

Last updated: 23 March 2010

LYRODA

Lyroda Say, 1837:372. Type species: *Lyroda subita* Say: 1837, designated by Patton, 1880b:386.

Morphota F. Smith, 1856:293. Type species: *Morphota fasciata* F. Smith, 1856, designated by Pate, 1837c:41.

Odontolarra Cameron, 1900a:35. Type species: *Odontolarra rufiventris* Cameron, 1900 [= *Morphota formosa* F. Smith, 1859], by monotypy.

Lyrodon Howard, 1901:pl. 6, fig. 5. Lapsus for *Lyroda* Say, 1837. Junior homonym of *Lyrodon* Goldfuss, 1837.

NOTE: Most *Lyroda* have three submarginal cells, but *errans* has two.

Key: T. Li, W. Cai, and Q. Li, 2009b (Oriental species).

1. aethiopica Kohl

Lyroda aethiopica Kohl, 1894:294, ♀. Holotype or syntypes: ♀, Guinea: Conakry (TMP). – Dalla Torre, 1897:696 (in catalog of world Hymenoptera); Magretti, 1906:20 (Eritrea); Arnold, 1930:2 (in checklist of Afrotropical Sphecidae); Schouteden, 1930:90 (Zaire); Iwata, 1933a:7 (listed); R. Bohart and Menke, 1976:299 (listed); Dollfuss, 1990:122 (Central African Republic).

2. alaminos Tsuneki

Lyroda alaminos Tsuneki, 1983a:115, ♂. Holotype: ♂, Philippines: Luzon: Laguna Province: Alaminos: Hidden Valley Spring (originally K. Tsuneki coll., now USNM). – Nuhn and Menke, 1994:26 (holotype not transferred to USNM, possibly returned to H. Kurokawa, the collector); Menke, 1995:14 (type still in K. Tsuneki collection); Tano, 1995:45 (holotype in K. Tsuneki collection); T. Li, W. Cai, and Q. Li, 2009:145 (in key to Oriental *Lyroda*).

3. antillana Genaro and Portuondo

Lyroda sp.: Alayo Dalmau, 1973:176 and 1976:21, corrected to *Lyroda antillana* by Genaro and Portuondo, 2001:45.

Lyroda antillana Genaro and Portuondo, 2001:45, ♀. Holotype: ♀, Cuba: Guantánamo: El Imbano, Cuchillas de Baracoa (MNHN Habana). Paratypes: Dominican Republic (FSCA). – Portuondo and Fernández, 2004:135 (Cuba: Sierra Maestra and Nipe-Sagua-Baracoa mountains); Amarante, 2005a:5 (in addendum to his 2002 catalog of Neotropical Crabronidae and Sphecidae); Genaro, 2006:54 (in checklist of Cuban Sphecidae and Crabronidae; also: Hispaniola).

4. argenteofacialis (Cameron)

Astata argenteofacialis Cameron, 1889c:151, "♀" = ♂. Lectotype: ♂, India: West Bengal: Barrackpore 20 km N Calcutta (OXUM), designated by Pulawski, 1975a:319. – Dalla Torre, 1897:651 (in catalog of world Sphecidae); Nurse, 1909:510 (omitted by Bingham, 1897, actually transferred to *Lyroda*); Ramakrishna Aiyar, 1916:550 (in catalog of Indian aculeates described after Bingham, 1897); Maidl and Klima, 1939:19 (in catalog of world Astatinae and Bembicinae). – **As *Lyroda argenteofacialis***: Bingham, 1897:... (new combination, as questionable synonym of *Lyroda formosa*); Tsuneki, 1983a:73 (doubtful species); T. Li, W. Cai, and Q. Li, 2009:145 (in key to Oriental *Lyroda*).

5. binghami Tsuneki

Lyroda binghami Tsuneki, 1983a:73, ♀, ♂. Holotype: ♀, India: Tenasserim: Shwegyin (BMNH). – T. Li, W. Cai, and Q. Li, 2009:144, 145 (in key to Oriental *Lyroda*).

