

A TAXONOMIC STUDY ON THE
CHRYSOMELIDAE
(INSECTA-COLEOPTERA) FROM FORMOSA

PART V SUBFAMILY CLYTRINAE (2)

By

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6. *Gynandrophthalma maculicollis* sp. nov.

Sexes somewhat dissimilar.

♂: Body small, nearly oblong. General colour metallic deep or dark blue, the blue colour on the head and elytra brighter than on the underside, mixed with a faint greenish colour on the head and underside, and a purplish colour on the lateral and apical areas of elytra; clypeus and mouth parts light yellowish brown, with palpi somewhat infuscated; antennae blackish brown, with four basal segments yellowish brown; pronotum yellowish brown, with a large blackish marking on the middle, the marking not touches to either the front or basal margin; scutellum more blackish than the elytra. Underside: head piceous to black on each side and dark yellowish brown on the middle, prothorax dark yellowish brown to blackish brown, with the exception of lateral areas yellowish brown, mesothorax blackish brown to piceous; legs yellowish brown, with tarsi and apices of the dorsal surfaces of tibiae more or less infuscated.

Head rather small, rather strongly but sparsely punctate, very finely shagreened; vertex somewhat convex; inter-ocular area rugose, rather sparsely pubescent-punctate on each side, with a large depression in the centre; clypeus flat, finely but very sparsely pubescent-punctulate, with a small and shallow impression on each side of the basal area, arcuated at the front margin. Eyes large, very widely ovate, strongly convex, with inner margin lightly notched near the base of antennae. Antennae short, rather robust, with 3rd segment slightly shorter and much narrower than the 4th, the latter very much narrower than the 5th, the latter and the six succeeding strongly widened and serrate, with a distinct and sharply pointed appendix at the apex of 11th. Pronotum strongly transverse, nearly three times as wide as it is long, somewhat narrowed in front; front margin gently trisinate, front angles narrowly rounded, lateral margins gently rounded and very narrowly reflexed against the dorsal convexure, basal corners widely rounded, basal margin slightly rounded on each side of the basal lobe, the latter also slightly rounded and preceded by a distinct groove on it; dorsum strongly transversely convex, with a weak transverse impression on a little behind the front margin and two, obliquely placed, irregular foveae on each side behind the middle, extremely finely punctulate throughout, coarsely and irregularly punctate before and behind the middle. Scutellum obtrigonal, truncated at the apical extremity,

depressed and rather strongly punctate on the base, but distinctly raised posteriorly, extremely minutely but not very thickly punctulate and mixed with some larger punctures sparsely. Elytra elongate, subparallel-sided, rather markedly lobed laterally at the base, rounded at the apex; dorsum convex, strongly and thickly punctate, the punctures with a tendency to form longitudinal rows partially and becoming feebler posteriorly, interspaces of these punctures very minutely punctulate throughout together with the humeral calli which are free from the larger punctures. Underside and legs rather thickly covered with greyish or pale yellowish pubescence; last abdominal sternite with apical margin gently emarginate, without central fovea; apical margin of pygidium very slightly notched at the middle; fore-legs rather longer than the others.

♀: Body larger than the male, nearly oblong-ovate, with elytra gently widened posteriorly; clypeus, apices of mandibles and palpi pitchy brown to piceous, with labrum and bases of mandibles rather light yellowish brown; last abdominal sternite with apical margin more widely and strongly emarginate than in the male and distinctly foveolate on the middle along the apical margin; pygidium with apical margin more noticeably notched at the middle than in the male.

Length: ♂, 3.0mm.; ♀, 3.75 mm.

Loc. Distr. - Musya, Nōkō-Gun, Taityū-Syū (1♂, *Holotype* & 1♀, *Allotype*, 12. VIII. 1940, M. CHŪJŌ leg.).

Gen. Distr. - Formosa.

The present new species may very easily be distinguished from all the allies by the peculiar coloration.

7. *Gynandrophthalma variabilis* sp. nov.

Sexes somewhat dissimilar.

♂: Body small, narrowly elongate, subparallel-sided. General colour black, somewhat lustrous, with a strong greenish bronzy shimmer on the head and a faint bronzy sheen on the pronotum, scutellum and elytra; antennae, mouth-parts and lateral areas of pronotum more or less stained with dark brown to piceous; elytra with a wide yellowish stripe from the base to a little before the apex on each elytron, the stripe touches to the inner half of basal margin and also scutellar margin and closely approaches to the sutural margin, but distinctly distant from the lateral and outer half of basal margins; legs yellowish brown and partly lighter but partly darker.

Head rather small, strongly and thickly punctate, interspaces of these punctures very finely punctulate and partly shagreened; vertex somewhat convex; inter-ocular area rugose, rather thickly pubescent-punctulate on each side, distinctly grooved along the inner margin of each eye, with a short longitudinal impression in the centre; clypeus shallowly and subtriangularly depressed on the basal area which is similarly punctured as on the vertex, anterior area with another angulation against the basal area, without large punctures but minutely punctulate and finely but sparsely pubescent-punctulate along the lateral and front margins, with front margin lightly arcuated. Eyes large, shortly elliptical, strongly convex,

with a light incision near the base of antenna. Antennae short, robust, with 3rd segment rather distinctly thickened terminally but narrowest, 4th strongly widened but a little narrower than the 5th, the latter and the six followings very strongly widened and thickened and serrated, with an appendic projection at the tip of 11th. Pronotum transverse, more than twice as wide as it is long, only a little narrowed in front; front margin slightly trisinate, lateral margins gently rounded and narrowly reflexed against the dorsal convexure, basal angles widely rounded and somewhat reflexed, basal margin slightly rounded on each side of the basal lobe, the latter rather noticeably produced posteriorly and preceded by a deep groove on it; dorsum strongly transversely convex, very finely punctulate throughout, strongly but very sparsely punctate on the basal and anterior areas, with a faint transverse impression on a little behind the front margin and a similar oblique impression on each side near the basal corner. Scutellum obtrigonate, truncated at the apical extremity, depressed at the basal extremity, but strongly raised posteriorly, extremely minutely but not very thickly punctulate, rather strongly but very sparsely punctate. Elytra strongly elongate, subparallel-sided, gently constricted on each side just before the middle, rather markedly lobed laterally at the base, rounded at the apex; dorsum convex, slightly depressed on the middle, regularly striate-punctate, the punctures very large and deep on the basal area, but becoming feebler on the apical area, interstices of these regular rows of punctures very finely punctulate throughout together with the humeral calli which are free from the large striated punctures. Underside and legs thickly covered with greyish pubescence; apical margins of the last abdominal sternite and pygidium simply rounded, not foveolate on the middle of the former sternite; fore-legs rather longer than the others.

♀: Body larger than the male, elongate-ovate; head greenish bronzy, with a strongly golden greenish shimmer; clypeus and mouth-parts yellowish brown, with apices of mandibles and palpi somewhat infuscated; pronotum entirely yellowish brown; elytra yellowish brown, with humeral and sutural areas widely bronzy, the humeral bronzy area in one case widely developing towards the scutellum, moreover with an elongate bronzy patch behind the middle of each elytron, this latter patch in one case strongly enlarged and connected to the humeral and sutural bronzy areas, the punctuation finer, more approximate to each other and the regular longitudinal striae which may be seen in the male are becoming irregular in the present sex; underside of prothorax entirely yellowish brown; 1st abdominal sternite with apical margin strongly emarginate in \wedge -shape and a large and deep fovea on the middle along the apical margin; pygidium with apical margin rather markedly notched at the apex; legs much lighter yellowish brown than in male.

Length: ♂, 2.75-2.95 mm.; ♀, 3.5 mm.

