

## EROTYLID BEETLES FROM SOUTH-CHINA, HAINAN, TAIWAN AND THE RYUKYUS Studies on the Erotylid Beetles (20)

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*Abstract*: Among 23 species treated, 4 species are new to science. Zoogeographic or taxonomic notes are included for several species.

This paper is a result of research on the erotylid-beetles collected at various localities in South-China, Hainan, Taiwan (Formosa) and the Ryukyu Is. Most specimens belong to the collection of the B. P. Bishop Museum, Honolulu, Hawaii.

### Family EROTYLIDAE

#### Subfamily DACNINAE

##### 1. *Episcapha* (*Episcapha*) *septentrionis* Heller

*Episcapha* (*Episcapha*) *quadrimacula septentrionis* Heller, 1918 (1920), Archiv Naturg. **84** A (8): 68, pl. 1, fig. 28 (Taiwan : Fuhosho, Kosempo & Kagi; S China : Hainan).

*Episcapha septentrionis*: Arrow, 1925, Fauna Brit. India, Coleoptera-Clavicornia (Erotylidae, Languriidae, and Endomychidae): 39 (key), 41 (India: U. P., Assam & Sikkim; Nicobar Is.; Andaman Is.; Indo-China; Taiwan; Hainan [teste Heller]); 1928, Faune Colon. Franç. 2: 331 (Laos, Tenasserim, Andaman Is., Sikkim, etc.). - Chûjô, 1936, Fauna Nipponica, ser. 10, **8** (5): 135 (key), 141, 175 (list), fig. 80 (Taiwan: Taito, Hori & Banshoryo).

*Episcapha quadrimacula* (Wiedemann) var. *septentrionis*: Deelder, 1942, Zool. Meded. **24** (1-2): 108 (S China : Hainan).

*Episcapha septentrionis septentrionis*: Araki, 1949, Trans. Kansai Ent. Soc. **14** (2): 5 (Taiwan); 1950, Takarazuka Konchûkan Hö (65): 6, fig. 5 (misinterpreted as *Episcapha septentrionis hainanensis* Araki) (Formosa).

*Episcapha* (*Episcapha*) *septentrionis septentrionis*: Chûjô, 1964, Ann. Hist. Nat. Mus. Nation. Hung. **56**: 417 (Taiwan: Chip Chip, Kosempo, Taihorinsho & Fuhosho); 1964, Folia Ent. Hung., n. s., **17** (14): 221 (Formosa).

*Episcapha quadrimacula*: Deelder, 1942, Zool. Meded. **24** (1-2): 108 (pars) (Taiwan : Fuhosho).

*Episcapha septentrionis hainanensis* Araki, 1949, Trans. Kansai Ent. Soc. **14** (2): 5, fig. 2 (S Hainan I.: San-a); 1950, Takarazuka Konchûkan Hö (65): 6, fig. 4 (misinterpreted as *Episcapha septentrionis septentrionis* Heller) (Hainan I.). **New Synonymy.**

SPECIMENS EXAMINED : 1, Loh-tuen-tung, Yoi-hsien Distr., Hainan I., 22-24.II.1935, F. K.

To ; 1, Tei-tsinglam-ts'uen, back of Lai-mo-ling (mountain range), Ting-an Distr., Hainan I., 17-18.VI. 1935, To ; 1, Nam-lin-tin, Lam-wan-tung (Loi territory), Kiung-shan Distr., Hainan I., 7-9.VIII.1935, To ; 1, Nam-pots'uen (Loi territory), Ch'eng-mai Distr., Hainan I., 1-3.IX.1935, To ; 1, Rokki, Taiwan, 17.V.1934, J. L. Gressitt.

**DISTRIBUTION :** Taiwan ; Hainan I. ; Laos ; Tenasserim ; Nicobar Is. ; Andaman Is. ; India (Sikkim, Assam & United Provinces).

**Notes :** Araki (1949 & 1950) classified this species in 2 subspecies – *septentrionis* Heller (Taiwan) and *hainanensis* Araki (Hainan) – and, at the same time (1950), speculated that *E. septentrionis* Heller recorded from India, Burma, Indo-China, Andaman Is. and Nicobar Is. by Arrow (1925) may perhaps belong to the other species or another subspecies of *E. septentrionis*.