6. *concinna* (F. Smith)

Morphota concinna F. Smith, 1856:294, ♀. Syntypes: Brazil: Pará: Tapajós River (BMNH). – **As *Lyroda concinna***: Kohl, 1885a:267 (new combination, in checklist of world *Lyroda*); Dalla Torre, 1897:696 (in catalog of world Hymenoptera); Iwata, 1933a:7 (listed); R. Bohart and Menke, 1976:299 (listed); Nascimento and Overal, 1980:7 (Brazil, Peru); Amarante, 2002:41 (in catalog of Neotropical Crabronidae).

7. *errans* (R. Turner)

Gastrosericus errans Turner, 1936:544, ♂. Syntypes: Western Australia: Yanchep (BMNH). – Bohart and Menke, 1976:256 (belongs to a new genus in Miscophini). – **As *Lyroda errans***: Menke, 1977:672 (new combination); Cardale, 1985:244 (in catalog of Australian Sphecidae).

8. *fasciata* (F. Smith)

Morphota fasciata F. Smith, 1856:294, ♀. Holotype or syntypes: ♀, Brazil: Pará: Santarem (BMNH). – **As *Lyroda fasciata***: Kohl, 1885a:267 (new combination, in checklist of world *Lyroda*); Dalla Torre, 1897:696 (in catalog of world Hymenoptera); Iwata, 1933a:7 (listed); R. Bohart and Menke, 1976:299 (listed); Nascimento and Overal, 1980:7 (Brazil); Amarante, 2002:41 (in catalog of Neotropical Crabronidae).

9. *formosa* (F. Smith)

Morphota formosa F. Smith, 1858b:17, ♀. Holotype or syntypes: ♀, Indonesia: Sulawesi: no specific locality (BMNH). – **As *Lyroda formosa***: Kohl, 1885a:267 (new combination, in checklist of world *Lyroda*); Bingham, 1897:209 (redescription; Burma: Tenasserim, Sikkim); Dalla Torre, 1897:696 (in catalog of world Hymenoptera, as new combination by Kohl); Bingham, 1908:355 (India: Lucknow, Calcutta); Williams, 1928a:93 (Philippines, revision); Iwata, 1933a:7 (listed); F. Williams, 1936b:130 (Solomon Islands); Iwata, 1964b:370 (nesting habits in Thailand), 1965:107 (number of oocytes); Baltazar, 1966:326 (in catalog of Hymenoptera of Philippines); R. Bohart and Menke, 1976:299 (listed); Tsuneki, 1976b:74 (Philippines); Guichard, 1980:228 (Oman); Tsuneki, 1983a:77 (Philippines), 1983c:41 (New Guinea: St. Joseph Island); Pu, 1986:8 (China); Ohl and Linde, 2003:151 (number of ovarioles); T. Li, W. Cai, and Q. Li, 2009:143, 145 (in key to Oriental *Lyroda*).

Odontolarra rufiventris Cameron, 1900a:36, ♀. Holotype or syntypes: ♀, India: Assam: Khasia (OUM). Synonymized with *Lyroda formosa* by Pulawski, 1975a:319. – Ramakrishna Aiyar, 1916:553 (in catalog of Indian aculeates described after Bingham, 1897). – **As *Lyroda rufiventris***: Turner, 1914:256 (new combination); Richards, 1935a:165 (new combination confirmed).

10. *fukuensis* Tsuneki

Lyroda fukuensis Tsuneki, 1983e:61, ♂. Holotype: ♂, Japan: Fukui Prefecture: Hossaka (originally K. Tsuneki coll., now Hyogo Mus.). – Tano, 1994a:5 (holotype in K. Tsuneki collection); Hashimoto and Nakanishi, 1997:17 (holotype transferred to Hyogo Mus.).