Loc. Distr. - Baibara, Nôkô-Gun, Taityû-Syû (1♂ & 1♀, *Cotype*, 4-7. VII. 1939, Y. MIWA Leg.); Musya, Nôkô-Gun, Taityû-syû (1♂ & 1♀, *Cotype*, 12. VIII. 1940, M. CHÛJÔ leg.).

Gen. Distr. - Formosa.

This new species is closely allied to *Gynandrophthalma striatipennis* JACOBY from Nilgiris, India, but may easily be separated from it by the head strongly punctured and

rugose between the eyes, the pronotum also thickly punctulate and not maculated, the abdomen not fulvous, etc.

8. *Gynandrophthalma flavimana* sp. nov.

Body elongate, rather widened posteriorly. General colour rather pale yellowish brown, somewhat lustrous; apices of mandibles and antennae (excepted the three basal segments) somewhat infuscated; metathorax black, with median area yellowish brown; abdomen more or less infuscated together with the pygidium; legs yellowish brown, with tarsi and dorsal surfaces and apical areas of tibiae blackish brown to black.

Head rather small, very finely but not thickly punctulate, sparsely pubescent-punctate near the inner margin of each eye; vertex gently convex; clypeus obtusely separated from frons by some obtuse small foveae placed semicircularly, very finely but sparsely pubescent-punctulate, with front margin distinctly arcuately emarginate. Eyes rather large, subelliptical, slightly oblique, moderately convex, with inner margin lightly emarginate near the base of antenna. Antennae rather robust, relatively long, with 4th segment distinctly widened terminally but very much narrower than the 5th and longer than the 3rd, 5th and the six succeeding segments distinctly serrate, 11th oblong and pointed at the apex. Pronotum strongly transverse, about thrice as wide as it is long, somewhat narrowed in front; front margin gently trisinate, lateral margins gently rounded and rather widely reflexed against the dorsal convexure, basal corners widely rounded and somewhat reflexed, basal margin slightly rounded on each side of the basal lobe, the latter scarcely indicated and preceded by a short impressed line; dorsum transversely convex, extremely finely punctulate throughout. Scutellum obtrigonal, truncated at the apex, depressed on the base, but raised posteriorly, extremely minutely but not very thickly punctulate. Elytra elongate, rather widened posteriorly, rather distinctly lobed laterally at the base, rounded at the apex; dorsum convex, rather thickly punctate, the punctures becoming feebler posteriorly, interspaces of these punctures very finely punctulate throughout together with the humeral calli which are free from the larger punctures. Underside and legs thickly covered with yellowish white pubescence.

♀: Last abdominal sternite with apical margin deeply emarginate in \wedge -shape and a large fovea touches to the median portion of apical margin; pygidium with apical margin rather markedly emarginate.

Length: ♀, 5.5 mm.

Loc. Distr. - Tipon, Taitô-Gun, Taitô-Tyô (1 ♀, *Holotype*, 25. III. 1935, M. CHÛJÔ leg.).

Gen. Distr. - Formosa.

The present new species is most nearly related to *Gynandrophthalma nigrotibialis* JACOBY from Nilgiris in India, but may be separated from it by the body larger, the head not entirely impunctate, the clypeus with front margin not subquadrately emarginate, the 3rd antennal segment distinctly shorter than the 4th, the pronotum not impunctate, the elytra with weak but distinct epipleural lobes, etc.

9. *Gynandrophthalma nigripennis* sp. nov.

Body elongate, somewhat widened posteriorly. Head, pronotum and scutellum yellowish brown, lustrous, with apices of mandibles and antennae (excepted the basal segments) somewhat infuscated; elytra shiny black, with basal and sutural margins piceous; underside yellowish brown to piceous or black, but in the latter cases prothorax never infuscated; legs in one case yellowish brown in general colour, with apices of femora, tibiae and tarsi blackish brown to black, but in another case tarsi, hind-coxae and dorsal surfaces of tibiae and femora more or less infuscated.

Head rather small, extremely minutely but not thickly punctulate; vertex gently convex; inter-ocular area with an obtuse depression in the middle, the depression occupied by three obtuse impressions which are placed in triangle, finely but sparsely pubescent-punctulate on each side; clypeus very finely but sparsely pubescent-punctulate, with front margin distinctly arcuately emarginate. Eyes rather large, ovate, slightly oblique, distinctly convex, with inner margin lightly notched near the base of antenna. Antennae rather robust, comparatively long, with 4th segment somewhat widened terminally but very much narrower than the 5th, the latter and the six succeeding distinctly serrate, 11th nearly spindle-shaped and pointed at the apex. Pronotum strongly transverse, about three times as wide as it is long, somewhat narrowed anteriorly; front margin nearly straight or very gently sinuate, lateral margins rather widely reflexed against the dorsal convexity and rounded at the anterior and basal ends, basal corners widely rounded, basal margin slightly rounded on each side of the basal lobe, the latter scarcely produced posteriorly and preceded by a short impressed-line; dorsum transversely convex, extremely finely punctulate throughout. Scutellum obtrigonal, truncated at the apical extremity, depressed and sparsely punctate on the base of dorsum, but then markedly raised posteriorly and extremely minutely but not thickly punctulate. Elytra elongate, somewhat widened posteriorly, rather strongly lobed laterally at the base, rounded at the apex; dorsum convex, rather strongly punctate, the punctures becoming feebler posteriorly, interspaces of these punctures very finely punctulate together with the humeral calli which are free from the large punctures. Underside and legs thickly covered with yellowish white pubescence.

♀: Lest abdominal sternite with posterior margin emarginated in \wedge -shape and a large fovea along the middle of apical margin; pygidium with apical margin slightly emarginate.

Length: ♀, 5.0 - 6.0 mm.

Loc. Distr. - Kōsyun, Kōsyun-Gun, Takao-Syū (1 ♀, *Cotype*, 25. IV - 25. V. 1918, J. SONAN leg.); Tipon, Taitō-Gun, Taitō-Tyō (1 ♀, *Cotype*, 25. III. 1935, M. CHŪJŌ leg.).

Gen. Distr. - Formosa.

This new species is somewhat allied to *Gynandrophthalma longicornis* JACOBY from Bengal, India, but may be distinguished from it by the elytra entirely black, the eyes notched at each inner margin, the clypeus not separated from frons and the front margin not subtriangularly emarginated, the 4th antennal segment not strongly triangularly expanded, the pronotum much more than twice as wide as it is long, the elytra not scarcely lobed laterally at the base, etc.

10. *Gynandrophthalma japonica* (BALY) subsp. *mandarina* WEISE (Fig. 15)

Gynandrophthalma japonica var. *mandarina* WEISE, Horae Soc. Ent. Rossicae, XXIII, pp. 579-580 (1887) (China: Shang-hai & Hongkong).

Gynandrophthalma (*Gynandrophthalma*) *japonica* var. *mandarina* JACOBY et CLAVAREAU, in WYTSMAN, Gen. Ins., XLIX, p. 43 (1906) (China: Sze-Tschuan).

Cyaniris (*Cyaniris*) *japonica* ab. *mandarina* CLAVAREAU, in JUNK et SCHENKLING, Col. Cat., LIII, p. 62 (1913) (China: Szetschuan). - WINKLER, Cat. Col. Reg. Palaearcticae, II, 10, p. 1241 (1929) (W. China). - HO, in WU, Cat. Ins. Sinensium, III, p. 790 (1937) (China: Szetschuan, Foochow & Yenping).

Cyaniris (*Cyaniris*) *japonica* var. *formosana* CHŪJŌ, Arb. Morph. Taxon. Ent. Berlin-Dahlem, 1, 4, pp. 284-286 (1934) (Formosa: Fuhosho, Taihorin, Kankau, Koroton & Taihorinsho).


Cyaniris (*Cyaniris*) *japonica* CHŪJŌ, Arb. Morph. Taxon. Ent. Berlin-Dahlem, I, 4, p. 284 (1934) (Formosa: Fuhosho & Taihorin).