In my present investigation of the 5 examples of this species from Hainan I., 1 fits Araki's description of his subsp. *hainanensis*, another with his subsp. *septentrionis*, and the remaining 3 as intermediate forms of the two. However, after examining many Taiwan species with similar variations, it seems that *E. septentrionis* Heller is a natural species with rather distinct character variations and also with rather wide distribution range in the Oriental Region.

It seems that the subspecies names in Fig. 4 and 5 of Araki's paper (1950) are reversed.

## 2. *Episcapha (Psiloscapha) mausonica* Heller

*Episcapha (Psiloscapha) mausonica* Heller, 1920, Archiv Naturg. **84** A (8) : 80, pl. 2, fig. 51 (Tonkin: Mau-Son). — Arrow, 1928, Faune Colon. Franç. **2** : 331 (Tonkin: Mauson).

**SPECIMENS EXAMINED :** 2, Lung-tau Shan, 900 m, Kwangtung Prov., S China, 8.VI.1947, J. L. Gressitt & T. S. Lam.

**DISTRIBUTION :** N. Viet-Nam ; S China (mountain distr.).

**Note :** This species is newly added to the fauna of the southern district (mountain region) of S China.

## 3. *Episcapha (Psiloscapha) morawitzi magna* Araki

*Episcapha morawitzi magna* Araki, 1949, Trans. Kansai Ent. Soc. **14** (2) : 4, fig. 1 (Taiwan: Kayō-Urai in Taichū Pref.); 1950, Takarazuka Konchūkan Hō (65) : 3, fig. 3 (Taiwan).—Chūjō, 1964, Folia Ent. Hung. **17** (14) : 222 (Taiwan).

*Episcapha taishoensis* Lewis, 1929, Miwa, Trans. Nat. Hist. Soc. Formosa **19** (101) : 125, 128 (list & distribution table) (Taiwan ; Horisha, Musha & Funkiko); 1931, Syst. Cat. Formosan Col. : 72 (Taiwan : Horisha, Musha & Funkiko).

**SPECIMENS EXAMINED :** 1, Bukai, Taiwan, 15.VI.1934, Gressitt ; 2, Puli (Holi), Taiwan, VII. 1953 ; 2, same loc., VII.1944.

**DISTRIBUTION :** Taiwan.

**Note :** A detailed revisional work may be needed for *Episcapha taishoensis* Lewis from

Laos and Tonkin recorded by Arrow (1922, *Trans. Ent. Soc. Lond.* (3-4) : 291 ; 1928, *Faune Colon. Franç.* 2 : 331).

#### 4. *Episcapha (Psiloscapha) takasagona* Chûjô

*Episcapha takasagona* Chûjô, 1941, *Mushi* 13 (2) : 84, fig. 1 (Taiwan : Horisya, Mt Ari-san, Mt Tai-hei-zan & Kahodai at Mt Hassen-zan). - Araki, 1941, *Konchû-Kai* 9 (89) : 441 (notes on sexual characters); 1949, *Trans. Kansai Ent. Soc.* 14 (2) : 5 (Taiwan); 1950, *Takarazuka Konchûkan Hô* (65) : 4 (Taiwan).

*Episcapha (Psiloscapha) takasagona* Chûjô, 1964, *Folia Ent. Hung.* 17 (14) : 227 (Taiwan).

SPECIMENS EXAMINED : 3, Mt Arisan, 2000 m, Taiwan, 25.V.1934, Gressitt ; 1, Puli (Hori), 500 m, Taiwan, 1953.

DISTRIBUTION : Taiwan.

#### 5. *Episcaphula hainanensis* Chûjô, new species

Body elongate, moderately convex on dorsum. General color black, lustrous; each elytron with a subbasal and a postmedian reddish mark as follows: subbasal mark broadly transverse, placed behind humerus, closely approaching lateral border of elytron but a little distant from sutural border, a little and subangularly produced forward each side of its front border and strongly produced anteriorly at middle of front border, but not reaching basal border of elytron at tip of this projection, and quadridentate at posterior border; postmedian mark very broad, extending to near lateral border of elytron at one side and nearly approaching sutural border at another side, broader at inner part than at outer part, somewhat produced at 2 parts of its anterior border (one of these projections situated on 3rd interstice of file of distinct punctures and other one on 5th interstice) and also produced posteriorly at posterior border (this projection being situated on 4th interstice); claw-segment of each tarsus, together with its claws, red-brown.