11. *harpactoides* (F. Smith)

Morphota harpactoides F. Smith, 1856:294, ♀ (as *Harpactoides*, incorrect original capitalization). Holotype or syntypes: ♀, Brazil: no specific locality (BMNH). – **As *Lyroda harpactoides***: Kohl, 1885a:267 (new combination, in checklist of world *Lyroda*); Dalla Torre, 1897:696 (in catalog of world Hymenoptera); Iwata, 1933a:7 (listed); R. Bohart and Menke, 1976:299 (listed); Amarante, 2002:41 (in catalog of Neotropical Crabronidae).

12. *laguna* Tsuneki

Lyroda laguna Tsuneki, 1983a:79, ♀, ♂. Holotype: ♀, Philippines: Luzon: Laguna Province: Pagsanjan (originally K. Tsuneki coll., now USNM). – Nuhn and Menke, 1994:27 (holotype not transferred to USNM, possibly returned to T. Murota, the collector); Menke, 1995:14 (type still in K. Tsuneki collection); Tano, 1995:45 (holotype in K. Tsuneki collection); T. Li, W. Cai, and Q. Li, 2009:143, 145 (in key to Oriental *Lyroda*).

Lyroda pagsanjan Tsuneki, 1983a:113, ♂. Holotype: ♂, Philippines: Luzon: Laguna Province: Pagsanjan (K. Tsuneki coll.). Synonymized with *Lyroda laguna* by Tsuneki, 1983a:115. – Nuhn and Menke, 1994:27 (holotype not transferred to USNM, possibly returned to H. Kurokawa, the collector); Menke, 1995:14 (type still in K. Tsuneki collection); Tano, 1995:45 (holotype in K. Tsuneki collection).

13. *madecassa* Arnold

Lyroda madecassa Arnold, 1945:91, ♀, ♂. Syntypes: Madagascar: Behara, Bekily (MNHN). – Leclercq, 1960a:97 (Madagascar), 1961d:108 (Madagascar); R. Bohart and Menke, 1976:299 (listed); Leclercq, 1990b:117 (Madagascar); Pulawski, 2003b:797 (in checklist of Malagasy Sphecidae).

14. *michaelseni* W. Schulz

Lyroda michaelseni W. Schulz, 1908:479, ♀, ♂ (as *Michaelseni*, incorrect original capitalization). Syntypes: Australia: Western Australia: Denham (depository?). – Iwata, 1933a:7 (listed); R. Bohart and Menke, 1976:299 (listed); Cardale, 1985:244 (in catalog of Australian Sphecidae).

ssp. tasmanica R. Turner

Lyroda michaelseni subsp. *tasmanica* R. Turner, 1914a:621, ♀. Syntypes: Australia: Tasmania: Eaglehawk Neck (BMNH). – As *Lyroda michaelseni tasmanica*: R. Turner, 1915b:557 (new status, Tasmania); R. Bohart and Menke, 1976:299 (listed); Cardale, 1985:244 (in catalog of Australian Sphecidae).

15. *minima* R. Turner

Lyroda minima R. Turner, 1936:545, ♀, ♂. Syntypes: Australia: Western Australia: Yanchep 32 mi N Perth (BMNH). – Bohart and Menke, 1976:299 (listed); Cardale, 1985:245 (in catalog of Australian Sphecidae).

16. *nigra* (Cameron)

Odontolarra nigra Cameron, 1904a:12, ♀. Holotype or syntypes: ♀, India: Sikkim: no specific locality (BMNH). – Ramakrishna Aiyar, 1916:553 (in catalog of Indian aculeates described after Bingham, 1897). – As *Lyroda nigra*: Bohart and Menke, 1976:299 (new combination, listed); Tsuneki, 1983a:73 (probably good species), 1983e:57 (study of type, redescription); Yamane, Ikudome, and Terayama, 1999:519 (in Identification Guide to Crabronidae of Nansei = Ryukyu Islands, Japan); Nemkov, 2008b:19 (in catalog of Crabronidae of Asiatic Russia); T. Li, W. Cai, and Q. Li, 2009:144 (in key to Oriental *Lyroda*, as *nigra nigra*).