Body elongate, oblong or oblong-ovate. Head black, strongly lustrous, with mouth-parts (excepted the basal areas of mandibles black) and three basal segments of antennae dark yellowish brown to dark reddish brown or piceous; pronotum yellowish brown or reddish brown, without marking or with black marking, the marking variable, but principally be generalized as follows: 1. A short transverse band or a large spot on each side of the middle; 2. A small transverse spot and a tiny round or subquadrate spot on each side of the middle; 3. A large transverse band on the middle; 4. The band in the 1st case very strongly developed and occupying the most part of the disc and not or partly touched to the basal margin; scutellum yellowish brown to reddish brown or piceous; elytra yellowish brown to reddish brown, sometimes more or less infuscated at the apical margin, with very variable black markings on the dorsum, the markings can generally be divided into the fourteen following cases on each elytron: 1. With a small spot on the humerus; 2. With two small spots, the one on the humerus and the other one near the scutellum; 3. With two small spots, the one on the humerus and the other one behind the middle; 4. With three small spots, two of them as in the 2nd case and the other one behind the middle; 5. Marked as in the 4th case, but the one situated near the scutellum is enlarged and touched neither the basal nor the sutural margins; 6. Marked as in the 4th case, but the one situated behind the middle becoming a large transversal marking; 7. Marked as in the 6th case, but the one situated near the scutellum is strongly enlarged and frequently touched to the sutural margin; 8. Marked as in the 6th case, but the basal two spots are strongly enlarged and closely approximate to each other, and the post-median one becoming a transverse band and frequently touched to the sutural margin but not so to the lateral margin; 9. With two large subquadrate markings, the one near the base and the other one behind the middle, and each one of them not touched to either the sutural or lateral margins; 10. Marked as in the 9th case, with the post-median marking touched to the sutural margin but much distanced from the lateral margin; 11. Marked as in the 10th case, with the post-median marking very closely approached to the lateral margin (very rare case);

12. Marked as in the 10th case, but the basal marking also touched to the sutural margin; 13. Marked as in the 12th case, but the markings connected to each other by a narrow longitudinal stripe near the suture; 14. Marked as in the 13th case, but the longitudinal stripe very much widely developed and touched to the sutural margin. Underside (excepted of the prothorax yellowish brown) black, with basal area of the 1st abdominal sternite more or less yellowish brown in many cases, rarely the median area of the metasternum also yellowish brown; legs black, with trochanters entirely or partly yellowish brown to piceous.

Head small, deeply inserted in prothorax, extremely finely but not very thickly punctulate under a high power lens; vertex rather convex; inter-ocular area transversely depressed at the upper portion, with a fovea in the middle of the depression, distinctly pubescent-punctate on each side, sometimes irregularly rugose or strigose; clypeus rather sparsely pubescent punctate, with front margin emarginate, pubescent-punctate in a row along the front margin and the pubescence much longer than those on the median area. Antennae with 1st segment strongly thickened, somewhat arched and the inner side strongly angulated, 2nd subcylindrical and the inner side also somewhat angulated but the outer side gently rounded, 3rd shortest, slightly rounded on each side and very much narrower than any one of the others, 4th distinctly subtriangularly widened terminally but not transverse and distinctly narrower than the 5th, 5th and the six followings very strongly subtriangularly expanded and serrate as usual. Pronotum strongly transverse, about thrice as wide as it is long, somewhat narrowed in front; front margin nearly straight, with lateral portions somewhat produced forwardly, lateral margins gently rounded, basal corners rounded and somewhat reflexed, basal margin more or less bisinuate on each side of the basal lobe; dorsum transversely convex, very finely and thickly punctulate throughout, with basal lobe somewhat depressed. Scutellum obtrigonal, with lateral margins gently rounded and apex subacuminated; dorsum very finely and thickly punctulate, with apical area longitudinally subcostate on the middle. Elytra elongate, slightly wider at the base than of pronotum, dorsum convex, rather thickly punctate, the punctures partly substriated, interspaces of these punctures very finely and thickly punctulate, with a weak epipleural lobes. Underside and legs thickly covered with greyish pubescence.

♂: Vertex more strongly convex and antennae rather robuster than in female, elytra with lateral margins gently and evenly rounded, abdomen with last sternite not foveolated on the middle and apical margin widely and gently rounded, legs distinctly robuster than those of the female, with fore-legs rather longer than the other legs; and tarsi, especially the fore-tarsi, much more strongly thickened on the dorsum.

♀: Elytra rather widened posteriorly, with a gentle curvature, abdomen with last sternite largely and deeply foveolated on the middle and the apical margin strongly emarginated as in  shape at the middle.

Length: 5.5 - 7.0 mm.

Food-plant: *Lagerstroemia subcostata* KOHENE var. *hirtella* KOHENE (Japanese name: *Sima-Sarusuberi*).

Loc. Distr. - Zyûgohun-Syô, Bunzan-Gun, Taihoku-Syû (1♂, 11. VII. 1907, T. SHIRAKI leg.); Taipin, Tikutô-Gun, Sintiku-Syû (1♂ & 1♀, 12. IX. 1910, I. NITOBÉ leg.); Taihoku-Si, Taihoku-Syû (1♀, IX. 1911, I. NITOBÉ leg.; 1♀, VI. 1925, J. SONAN leg.; 1♀, 15. V. 1932, M. CHÛJÔ leg.; 1♂, 12. VI. 1932, M. CHÛJÔ leg.); Taitô-Gai, Taitô-Tyô (2♀♀, 7. VI. 1914, I. NITOBÉ leg.); Sintiku, Sintiku-Syû (1♀, 27. V. 1917, M. MAKI leg.); Kôsyun, Kôsyun-Gun, Takao-Syû (2♂♂ & 2♀♀, 25. IV - 25. V. 1918, J. SONAN leg.); Horisya, Nôkô-Gun, Taityû-Syû (2♂♂ & 2♀♀, V - VIII. 1918, H. KAWAMURA leg.; 1♀, 31. VII. 1929, Y. MIWA leg.; 1♂, 14. V. 1937, M. CHÛJÔ leg.); Mt. Arisan, Tainan-Syû (1♂ & 2♀♀, 2-23. X. 1918, J. SONAN leg.); Mt. Nôkô-zan, Nôkô-Gun, Taityû-Syû (1♂, 11. V. 1919, T. OKUNI leg.); Musya, Nôkô-Gun, Taityû-Syû (3♂♂ & 1♀, 18. V - 15. VI. 1919, T. OKUNI leg.); Kobayasi, Ratô-Gun, Taihoku-Syû (1♀, 29. VIII. 1923, T. SHIRAKI leg.); Kayahara, Ratô-Gun, Taihoku-syû (1♂, 3. IX. 1923, T. SHIRAKI leg.; 1♂ & 1♀, 23. VII. 1929, Y. MIWA leg.); Ryohen~Ratô, Ratô-Gun, Taihoku-Syû (1♂ & 1♀, 5. IX. 1923, R. TAKAHASHI leg.); Roeiti, Niitaka-Gun, Taityû-Syû (1♀, 12. IV. 1924, T. SHIRAKI leg.); Rakuraku, Niitaka-Gun, Taityû-syû (1♀, 18. IV. 1924, T. SHIRAKI leg.); Riran, Kwanzan-Gun, Taitô-Tyô (1♀, 18. XI. 1925, R. TAKAHASHI leg.); Kuaru, Kôsyun-Gun, Takao-Syû (1♀, 28. VI. 1928, R. TAKAHASHI leg.; 1♀, 11. VI. 1937, M. CHÛJÔ leg.); Mt. Ritô-zan, Taikai-Gun, Sintiku-Syû (1♂ & 2♀♀, 31. VII. 1928, S. ISSIKI leg.); Kankau, Kôsyun-Gun, Takao-Syû (2♀♀, 24. V. 1929, J. SONAN leg.); Urai, Burzan-Gun, Taihoku-Syû (1♀, 20. VII. 1929, Y. MIWA leg.; 1♂, 26. VI. 1932, M. CHÛJÔ leg.; 1♂, 24. VI. 1933, K. KOBAYASHI leg.); Rimogan, Bunzan-Gun, Taihoku-Syû (1♀, 22. VII. 1929, Y. MIWA leg.); Nisimura, Ratô-Gun, Taihoku-Syû (1♂ & 1♀, 24. VII. 1929, Y. MIWA leg.); Mt. Taihei-zan, Taihoku-Syû (2♂♂ & 2♀♀, VII, 1930, S. MINOWA leg.); Taikô, Taikô-Gun, Sintiku-Syû (1♀, 20. VII. 1930, J. SONAN leg.); Tabito, Karen-Gun, Karenkô-Tyô (1♀, 24. X. 1930, S. MINOWA leg.); Sikikun, Ratô-Gun, Taihoku-Syû (3♂♂ & 1♀, 22. V. 1931, R. TAKAHASHI leg.; 1♀, 11. VII. 1933, M. CHÛJÔ leg.); Piyanan~Dangai, Ratô-Gun, Taihoku-Syû (5♂♂ & 1♀, VII. 1931, S. AOKI leg.); Mt. Sô-zan, Sitisei-Gun, Taihoku-Syû (1♀, 5. VI. 1932 & 1♀, 25. X. 1936, M. CHÛJÔ leg.); Siigao, Tikutô-Gun, Sintiku-Syû (7♂♂ & 11♀♀, 17-30. VI. 1934, M. CHÛJÔ leg.); Inoue, Tikutô-Gun, Sintiku-Syû (1♂ & 1♀, 21. VII. 1935, M. CHÛJÔ leg.); Hokuzankô, Nôkô-Gun, Taityû-Syû (1♂ & 1♀, 8. VII. 1940, M. CHÛJÔ leg.); Kasinôkidaira, Mt. Taihei-zan, Taihoku-Syû (1♂, 23. VII. 1940, M. CHÛJÔ leg.); Miharasi, Nôkô-Gun, Taityû-Syû (5♀♀, 12. VIII. 1940, M. CHÛJÔ leg.); Karapao, Karen-Gun, Karenkô-Tyô (1♂ & 1♀, 14. VIII. 1940, M. CHÛJÔ leg.); Seraoka, Karen-Gun, Karenkô-Tyô (1♀, 15. VIII. 1940, M. CHÛJÔ leg.); Miharasi~Kubayan, Karen-Gun, Karenkô-Tyô (1♂ & 3♀♀, 16. VIII. 1940, M. CHÛJÔ leg.); Kahodai in Mt. Hassen-zan, Taityû-Syû (1♀, 3. VI. 1942, S. ISSIKI leg.); Reimei in Mt. Hassen-zan, Taityû-Syû (1♂, 5. VI. 1942, A. MUTUURA leg.).