Head slightly convex, distinctly punctured (these punctures more sparsely placed on posterior area than on anterior area), with a distinct depression on each side of clypeus which is slightly notched at its front border. Antennae slender, short, extending only a little behind middle of pronotum; segment 3 much longer than 4 but a little shorter than 4 and 5 combined; 3 terminal segments thickened, strongly expanded and forming a rather compactly articulated club. Pronotum about  $2\times$  as broad as long, gently narrowed anteriorly; front border nearly straight, front angles strongly produced forwardly; lateral borders nearly straight, but anterior part somewhat convergent with a gentle curvature, strongly marginated and somewhat widened at both, anterior and posterior ends with fovealike puncture on each of these widened ends; basal border distinctly lobed at median part; dorsum slightly convex from side to side, but flattened on mediobasal area, rather closely punctured on entire surface (these punctures coarser on median area and stronger at each side of middle of base). Scutellum transverse pentagonal, flat on surface with a few minute punctures. Elytra moderately convex on dorsum, with humeri separately raised; each elytron with 7 files of rather fine punctures and minutely but not very closely pubescent-punctulate on interstices of these files of punctures. Venter irregularly (partly finely or coarsely and partly rather closely or sparsely) pubescent-punctate; coxal lines all well impressed.

Length : 7.0 mm.

SPECIMENS EXAMINED : Holotype (BISHOP deposit), vicinity of villages at foot of Lai-

mo-ling (mountain range), Kiung-shan Distr., Hainan I., 25-28.V.1935, F. K. To.

DISTRIBUTION : Hainan I.

This new species is allied to *E. andamanensis* (Gorham), but is separated from it by the following characters : Antennae slenderer, with segment 3 much longer than 4, segments 7 & 8 not as thick as in *andamanensis*; head and pronotum more weakly punctured, pronotum narrowed from base to front; scutellum not as transverse as that of *andamanensis*; elytral reddish markings larger, the subbasal one not connected to basal border of elytron with its medio-anterior projection; venter not as strongly punctured.

#### 6. *Episcaphula tonkinensis* Heller

*Episcaphula (Isoscaphula) tonkinensis* Heller, 1920, Archiv Naturg. **84** A (8) : 83 (Tonkin : Mau-Son).

*Megalodacne tonkinensis* : Arrow, 1925, Fauna Brit. India, Col.-Clavicornia: 45 (key), 50 (Sikkim, Nepal-Sikkim Frontier, Burma, Assam & Indo-China); 1928, Faune Colon. Franç. **2** : 330 (Tonkin, Laos & Burma).

*Episcaphula (Isoscaphula) tonkinensis* var. *fratris* Heller, 1920, Archiv Naturg. **84** A (8) : 83 (Burma : Carin).

*Megalodacne major* Arrow, 1922, Trans. Ent. Soc. Lond. (3-4) : 288 (Upper Mekong R. & Burma); 1925, Fauna Brit. India, Col.-Clavicornia : 50 [Synonymized with *M. tonkinensis* (Heller)].

SPECIMENS EXAMINED : 1, Nam-kio, 140 m, Paoting Distr., Hainan I., 26.II.1947, Gressitt; 1, Dalat, 1400-1500 m, S. Viet-Nam, 8.VI-7.VII.1961, N. R. Spencer.

DISTRIBUTION : Viet-Nam ; Laos ; Burma ; Hainan I.

Note : The Hainan sp. is different from the Vietnamese example in the following points : Body rather broad and short, pronotum and elytra more strongly punctured, interstices of files of distinct punctures on elytra finely but distinctly punctulate, etc. It is not clear whether these differences are constant or not at this time. Detailed studies of more examples from both areas - continental Southeast Asia and Hainan I. - are needed.

#### 7. *Megalodacne (Megalodacne) chinensis* Crotch

*Megalodacne chinensis* Crotch, 1876, Cist. Ent. **1** (13) : 417 (China).—Arrow, 1909, Ann. Mag. Nat. Hist., ser. 8, **4** (21) : 196 (nota).—Kuhnt, 1911, Coleopt. Cat. **34** : 80 (China).

SPECIMENS EXAMINED : 3, Mt Omei, Szechuan, China, 16.VII.1932, Franck.

DISTRIBUTION : China.

#### 8. *Microsternus perforatus* (Lewis)

*Episcapha perforata* Lewis, 1883, Ent. Month. Mag. **20** : 140 (Japan : Oyayama & Yuyama).