ssp. japonica Iwata

Lyroda japonica Iwata, 1933a:8, ♀, ♂. Holotype: ♀, Japan: Honshu: Settsu: Ikeda (Entomol. Lab. Kyoto Imper. Univ.). – Iwata, 1933a:7 (listed), 1963:116 (prey, stinging habits); Tano, 1964:38 (Japan: Kyushu: Yakushima Island); Tsuneki, 1964l:61 (in key); Nishino, 1968:25 (Japan); Tano, 1968:36 (Japan); Haneda, 1969:68 (Japan: Yamanashi Prefecture); Itami, 1969:48 (Japan: Niigata Prefecture); Tsuneki and Iida, 1969:14 (nesting habits); Tsuneki, 1971m:32 (China: Peking: Tiendang; taxonomy); Yamada, 1971:35 (Japan: Aichi Prefecture); Nambu, 1973d:150 (Japan: Saitama Prefecture); Tsuneki, 1974a:363 (Korea); Nambu, 1975b:61 (Japan: Saitama Prefecture); R. Bohart and Menke, 1976:299 (listed); Kazenas, 1980e:90 (Russia: Primorskiy Krai); Tsuneki, 1982b:15 (Central Korea), 1982g:60 (known from the Ryukyu archipelago), 1983a:72 (valid species, different from *venusta*); Nemkov, 1990c:81 (Russia: Maritime Province); Tsuneki, 1991:200 (Korea); Nemkov in Nemkov, Kazenas, Budrys, et Antropov, 1995:413 (in key to Sphecidae of Russian Far East); Nemkov, 2009b:81 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia). – As *Lyroda nigra japonica*: Tsuneki, 1983e:58 (new status), 59 (redescription); Kurokawa, 2003:61 (Japan: city of Fukui: Egamichou); Haneda, Inoue, Nozaka, Tano, Kurokawa, and H. and T. Murota, 2005:65 (Japan: Fukui Prefecture: Mount Monju); Haneda, Nozaka, Tano, Kurokawa and Murota, 2006:22 (Japan: Toyama Prefecture); Okusa and Tajima, 2008:74 (Japan: central Honshu: Aichi Prefecture).

As *Lyroda venusta*: Yasumatsu, 1942c:112 (China: Beijing), corrected to *Lyroda japonica* by Tsuneki, 1971m:32.

ssp. *takasago* Tsuneki

Lyroda japonica takasago Tsuneki, 1967b:58, ♀, ♂. Holotype: ♀, Taiwan: Ilan Prefecture: Tsukeng (originally K. Tsuneki coll., now USNM). – Tsuneki and Iida, 1969:13 (nesting habits); Haneda, 1971b:30 (Taiwan); Tsuneki, 1971h:19 (Taiwan); Haneda, 1972a:4 (Taiwan); Murota, 1973b:118 (Taiwan); Tsuneki, 1977j:270 (Taiwan); Nuhn and Menke, 1994:26 (holotype transferred to USNM); Porter, Stange, and Wang, 1999:9 (in checklist of Sphecidae of Taiwan). – **As *Lyroda nigra takasago***: Tsuneki, 1983e:58 (new subspecific combination), 60 (redescription); Hua, 2006:281 (in list of Chinese insects, geographic distribution); T. Li, W. Cai, and Q. Li, 2009:144, 145 (in key to Oriental *Lyroda*).

17. *philippinica* Tsuneki

Lyroda philippinica Tsuneki, 1983a:112, ♂. Holotype: ♂, Philippines: Leyte: Palo (originally K. Tsuneki coll., now?). – Nuhn and Menke, 1994:27 (holotype not transferred to USNM, possibly returned to T. Tano, the collector); Menke, 1995:14 (type still in K. Tsuneki collection); Tano, 1995:45 (holotype in K. Tsuneki collection); T. Li, W. Cai, and Q. Li, 2009:145 (in key to Oriental *Lyroda*).