Gen. Distr. - S. & W. China and Formosa.

11. *Gynandrophthalma octomaculata* sp. nov. (Fig. 16)

Body elongate, somewhat widened posteriorly. General colour rather pale yellowish brown, somewhat lustrous; head black, with anterior half of clypeus and mouth-parts (excepted the mandibles black in general and partly piceous) yellowish brown; antennae blackish brown to black, with three or four basal segments yellowish brown; pronotum with two pitchy black or deep black markings, which are placed transversely and each one of them nearer to the basal margin than to the front margin, sometimes these markings united by a transverse blackish band nearly along the basal margin; scutellum black; elytra with four black markings on each elytron, the 1st one of them being situated on the humeral callus, the 2nd one a little behind the base and near the sutural margin, the 3rd one on the middle and near the lateral margin, the 4th one just behind the middle and near the sutural margin, and these markings very small in some cases, but very large in other cases; meso- and metathorax black; upper surfaces of tibiae partly or nearly entirely blackish brown to black; tarsi dark yellowish brown to blackish brown.

Head: vertex somewhat convex, extremely finely but sparsely punctulate; inter-ocular space flat, strongly and thickly rugose, rather thickly pubescent-punctulate, with a shallow depression in the centre; clypeus with anterior half somewhat depressed, minutely shagreened or alutaceous and punctulate throughout, finely but sparsely pubescent-punctulate on each side, with front margin deeply emarginate. Antennae rather slender, structured as in the generic description, with last segment rather narrowly elongate and sharply pointed at the apex. Pronotum strongly transverse, rather more than twice as wide as it is long, somewhat narrowed in front; front margin gently sinuate, lateral margins rounded and narrowly reflexed against the dorsal convexure, basal angles widely rounded, basal margin slightly rounded on each side of the basal lobe, the latter rather distinctly produced posteriorly; dorsum transversely convex, extremely finely but not thickly punctulate throughout, with shallow impressions as follows: a long transverse one nearly along the front margin, a short oblique one near each basal corner, a short transverse one on the basal lobe and these impressions frequently connected by more shallow impressions and assuming a strong transverse circular impression. Scutellum obtrigonal, truncated at the apex, strongly depressed at the base, but the rest surface convex, extremely finely but not very thickly punctulate. Elytra elongate, somewhat widened posteriorly, rounded at the apex; dorsum convex, somewhat depressed along the basal margin, slightly lobed laterally at the base, rather thickly punctate, the punctures not so strong and feebler on the posterior area than on the basal area, partly arranged in longitudinal rows, interspaces of these punctures very finely and thickly punctulate throughout together with the humeral calli. Underside and legs thickly covered with silvery or pale yellowish pubescence.

♂: Last abdominal sternite with apical margin strongly and widely emarginate and a deep fovea on the middle along the apical margin.

Length: ♀, 5.0 - 7.0 mm.

Loc. Distr. - Hori, Nôkô-Gun, Taityû-Syû 1♀, *Cotype*, 10. V. 1913, M. MAKI leg.); Musya, Nôkô-Gun, Taityû-Syû (3♀♀, *Cotype*, 18. V-15. VI. 1919, T. OKUNI);

Zyūzīro, Kagi-Gun, Tainan-syū (1♀, *Cotybe*, 26. IV. 1931, T. SHIRAKI leg.);
 Hunkiko, Kagi-Gun, Tainan-Syū (1♀, *Cotybe*, 29. IV. 1931, T. SHIRAKI leg.);
 Syōnōryō, Kagi-Gun, Tainan-Syū (1♀, *Cotybe*, 30. IV. 1931, T. SHIRAKI leg.);
 Mt. Ari-san, Tainan-Syū (2♀♀, *Cotybe*, 25. V. 1932, M. CHŪJŌ leg.).

Gen. Distr. - Formosa.

The present new species is closely allied to *Gynandrophthalma affine* (JACOBY) from Burma, but differs from it in having the head strongly rugose and pubescent-punctate between the eyes, the vertex and frons black, the pronotum not impunctate, the elytra not so regularly punctate-striate, etc.

12. *Gynandrophthalma octomaculata* CHŪJŌ var. *melania* nov.

This new variety differs from the original form by the colorations as follows: Head black, with outer margin of labrum yellowish brown and palpi piceous; pronotum with a very large black marking, which is nearly approached to the basal margin but distinctly distanced from the front margin; elytra with eight black markings strongly enlarged; underside black, with the exception of the lateral areas of prothorax; legs with coxae piceous to black.

Length: ♀, 5.0 - 6.0mm.

Loc. Distr. - Mt. Rara-san Bunzan-Gun, Taihoku-Syū (1♀, *Cotybe*, 20. III. 1933, M. CHŪJŌ leg.); Near Hori, Nōkō-Gun, Taityū-Syū (1♀, *Cotybe*, 3. V. 1941, Y. YANO leg.).

Gen. Distr. - Formosa.

