans., Tex., Calif. Host: *Oidaematophorus paleaceus* (Zell.).
Ceratoscira paya Burks, 1940. U. S. Natl. Mus. Proc. 88: 348. ♂ ♀.

Family LEUCOSPIDAE

Revision: Weld 1922. U. S. Natl. Mus. Proc. 61 (6): 1-43.

Genus LEUCOSPIS Fabricius

Leucospis Fabricius, 1775. Syst. Ent., p. 361.

Type: *Leucospis dorsigera* Fabricius. Monob.

Coelogaster Schrank, 1780. Schrift. Gesell. Naturf. Freunde Berlin 1: 303
(no species).

Type: (*Coelogaster passavianus* Schrank) = *Leucospis dorsigera*
Fabricius. Included by Foerster, 1782.

Leucaspis Burmeister, 1835. Arch. f. Naturgesch. 1 (2): 47. Emend.

Exochlaenus Shipp, 1894. Ent. Monthly Mag. 30: 245.

Type: *Leucospis anthidioides* Westwood. Monob.

Micrapion Kriechbaumer, 1894. Berlin. Ent. Ztschr. 39: 315.

Type: *Micrapion bilineatum* Kriechbaumer. Monob.

Parexoclaenus Girault, 1915. Queensland Mus. Mem. 4: 355.

Type: *Parexoclaenus vespoides* Girault. Monob.

Exoclaenoides Girault, 1915. Queensland Mus. Mem. 4: 356.

Type: *Exoclaenoides uncinatus* Girault. Monob.

Revision: Weld, 1922. U. S. Natl. Mus. Proc. 61 (6): 1-43.

affinis affinis Say. Widespread in Canada and U. S. Hosts: *Ecdytolopha inscitiana*
Zell.; *Anthidium emarginatum* (Say); *Dianthidium pudicum consimile*
(Ashm.); *Megachile brevis* Say; *M. montivaga* Cress.; *Osmia atriventris*
Cress.; *O. pumila* Cress.; *O. simillima* Smith.

Leucospis affinis Say, 1824. In Keating, Narr. Long's 2nd Exped., App. p. 327.
♂ ♀.

Leucospis subnotata Westwood, 1834. Ent. Mag. 2: 215. ♀.

Leucospis fraterna Say, 1836. Boston Jour. Nat. Hist. 1: 269. ♂ ♀.

Leucospis basalis Westwood, 1839. Ztschr. f. Ent. 1: 251. ♂ ♀.

Leucospis Canadensis Walker, 1860. Jour. Ent. 1: 17. ♂.

Leucospis bicincta Viereck, 1906. Amer. Ent. Soc. Trans. 32: 227. ♂.

Biology: Graenicher, 1906. Wis. Nat. Hist. Soc. Bul. 4: 153-159.

Morphology: Snodgrass, 1910. U. S. Natl. Mus. Proc. 39: 65.

affinis floridana (Cresson). Mass., Fla.

Leucospis affinis var. *floridana* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 33.
♂ ♀.

birkmani Brues. Tex.

Leucospis birkmani Brues, 1925. Psyche 32: 23. ♀.

robertsoni Crawford. Fla.

Leucospis robertsoni Crawford, 1909. Ent. Soc. Wash. Proc. 11: 51. ♂ ♀.

slossonae Weld. Ga., Fla.

Leucospis slossonae Weld, 1922. U. S. Natl. Mus. Proc. 61 (6): 11. ♂ ♀.

texana Cresson. N. C., Ga., Tex.

Leucospis texana Cresson, 1872. Amer. Ent. Soc. Trans. 4: 31, 191. ♂.

Unplaced Genera

Hoplocrepis Ashmead, 1890. Ent. Soc. Wash. Proc. 1: 235.

Type: *Hoplocrepis albiclavus* Ashmead. Monob. and orig. desig.

Lophocomodia Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VI.

Type: *Lophocomodia americana* Ashmead. Monob.

Pteratomus Packard, 1866. Essex Inst. Proc. 4: 137.

Type: *Pteratomus putnamii* Packard. Monob.

Unplaced Species

- Entedon antiopae* Packard, 1881. Boston Soc. Nat. Hist. Proc. 21: 36. ♂.
- Stenomesus? aphidicola* Ashmead, 1880. Orange Insects, p. 67. ♂ ♀.
- Smicra bimaculatas* (!) Strecker, 1878. War Dept. U. S. Ann. Rpt. for 1878, v. 2, pt. 3, p. 1848.
- Caccophagus* (!) *brunneus* Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 205.—*Coccophagus bruneus* Dalla Torre, 1898. Cat. Hym., v. 5, p. 224, emend.
- Camptotera* (!) *clavata* Provancher, 1888. Addit. Corr. Faune Ent. Canada Hym., p. 404. ♂ ♀.
- Entedon coquillettii* Riley, 1889. U. S. Dept. Agr. Ann. Rpt. for 1888, p. 86.
- Stinoplus cyaneus* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 338. ♂.
- Semiotellus fasciatus* Provancher, 1881. Nat. Canad. 12: 294. ♂ ♀.
- Trichogramma flavus* Ashmead, 1880. Orange Insects, p. 33. ♀.
- Encyrtus Gastron* Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 21. ♀.
- Eulophus Gobryas* Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 26. ♂.
- Entedon Imbrasus* Walker, 1847. Ann. Mag. Nat. Hist. 20: 23. ♀.
- Leucospis integra* Haldeman, 1844. Acad. Nat. Sci. Phila. Proc. 2: 53. ♂.
- Perilampus laevis* Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 199.—*Perilampus levis* Dalla Torre, 1898. Cat. Hym., v. 5, p. 355, emend.
- Semiotellus minimus* Provancher, 1881. Nat. Canad. 12: 295. ♀.
- Eulophus Minyas* Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 26. ♀.
- Cricellius megachilis* Ashmead, 1897. South. Calif. Acad. Sci. Proc. 1 (3): 6. ♂ ♀.
- Pteromalus nigricornis* Provancher, 1881. Nat. Canad. 12: 297. ♀.
- Semiotellus oblongus* Provancher, 1881. Nat. Canad. 12: 295. ♀.
- Eurytoma orbiculata* Say, 1836. Boston Jour. Nat. Hist. 1: 272.
- Pteratomus Putnamii* Packard, 1864. Essex Inst. Proc. 4: 138. ♂.
- Eulophus ramosus* Provancher, 1881. Nat. Canad. 12: 297. ♂ ♀.
- Encyrtus Reate* Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 22. ♂.
- Trigonoderus varipes* Viereck, 1903. Amer. Ent. Soc. Trans. 29: 75. ♀.

Superfamily CYNIPOIDEA¹⁸

Revision: Dalla Torre and Kieffer, 1910. Cynipidae, Das Tierreich, vol. 24. This is the latest monograph of the species of the world. It closed with the literature of 1905.

Family IBALIIDAE

Subfamily IBALIINAE

Genus IBALIA Latreille

Ibalia Latreille, 1802. Hist. Nat. Crust. Ins., v. 3, p. 306.

Type: (*Ophion cultellator* Fabricius)=*Ichneumon leucospoides* Hochenwarth. Monob.

Sagaris Panzer, 1806. Krit. Rev. Insektenf. Deutschlands, v. 2, p. 91.

Type: *Ophion cultellator* Fabricius. Monob.

Parasitic on Siricidae.

¹⁸ By L. H. Weld, Falls Church, Va.

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