18. *queenslandensis* R. Turner

Lyroda queenslandensis R. Turner, 1916e:285, ♂. Holotype or syntypes: ♂, Australia: Queensland: Bundaberg (BMNH). – Iwata, 1933a:7 (listed); R. Bohart and Menke, 1976:299 (listed); Cardale, 1985:245 (in catalog of Australian Sphecidae).

19. *salai* Giner Marí

Lyroda salai Giner Marí, 1945c:854, ♀. Holotype: ♀, India: Maharashtra: Khandala near Bombay (IEE). – Tsuneki, 1983a:73 (good species); T. Li, W. Cai, and Q. Li, 2009:144 (in key to Oriental *Lyroda*), 146 (first record from China: Yunnan: Badao village in Dehong Prefecture).

20. *subita* Say

Lyroda subita Say, 1837:372, ♀. Holotype or syntypes: USA: Indiana: no specific locality (lost). – Le Conte, 1859b:755 (original description copied); Provancher, 1882:49 and 1883:632 (in revision of Canadian Hymenoptera); Kohl, 1885a:267 (in checklist of world *Lyroda*); Cresson, 1887:277 (in catalog of North American Hymenoptera); W. Fox, 1892c:138 (does not belong to *Didineis*); Patton, 1892:... (...), 1893:202 (*Nemobius* prey is killed and not paralyzed); W. Fox, 1894a:533 (in revision of North American Larinae); Dalla Torre, 1897:696 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Crabronidae); Harrington, 1902:222 (Canada: Ontario: Ottawa); Adlerz, 1904:137 (known prey: gryllids); H. Smith, 1908b:374 (in revision of Nebraskan Sphecidae); F. Williams, 1914a:174 (in revision of Larinae of Kansas), 207 (nesting habits); Rohwer, 1916b:683 (in catalog of Hymenoptera of Connecticut); Gahan and Rohwer, 1918:30 (Provancher's specimens not located); Mickel, 1918b:408 (in catalog of Nebraskan Sphecidae); J.Ch. Bradley, 1928:1010 (in catalog of New York Crabronidae); Hendrickson, 1930:159 (Iowa); Iwata, 1933a:7 (listed); Krombein, 1936:98 (New York: Buffalo; floral records); Brimley, 1938:443 (North Carolina: Fayetteville, Raleigh); Krombein, 1950a:267 (North Carolina: Dare County), 1951a:143 (Virginia: Dunn Loring; visiting tulip-tree honeydew); Krombein *in* Muesebeck et al., 1951:941 (in catalog of North American Hymenoptera); Krombein, 1952a:93 (USA: Virginia: Westmoreland State Park); K. Cooper, 1953:33 (Massachusetts: Penikese Island); Krombein, 1953a:328 (North Carolina); Gittins, 1960:135 (Idaho); Kurczewski and Kurczewski, 1963:146 (Pennsylvania: Presque Isle State Park); Evans, 1964b:281 (larva), 282 (nesting habits); Krombein, 1963f:273 (Maryland: Plummers Island near Washington, D.C.); G. Bohart, Nye, and Hawthorn, 1970:48 (Utah: Logan, onion pollinator); Kurczewski and Kurczewski, 1971:132 (prey: *Nemobius carlinus* Scudder, a gryllid); Evans, 1975a:265 (unsuccessful colonizer of a new habitat); R. Bohart and Menke, 1976:299 (listed); L. Davis, 1978:217 (North Carolina: Kill Devil Hills, data from Krombein, 1953a); Krombein, 1979b:1633 (in catalog of North American Hymenoptera); Finnermore, 1982:109 (in Sphecid Fauna of Southern Quebec); Kurczewski and