Genus *Coptocephala* LACORDAIRE

Coptocephala LACORDAIRE, Monogr. Phytoph. II (Mém. Soc. Roy. Sci. Liège. V), pp. 345-346 (1848). - CHAPUIS, in LACORDAIRE, Hist. Nat. Ins.: Gen. Col., X, p. 127 (1874). - JACOBY et CLAVAREAU, in WYTSMAN, Gen. Ins., XLIX, Col. - Phytoph.: Chysom. - Clytrinae, pp. 4 & 49-50 (1906). - JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chysom. 1, pp. 174-175 (1908).

Genotype: *Coptocephala melanocephala* (OLIVIER), Ent., VI, pp. 856, Pl. V, No. 96, pl. i, f. 15 (*Clytra*) (1808) from Algeria [This species is a synonym of *Coptocephala bistrinotata* FABRICIUS, in ILLIGER, Mag. Ent., II, p. 293 (*Clytra*) (1803), from Algeria] [Designated by M. JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chysom. 1, p. 174 (1908)].

Range: Europe, Asia and Africa.

General characters: Sexes dissimilar.

Male: Body medium in size, elongate, parallel- or subparallel-sided, with dorsum convex and generally glabrous, underside and legs more or less thickly pubescent. Head large, robust, porrect, suborbicular or subquadrate, perpendicular or deflexed, rarely with vertex strongly

swollen; clypeus variable in shape and size, not distinctly delimited from frons, with front margin straight or emarginate. Mouth-parts: labrum more or less transverse; mandibles robust, prominent, arched inwardly, acuminate at the apex, unidentate or uniangulate at the upper and lower margins on the inner face, the latter more or less hollowed, rarely the left mandible very much shorter than the right one, but generally equal or subequal to each other; palpi generally slender, with 1st segment very much smaller than any one of the others and the three followings rather variable in shape and size. Eyes medium in size, subelliptical or oval, lightly convex, distinctly distanced from the front margin of prothorax. Antennae rather slender, short, with 1st segment strongly thickened, 2nd short and nearly obconical in many cases, 3rd shortest and much thinner than the 2nd, 4th nearly obconical and generally longer than the 2nd, 5th strongly expanded terminally and very much wider than the 4th but narrower than the 6th, the latter and the five followings serrate or dentate, with apex of the 11th triangularly prominent. Pronotum strongly transverse, frequently gently narrowed anteriorly, front margin straight or gently rounded and immarginated at the middle but narrowly bordered on each side; front corners assuming nearly 90° in angulation, with a setigerous-puncture on each tip; lateral margins more or less rounded or nearly straight, distinctly reflexed; basal corners widely rounded, somewhat reflexed, with a setigerous-puncture on each outer extremity; basal margin narrowly but distinctly bordered, prominent posteriorly at the middle in a short distance with a gentle curvature (this area called the "basal lobe"); dorsum transversely convex, with basal lobe more or less depressed or somewhat reflexed. Scutellum medium in size, obtriangulate, with lateral margins straight or slightly rounded, pointed at the apex. Elytra strongly elongate, parallel- or subparallel-sided, nearly equal in width to, or rather narrower than, the pronotum at the base, rounded at the apex; dorsum strongly convex, markedly developed downwardly on each side at the basal area, with humeri more or less elevated; elytral epipleurae very wide at the basal one-third of the whole length of elytra, then strongly narrowed posteriorly and disappeared near the latero-apical corner. Underside: prosteronum very short as like as a transverse keel before the acetabulae, but triangularly expanded posteriorly at the middle, finely pubescent-punctulate; prosternal process extremely narrow, linear between the acetabulae, extending at the posterior end to the apices of pro-epimera, the latter touched to each other, thence acetabulae closed behind; mesosternum finely pubescent-punctulate, strongly narrowed posteriorly between the middle-coxae; metasternum large, much wider than long, finely pubescent-punctulate; abdomen finely pubescent-punctulate, with 1st sternite largest and the medio-anterior area produced anteriorly between the hind-coxae as a leaf-like projection, 3rd sternite rather shorter than the 2nd but rather longer than the 4th and very much shorter than the 1st, 5th rather shorter than the 1st and narrowly emarginated at the middle of apical margin. Legs: fore-legs much longer than the middle-legs, the latter slightly longer than the hind-legs; fore-coxae conico-cylindrical, very strongly prominent, contiguous to each other; middle-coxae nearly conico-cylindrical or oblong-oval, somewhat prominent, contiguous at the inner faces of apical areas; hind-coxae transverse, strongly narrowed laterally, not

prominent, distinctly separated from one another; femora somewhat incrassate, but compressed laterally; tibiae gently arcuate in some cases; tarsi elongate, narrow, with 1st segment nearly equal in length to the two followings combined together, 3rd distinctly bilobed; claw-segment weakly clubate and somewhat curved; claws strongly curved, sharply pointed at the apex, distinctly angularly widened at the base.

Female: Body oblong or oblong-ovate, more or less narrowed anteriorly. Head small, inserted in prothorax up to the posterior margin of the eyes, with genae and mandibles not so developed. Pronotum not so wide as in male, distinctly narrowed anteriorly. Elytra more or less widened posteriorly, rather wider at the base than pronotum. Last abdominal sternite with a large fovea on the middle and apical margin widely emarginate. Legs not so elongate, with fore-coxae not so strongly prominent as in male.

This genus has been divided into seven subgenera by M. JACOBY and H. CLAVAREAU in 1906 and in after that the division was supported by H. CLAVAREAU in 1913. On the other hand, M. JACOBY (1908) treated some subgenera in his former work (co-operated by H. CLAVAREAU) in 1906 as distinct genera. In either cases, the treatment of those genera or subgenera may yet seen as an undecided problem. The Formosan species of this genus at present may be appertained in only the Subgenus *Physauchenia* LACORDAIRE.

Subgenus *Physauchenia* LACORDAIRE

Physauchenia LACORDAIRE, Monogr. Phytoph. II (Mém. Soc. Roy. Sci. Liège, V), p. 367 (1848). - CHAPUIS, in LACORDAIRE, Hist. Nat. Ins.: Gen. Col., X, p. 128 (1874). - JACOBY et CLAVAREAU, in WYTSMAN Gen. Ins., XLIX, Col.-Phytoph.: Chrysom.-Clytrinate, pp. 50 & 51 (1906).

Subgenotype: *Cryptocephalus pallens* FABRICIUS, Mant. Ins., I, p. 81 (1787) from E. India.

Range: India, Indo-China, S. China, Formosa and Janan (Honsyü & Kyüsü).

General characters: Sexes dissimilar.

Male: Body elongate-rectangular, subcylindrical, parallel-sided, with dorsum glabrous and smooth. Head strongly enlarged, very robust, well projects from the prothorax, perpendicular, swollen on the vertex, very finely pubescent on the lateral areas, with front margin of clypeus gently incised as in \wedge -shape, and genae well developed and somewhat expanded laterally. Mouth-parts: labrum transverse, distinctly narrowed anteriorly, rounded and very finely pubescent at the front corners, emarginate at the front margin, lightly convex on the dorsum, but the medio-anterior area somewhat depressed, with a few pubescent-punctures on each side of the middle; mandibles very robust, strongly exposed, arched inwardly, acuminate at the apex, with outer face rather sparsely or thickly pubescent-punctate, and inner face widely and deeply hollowed, upper margin of the inner face gently angulated at the middle and of the lower margin distinctly unidentate before the middle; maxillary palpi slender, with 1st segment very much smaller than any one of the three followings, 2nd longest, thickest and distinctly thickened terminally, 3rd somewhat