Peckham, 1982:149-155 (nesting habits); Kurczewski and Spofford, 1985:113 (unusual prey: Tridactylidae); Kurczewski and Acciavatti, 1990:60 (New York: Cayuga County); Kurczewski, 1991b:203 (burrow construction from ground surface); Spofford and Kurczewski, 1992:997 (species of miltogrammine parasites listed), 1002 (counter-cleptoparasitic habits: freeze-stop and face-off, diversionary flight), 1005 (post-larvipositional counter-cleptoparasitic habits: abandon prey); Ahlstrom, 1995:109 (in checklist of insects of North Carolina); Kurczewski, 1998d:250 (pine barrens in upstate New York); Sugar *et al.*, 1998:15 (Canada: southern Ontario); Buck, 2004:25 (in checklist of Crabronidae of Ontario, Canada); Giles and Ascher, 2006:231 (New York: Black Rock Forest Preserve). – **As *Tachytes subitus***: F. Smith, 1856:307 (new combination, in catalog of Hymenoptera in British Museum). – **As *Lyrops subita***: Cresson, 1862:238 (new combination, in catalog of North American Hymenoptera). – **As *Larrada subita***: Cresson, 1873:213 (new combination, Texas).

Larrada arcuata F. Smith, 1856:293, ♀. Holotype or syntypes: ♀, Canada: no specific locality (BMNH). Synonymized with *Lyroda subita* by Krombein *in* Muesebeck *et al.*, 1951:941. – Cresson, 1862:237 (in catalog of North American Hymenoptera); W. Fox, 1894a:483 (unidentified species, original description copied). – **As *Larra arcuata***: Kohl, 1885a:241 (new combination, in checklist of world *Larra*); Cresson, 1887:277 (in catalog of North American Hymenoptera); Dalla Torre, 1897:663 (in catalog of world Sphecidae). – **As *Tachysphex arcuatus***: Harrington, 1902:221 (new combination, Canada: Ontario: Ottawa).

Lyroda cockerelli Rohwer, 1909f:369, ♀. Holotype: ♀, USA: Colorado: Boulder: University Campus (...). Synonymized with *Lyroda subita* by Krombein *in* Muesebeck *et al.*, 1951:941. – Iwata, 1933a:7 (listed).

As *Psen niger* (part): Faull, 1913:384 (Canada: Toronto region), corrected to *Lyroda subita* by Buck, 2004:77.

21. *tridens* (Taschenberg)

Morphota tridens Taschenberg, 1870:8, ♀. Holotype or syntypes: ♀, Brazil: Lagoa Santa (Halle). – **As *Lyroda tridens***: Kohl, 1885a:267 (new combination, in checklist of world *Lyroda*); Dalla Torre, 1897:696 (in catalog of world Hymenoptera); Iwata, 1933a:7 (listed); R. Bohart and Menke, 1976:299 (listed); Amarante, 2002:41 (in catalog of Neotropical Crabronidae).

22. *tridentata* T. Li, W. Cai, and Q. Li

Lyroda tridentata T. Li, W. Cai, and Q. Li, 2009:145, ♀, ♂. Holotype: ♀, China: Yunnan: Yunyan Mountain in Dehong Prefecture (YUNNAN AGRICULTURAL UNIVERSITY, KUNMING). – T. Li, W. Cai, and Q. Li, 2009:143, 145 (in key to Oriental *Lyroda*).

23. *triloba* Say

Lyroda triloba Say, 1837:372, sex not indicated. Holotype or syntypes: USA: no specific locality (lost). – Le Conte, 1859b:755 (original description copied); Provancher, 1882:49 (revision), 1883:631 (in revision of Canadian Hymenoptera); Kohl, 1885a:267 (in checklist of world *Lyroda*); Cresson, 1887:277 (in catalog of North American Hymenoptera); Ashmead, 1890:33 (in checklist of Hymenoptera of Colorado); W. Fox, 1894a:534 (in revision of North American Larrinae); Dalla Torre, 1897:696 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Crabronidae); Bridwell, 1899:209 (Kansas: no specific locality); H. Smith, 1908b:374 (in revision of Nebraskan Sphecidae); F. Williams, 1914a:174 (in revision of Larrinae of Kansas); Rohwer, 1916b:683 (in catalog of Hymenoptera of Connecticut); Mickel, 1918b:408 (in catalog of Nebraskan Sphecidae); Iwata, 1933a:7 (listed); Krombein *in* Muesebeck *et al.*, 1951:941 (in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:299 (listed); Krombein, 1979b:1633 (in catalog of North American Hymenoptera). – **As *Tachytes trilobus***: F. Smith, 1856:307 (new combination, in catalog of Hymenoptera in British Museum). – **As *Lyrops triloba***: Cresson, 1862:238 (new combination, in catalog of North American Hymenoptera). – **As *Larrada triloba***: Cresson, 1873:213 (new combination, new combination, Texas).