shorter and slenderer than the 2nd, 4th shorter than the 3rd, distinctly diminishing the thickness terminally and bluntly pointed at the apex; labial palpi slender, with 1st segment minute, 2nd and 3rd nearly equal in length to each other but the 2nd much thicker than the 3rd, the latter bluntly pointed at the apex. Eyes medium in size, subelliptical, lightly prominent, distinctly distanced from the front margin of prothorax, with inner margin distinctly but not strongly emarginated. Antennae short, not extending to the basal margin of pronotum when turned them back, 1st, 2nd and 4th segments rather sparsely pubescent, 3rd glabrous, the seven terminal segments very thickly pubescent; 1st segment strongly subtriangularly thickened, 2nd nearly obconical and much shorter and slenderer than the 1st, 3rd shortest and slightly thickened terminally but much slenderer and thinner than the 2nd, 4th much longer than the 2nd and widened terminally, 5th strongly subtriangularly widened terminally, the six followings strongly expanded infero-terminally, with a blunt-headed projection at the tip of 11th. Pronotum very strongly transverse; front margin nearly straight or slightly sinuate, with lateral areas distinctly bordered but the median area immarginated; front corners strongly deflexed, almost invisible from above, assuming nearly 90° in lateral view but the tip not sharply angulated, furnished with a setigerous-puncture on each; lateral margins gently rounded in dorsal view, narrowly bordered and reflexed; basal corners rounded, somewhat reflexed, furnished with a setigerous-puncture on each; basal margin distinctly bordered, with median area strongly produced posteriorly; dorsum transversely convex, with medio-basal area somewhat reflexed. Scutellum medium in size, obtrigonal, with lateral margins slightly rounded and apex sharply angulated. Elytra elongate-rectangular, somewhat wider at the base than pronotum, with dorsum strongly convex and apices of each elytron separately rounded. Underside: prosternum very short as like as a transverse keel before the acetabulae, but triangularly produced posteriorly at the middle, finely pubescent; prosternal process very narrow, linear, extending to the apices of pro-epimera, the latter touched to each other, thence acetabulae closed behind; mesosternum finely pubescent-punctulate, strongly narrowed posteriorly between the middle-coxae; metasternum large, much wider than long, finely pubescent-punctulate; abdomen finely pubescent-punctulate, with 1st sternite longest, 5th slightly shorter than the 1st, 3rd slightly shorter than the 2nd but slightly longer than the 1st, 4th very much shorter than the 5th, the latter with posterior margin wide and gently emarginate at the middle. Legs long, with fore-legs much longer than the middle-legs, the latter rather longer than the hind-legs; fore-coxae conico-cylindrical, strongly prominent, contiguous; middle-coxae nearly conico-cylindrical, somewhat prominent, contiguous at the apices; hind-coxae transverse, strongly narrowed laterally, distinctly separated from each other by a protuberance of the median area of 1st abdominal sternite; femora somewhat thickened, but compressed laterally; tibiae slender, gently thickened terminally, unarmed the spur, with fore-tibiae not arcuate as in the members of Subgenus *Coptocephala* s. str.; tarsi elongate, narrow, with 1st segment nearly equal in length to the two succeeding combined together, 3rd bilobed and the cleft extending to near the base, claw-segment very slender, slightly thickened terminally and somewhat curved; claws strongly curved, sharply pointed at the

apex, distinctly and angularly widened at the base.

Female: Body oblong-ovate, narrowed in front. Head small, deeply inserted in prothorax, posterior areas of eyes somewhat covered by the anterior area of prothorax, narrowed anteriorly, with front margin of clypeus deeply emarginate, genae and mandibles not so developed. Pronotum narrower in male, distinctly narrowed anteriorly. Elytra strongly widened posteriorly. Last abdominal sternite with a shallow fovea on the middle, posterior margin widely emarginate, but the median area slightly produced posteriorly in a short width. Legs short, with fore-coxae not so strongly prominent as in male.

13. *Coptocephala (Physauchenia) pallens* (FABRICIUS)

Cryptocephalus pallens FABRICIUS, Mant. Ins. I, p. 81 (1787) (China); Ent. Syst., I, 2, p. 61 (1892) (China).

Clythra pallens FABRICIUS, Suppl. Ent. Syst., p. 114 (1798) (China); Syst. Eleuth., II, p. 38 (1801) (China). - SCHOENHERR, Syn. Ins., II, p. 351 (1808) (China). - FORSBERG, Nouv. Act. Roy. Sci. Upsala, VIII, p. 261 (1821) (China).

Clythra (Physauchenia) pallens LACORDAIRE, Monogr. Phytoph. II (Mém. Soc. Roy. Sci. Liège, V), pp. 368-369 (1848) (E. India & China).

Coptocephala pallens BALY, Trans. Ent. Soc. London, p. 81 (1873) (Japan: Nagasaki). - GEMMINGER et HAROLD, Cat. Col., XI, p. 3293 (1874) (China). - LEWIS, Cat. Col. Japanese Archipel., p. 27 (1879) (Japan). - JACOBY, Proc. Zool. Soc. London, p. 753 (1885) (Japan). - SCHOENFELDT, Cat. Col. Japan, p. 144 (1887) (Japan: Nagasaki).

Physauchenia pallens LEFÈVRE, Ann. Soc. Ent. France, LXII, p. 115 (1893) (Indo-China, China & Formosa). - WEISE, Tijdschr. v. Ent., LXV, pp. 42-43 (1922) (China: Fokien). - PIC, Echange. Rev. Linn., XLIII, p. 7 (1927) (India & China).

Coptocephala (Physauchenia) pallens JACOBY et CLAVAREAU, in WYTSMAN, Gen. Ins., XLIX, p. 51 (1906) (India & China). - CLAVAREAU, in JUNK et SCHENKLING, Col. Cat., LIII, pp. 68-69 (1913) (India & China). - WINKLER, Cat. Col. Reg. Palaearcticae, II, 10, p. 1243 (1929) (China). - MIWA, Syst. Cat. Formosan Col., p. 185 (1931) (Formosa: Tauran, Koshun, Horisha, Rikiriki, Taito & Taihoku). - CHŪJŌ Arb. Morph. Taxon. Ent. Berlin-Dahlem, I, 4, p. 234 (1934) (Formosa: Tainan). - HO, in WU, Cat. Ins. Sinensium, III, p. 792 (1936) (China: Fokien & Amoy).

General colour black, lustrous; apical and inner areas of mandibles deep or dark reddish brown; three or four basal segments of antennae, prothorax, scutellum, elytra and basal half of each tibia yellowish brown, with elytra frequently more or less paler than pronotum and scutellum.

General structures as in the generic description. Head extremely minutely punctulate throughout, sparsely pubescent-punctate on each side, transversely and unevenly impressed between the eyes, with basal area of labrum minutely shagreened and anterior area emarginate-depressed. Pronotum extremely minutely punctulate throughout. Scutellum with dorsum extremely finely punctulate and longitudinally costate on the middle of apical

half. Elytra with dorsum extremely minutely punctulate throughout and, besides those, rather thickly clothed with much larger punctures, the latter (the larger punctures) with a tendency to form longitudinal rows here and there; latero-marginal areas narrowly reflexed and sparsely pubescent-punctate on the edge together with the lower edge of elytral epipleurae.

Length: ♂, 6.0 - 8.0 mm.; ♀, 5.5 - 6.5 mm.

Food-plant: *Lagerstroemia subcostata* KOHENE var. *hirtella* KOHENE (Japanese name: *Sima-Sarusuberi*).

The specific name of this species was given for the form with the immaculated elytra, but the elytra frequently variously maculated by the black or blackish brown or blue-black colours and separated by the variation in the following seven varieties:

1. Elytra immaculated *pallens pallens* (FABRICIUS)
2. Each elytron with a spot on the humerus var. *uninotata* PIC
3. Each elytron with two spots, the one on the humerus as in the 2nd case and the other one between the humerus and scutellum var. *binotata* PIC
4. Each elytron with two spots as in the 3rd case and moreover with another spot behind the middle var. *fokiensis* PIC
5. Each elytron with two spots as in the 3rd case and moreover with a transverse band behind the middle var. *formosana* PIC
6. Each elytron with four spots, the two of them on the basal area as in the 3rd case and the other two on the post-median area placed transversely var. *octonotata* nov.
7. Each elytron with two transverse bands, the one of them on the basal area and the other one just behind the middle var. *bifasciata* JACOBY

13-1. *Coptocephala* (*Physauchenia*) *pallens pallens* (FABRICIUS)

Physauchenia pallens var. ♂ LEFÈVRE, Ann. Soc. Ent. France, LXII, p. 115 (1893) (Indo-China).

Coptocephala (*Physauchenia*) *pallens* CHŪJŌ, Arb. Morph. Taxon. Ent. Berlin-Dahlem, I, 4, p. 284 (1934) (Formosa: Tainan).

Loc. Distr. - Tainan (after M. CHŪJŌ, 1934).

Gen. Distr. - E. India, Indo-China, S. China, and Formosa.

13-2. *Coptocephala* (*Physauchenia*) *pallens* (FABRICIUS) var. *uninotata* PIC

Physauchenia pallens var. *uninotata* PIC, Échange, XLII, p. 7 (1927) (China).

Coptocephala (*Physauchenia*) *pallens* ab. *uninotata* WINKLER, Cat. Col. Reg. Palaearticae, II, 10, p. 1243 (1929) (China). - CHŪJŌ, Arb. Morph. Toaxon. Ent. Berlin-Dahlem, I, 4, p. 284 (1934) (Formosa: Anping & Tainan).

Coptocephala (*Physauchenia*) *pallens* var. *uninotata* HO, in WU, Cat. Ins. Sinensium, III, p. 792 (1936) (China).

Loc. Distr. - Anping & Tainan (after M. CHŪJŌ, 1934).

Gen. Distr. - China and Formosa.

13—3. *Cotocephala (Physauchenia) pallens* (FABRICIUS) var. *binotata* PIC

Clythra pallens var. *Kymell*, in SCHOEUNHERR, Syn. Ins., II, p. 351 (1808) (China).

Physauchenia pallens var. β LEFÈVRE, Ann. Soc. Ent. France, LXII, p. 115 (1893) (Indo-China).

Physauchenia pallens var. *binotata* PIC, Échange, XLIII, p. 7 (1927) (China).

Coptocephala (Physauchenia) pallens ab. *binotata* WINKLER, Cat. Col. Reg. Palaearcticae, II, 10, p. 1243 (1929) (China). - CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem, I, 4, p. 284 (1934) (Formosa: Tainan).

Coptocephala (Physauchenia) pallens var. *binotata* HO, in WU, Cat. Ins. Sinensium, III, p. 792 (1936) (China).

Loc. Distr. - Maruyama, Taihoku-Si, Taihoku-Syû (1♂, 3. V. 1928, R. TAKAHASHI leg.); Taihoku-Si, Taihoku-Syû (1♂, 5. VI. 1933, M. CHÛJÔ leg.); Hori, Nôkô-Gun, Taityû-Syû (1♀, 14. III. 1937, M. CHÛJÔ leg.).

Tainan (after M. CHÛJÔ, 1934).

Gen. Distr. - Indo-China, China and Formosa.

13—4. *Coptocephala (Physauchenia) pallens* (FABRICIUS) var. *fokiensis* PIC

Physauchenia pallens var. β , LEFÈVRE, Ann. Soc. Ent. France, LXII, p. 113 (1893) (Indo-China,)

Physauchenia pallens var. *fokiensis* PIC, Échange, XLIII, p. 7 (1927) (China: Fokien).

Coptocephala (Physauchenia) pallens ab. *fokiensis* WINKLER, Cat. Col. Reg. Palaearcticae, II, 10, p. 1243 (1929) (China).

Coptocephala (Physauchenia) pallens var. *fokiensis* HO, in WU, Cat. Ins. Sinensium, III, p. 792 (1936) (China: Fokien).

Loc. Distr. - Garambi, Kôsyun-Gun, Takao-Syû (1♂, 21. IV. 1908, I. Nitobe leg.; 1♀, 14. VI. 1937, M. CHÛJÔ leg.); Tauran, Karen-Gun, Karenkô-Tyô (1♂, 28. IV. 1910, I. NITOBE leg.); Taihoku-Si, Taihoku-Syû (1♂, 20. VI. 1913, K. SATÔ leg.; 2♂♂, 7. V. 1933, M. CHÛJÔ leg.).

Gen. Distr. - Indo-China, China and Formosa.

13—5. *Coptocephala (Physauchenia) pallens* (FABRICIUS) var. *formosana* PIC

Coptocephala (Physauchenia) formosana PIC, Mélanges Exot. Ent., LI, p. 35, ♀ (1928) (Formosa). - MIWA, Syst. Cat. Formosan Col., p. 185 (1931) (Formosa: Tainan).

Coptocephala (Physauchenia) pallens ab. *formosana* CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem, I, 4, p. 283 (1934) (Formosa: Taihanroku, Anping, Tainan & Kankau in Koshun-Distr.).

Loc. Distr. - Kuaru, Kôsyun-Gun, Takao-Syû (1♀, 2. IV. 1908, I. NITOBE leg.; 1♂, 27. X. 1921, M. YOSHINO leg.; 1♂, 11. VI. 1937, M. CHÛJÔ leg.); Tauran, Karen-Gun, Karenkô-Tyô (1♀, 23. IV. 1910, I. NITOBE leg.); Taihoku-Si, Taihoku-Syû (1♀, 28. IV. 1910, I. NITOBE leg.; 1♂, 13. v. 1932, M. CHÛJÔ leg.; 7♂♂ & 1♀, 7. V.

1933, M. CHÛJÔ leg.; 1♂, 25. IV. 1934, M. CHÛJÔ leg.; 2♂♂ & 2♀♀, 1. V. 1937, M. CHÛJÔ leg.); Kôsyun, Kôsyun-Gun, Takao-Syû (1♂ & 2♀♀, 25. IV. 1925. V. 1918, J. SONAN leg.); Hori, Nôkô-Gun, Taityû-Syû (2♂♂ & 1♀, V-VIII. 1918, H. KAWAMURA leg.); Taitô, Taitô-Tyô (1♂, 25. II-27. III. 1919, S. INAMURA leg.); Gyoti, Niitaka-Gun, Taityû-Syû (1♀, 20. VI. 1926, J. SONAN leg.); Mt. Ari-san, Tainan-Syû (1♀, 19. V. 1927, K. FUKUDA leg.); Sizyûkei, Kôsyun-Gun, Takao-Syû (1♂ & 2♀♀, 1. VIII. 1931, R. TAKAHASHI leg.); Garanbi, Kôsyun-Gun, Takao-Syû (2♀♀, 14. VI. 1937, M. CHÛJÔ leg.).

Tainan (after Y. MIWA, 1931); Taihanroku, Anping, Tainan and Kankau in Kosun- Distr. (after M. CHÛJÔ 1934)

Gen. Distr. - Formosa.

13-6. *Coptocephala (Physauchenia) pallens* (FABRICIUS) var. *octonotata* nov.

Each elytron with four blackish brown to black or blue-black markings.

This new variety is the case that the post-median transverse band in var. *formosana* PIC has been divided in two spots.

Loc. Distr. - Taihoku-Si, Taihoku-Syû (1♂, *Holotype*, 7. V. 1933, M. CHÛJÔ leg.);

Tauran, Karen-Gun, Karenkô-Tyô (1♂, *Paratype*, 28. IV. 1910, I. NITOBE leg.).

Gen. Distr. - Formosa.

13-7. *Coptocephala (Physauchenia) pallens* (FABRICIUS) var. *bifasciata* JACOBY

Coptocephala bifasciata JACOBY, Proc. Zool. Soc. London, pp. 431-432 (1888) (China: Kiukiang).