Lyrops caliptera Say, 1837:... Nomen nudum or lapsus for *Lyrops triloba*. – Kohl, 1885a:267 (in checklist of world *Lyroda*).

24. *venusta* Bingham

Lyroda venusta Bingham, 1897:210, "♀", ♂ (actually ♂). Lectotype: ♂, Burma: Tenasserim: no specific locality (BMNH), designated by Tsuneki, 1983a:70. – Bingham, 1905:44 (Malaysia: Biserat); nec Williams, 1928a:94 (= *Lyroda williamsi*); Iwata, 1933a:7 (listed); von Schulthess, 1935:305 (Indonesia: Java: Buitenzorg, now Bogor); nec Yasumatsu, 1942c:112 (= *Lyroda japonica* Iwata); Bibby, 1947:79 (Philippines: Samar group of Islands: Calicoan Island); Baltazar, 1966:327 (in catalog of Hymenoptera of Philippines); Tsuneki, 1983a:70 (re-description); Yamane, Ikudome, and Terayama, 1999:519 (in Identification Guide to Crabronidae of Nansei = Ryukyu Islands, Japan); T. Li, W. Cai, and Q. Li, 2009:144, 145 (in key to Oriental *Lyroda*, as *venusta venusta*).

ssp. taiwana Tsuneki

Lyroda taiwana Tsuneki, 1967b:56, ♀, ♂. Holotype: ♀, Taiwan: Pingtung Prefecture: Hengchun (originally K. Tsuneki coll., now USNM). – Haneda, 1971b:30 (Taiwan); Tsuneki, 1971h:19 (Taiwan); Haneda, 1972a:4 (Taiwan); Murota, 1973b:118 (Taiwan); R. Bohart and Menke, 1976:299 (listed); Tsuneki, 1977j:270 (Taiwan); Nuhn and Menke, 1994:26 (holotype transferred to USNM); Wu and Zhou, 1996a:95 (in revision in Economic Insect Fauna of China); Li and He, 2004:1102 (in hymenopterous fauna of Zhejiang Province, China). – **As *Lyroda venusta taiwana***: Tsuneki, 1983a:72 (new status); Hua, 2006:281 (in list of Chinese insects, geographic distribution); T. Li, W. Cai, and Q. Li, 2009:144, 145 (in key to Oriental *Lyroda*).

25. *williamsi* Tsuneki

As *Lyroda venusta*: Williams, 1928a:94 (Philippines), corrected to *Lyroda williamsi* by Tsuneki, 1983a:72.

Lyroda williamsi Tsuneki, 1983a:72, ♀, ♂. Holotype: ♀, Philippines: specimen illustrated by Williams, 1928a:fig. 49. – Porter, Stange, and Wang, 1999:9 (in checklist of Sphecidae of Taiwan); T. Li, W. Cai, and Q. Li, 2009:145 (in key to Oriental *Lyroda*).

sp.

Alayo Dalmau, 1973:176 (in catalog of Cuban Hymenoptera); Evans and Hook, 1984:16 (sp. near *minima* Turner preys upon *Tridactylus mutus*, a tridactylid, in se. Queensland); McCorquodale and Thomson, 1989:95 (prey: nymphal gryllid, an Eneopterinae); Amarante, 1993:19 (ne. Brazil); Cambra, 1993:16 (Peru: Pakitza, 11°57'S, 71°17'W); Naumann, 1993:184 (Australia: Queensland: Heathlands area in Cape York); Genaro, 1995b:12 (Dominican Republic).