Physauchenia pallens pallens LEFÈVRE, Ann. Soc. Ent. France, XLII, p. 115 (1893) (Indo-China).

Coptocephala (Physauchenia) pallens var. *bifasciata* JACOBY et CLAVAREAU, in WYTSMAN, Gen. Ins., XLIX, p. 51 (1906) (Kiu-Kiang.)

Coptocephala (Physauchenia) pallens ab. *bifasciata* CLAVAREAU, in JUNK et SCHENKLING, Col. Cat., LIII, p. 69 (1913) (China: Kiu-Kiang). - WINKLER, Cat. Col. Reg. Palaearcticae, II, 10, p. 1243 (1929) (China). - HO, in WU, Cat. Ins. Sinensium, III, p. 792 (1937) (China: Kiukiang).

Loc. Distr. - Hori, Nôkô-Gun, Taityû-Syû (1♀, 10. V. 1913, M. MAKI leg.); Mt. Nôkô-zan, Nôkô-Gun, Taityû-Syû (1♀, 11. V. 1919, T. OKUNI leg.); Musya, Nôkô-Gun, Taityû-Syû (1♀, 18. V-15. VI. 1919, T. OKUNI leg.); Taihoku-Si, Taihoku-Syû (3♀♀, 7. V. 1933 & 1♀, 1. V. 1937, M. CHÛJÔ leg.).

Gen. Distr. - Indo-China, China and Formosa.

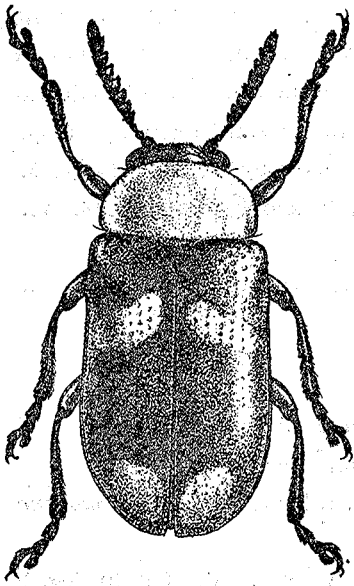


Fig. 11. *Aetheomorpha sauteri*
CHÛJÔ, sp. nov.

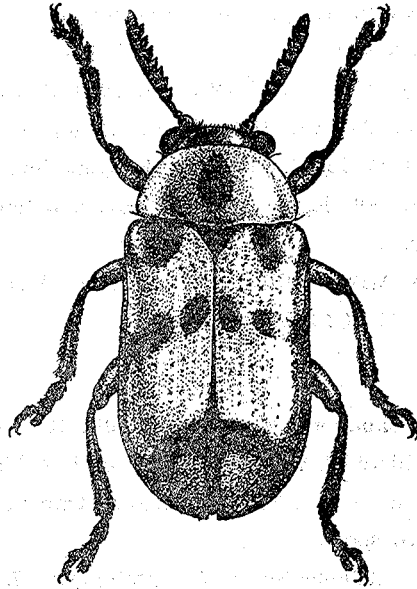


Fig. 12. *Aetheomorpha taiwana*
CHÛJÔ, sp. nov.

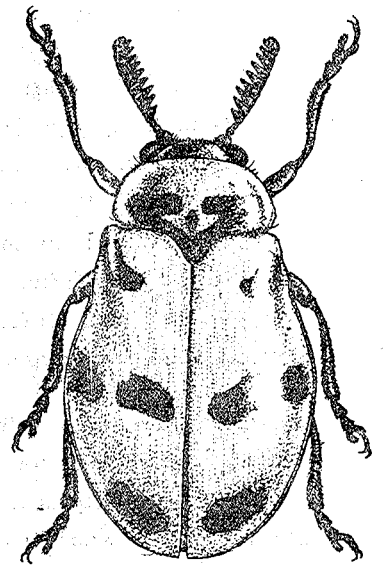


Fig. 13. *Clytrasoma palliata*
(FABRICIUS), ♂.

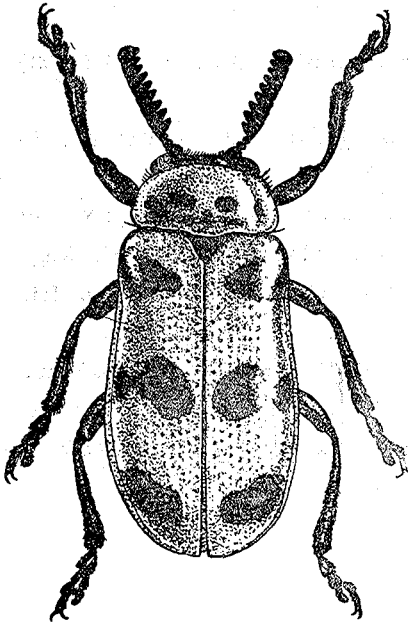


Fig. 14. *Clytrasoma palliata*
(FABRICIUS), ♀.

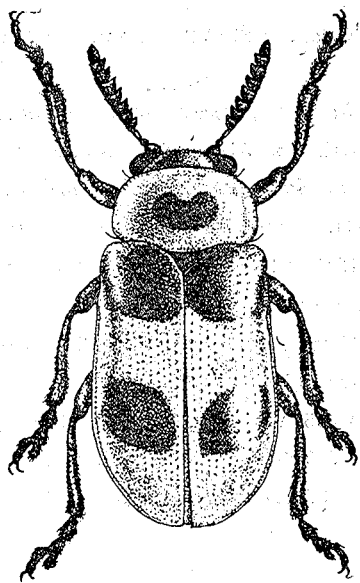


Fig. 15. *Gynandrophthalma japonica*
BALY subsp. *mandarina* WEISE

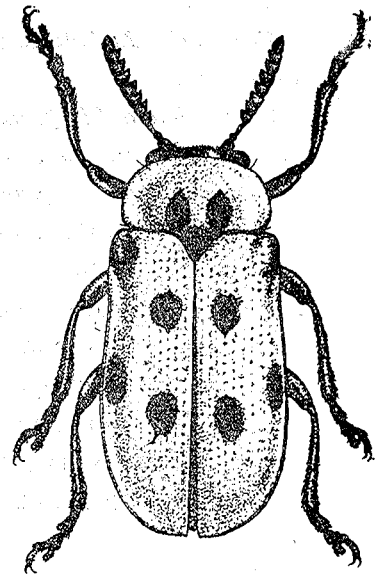


Fig. 16. *Gynandrophthalma*
octomaculata CHÛJÔ, sp. nov.

摘 要

臺灣産金花蟲科の形態分類学的研究

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臺灣産金花蟲科の形態分類学的研究の第V報として、長圓筒金花蟲亜科 (Subfamily *Clytrinae*) に関する研究結果を報告した。

此の亜科に属する金花蟲類としては、4群 (Tribes) に分轄される約40属・1200種余りのものが今迄に全世界から発見記録されて居り、夫等の中で台湾の Fauna にも関係があるのは *Clytrini* 群に属するもののみである。此の *Clytrini* 群は全世界の Fauna に多少なりとも関係を有するが、他の3群に属するものは新世界 (The New World) に分布するものばかり、就中、熱帯アメリカは属・種共に此の類の最も繁栄して居る地域である。

臺灣に産するものは、4属・11種・1亜種・7変種 (新種3・新変種2を含む) で、夫等の中の1属 *Gynancrophthalma* LACORDAIRE は全世界に関係のあるものであるが、他の3属は印度・南支・台湾・濠洲・アフリカ等に分布する種のみを含むものである。臺灣産の種・亜種・変種等は何れも南支・印度支那・印支、殊に南支に最も近縁関係を有するもので、臺灣の生物相の特性をよく示す処のもののみである。

本研究に参照した文献類公表の処置は、第I—IV報の夫れに倣うものである。