*Microsternus perforatus* : Lewis, 1887, Ent. Month. Mag. **24** : 3; 1887, Ann. Mag. Nat. Hist., ser. 5, **20** (115) : 57 (Japan : Oyayama & Yuyama in Higo).—Schönfeldt, 1891, Cat. Col. Japan, Nachtr. 2 : 270 (Japan : Oyayama & Yuyama in Higo).—Kuhnt, 1911, Coleopt. Cat. **34** : 81 (Japan).—Chûjô, 1936, Fauna Nipponica, ser. 10, **8** (5) : 129, 174 (list) (Japan: Oyayama & Yuyama in Kumamoto Pref.).

*Encaustes perforata*: Schönfeldt, 1891, Cat. Col. Japan, Nachtr. 2 : 271 (Japan: Oyayama & Yuyama) (erroneous record).

SPECIMEN EXAMINED : 1 (6.0 mm body length), Puli (Hori), Taiwan, VI.1954.

DISTRIBUTION : Japan (Honshu, Shikoku) ; Taiwan.

Note : The present example is differentiated from the Japanese species in the following points : Head, pronotum, metathorax and abdomen more finely and closely punctured, pronotum entirely gently rounded at each side, interstices of striated punctures on each elytron more strongly and closely punctured, and prosternum more coarsely punctured on median triangular area. However, it cannot be definitely said with only 1 Taiwan specimen that these differences between the Taiwan and Japanese species are constant.

#### Subfamily TRIPLACINAE

##### Tribe ENCAUSTINI

#### 9. *Aulacochilus bedeli* Harold

*Aulacochilus Bedeli* Harold, 1880, Mitt. Münch. Ent. Ver. 4: 170 (Japan: Nikko).—Schönfeldt, 1887, Cat. Col. Japan: 191 (Japan: Nikko).—Kuhnt, 1911, Coleopt. Cat. 34: 4 (Japan: Nikko).

*Aulacochilus bedeli* : Chûjô, 1936, Fauna Nipponica, ser. 10, 8 (5) : 36 (key), 38, 167 (list), fig. 23 (Japan: Nikkô, Bukenji in Yokohama, Nara, Higo & Mt Sobo-san; Taiwan: Taihoku).—Deelder, 1942, Zool. Meded. 24 (1-2) : 76 (Japan).—Chûjô, 1964, Folia Ent. Hung. 17 (14) : 213 (Japan & Taiwan).

*Aulacochilus janthinus* Lacordaire : Miwa, 1929, Trans. Nat. Hist. Soc. Formosa 19 (101) : 122, 125 (distribution table) (Taiwan: Arisan, Kôshun & Horisha); 1931, Syst. Cat. Formosan Col.: 69 (Taiwan: Arisan, Kôshun & Horisha).—Chûjô, 1936, Fauna Nipponica, ser. 10, 8 (5) : 39 (Synonymized with *A. bedeli* Harold).

SPECIMENS EXAMINED : 7, Izumi-Gogayama, Okinawa I., Ryukyu Is., 22.III.1964, C. M. Yoshimoto & J. Harrell.

DISTRIBUTION : Japan (Honshu, Shikoku, Kyushu & Tsushima Is.) ; Ryukyu Is. ; Taiwan.

#### 10. *Aulacochilus janthinus* Lacordaire

*Aulacocheilus janthinus* Lacordaire, 1842, Monogr. Erotyl. : 250 (Java).

*Aulacochilus janthinus* : Kuhnt, 1911, Coleopt. Cat. 34: 4 (as a synonym? of *A. micans* Bedel).—Arrow, 1922, Trans. Ent. Soc. Lond. (3-4) : 300 (Laos, India & Malayan Region); 1925, Fauna Brit. India, Col.-Clavicornia : 84 (key), 90 (Assam, Burma, Siam, Indo-China, Malay Peninsula & Java); 1928, Faune Colon. Franç. 2: 338 (Laos, Assam, Buma, Malacca & Java).

SPECIMENS EXAMINED : 2, Tai-pin-ts'uen, Lam-ka-heung, Lai-mo-ling (mountain range), Klung-shan Distr., Hainan I., 19-20 & 25-26.V.1935, F. K. To.

DISTRIBUTION : Java ; Malacca ; Laos ; Burma ; Assam ; Hainan I.

Note : Hainan I. is a new record for this species.

### 11. *Aulacochilus luniferus helleri* Deelder

*Aulacochilus luniferus* (Guérin-Méneville) var. *helleri* Deelder, 1942, Zool. Meded. **24** (1-2) : 78, fig. 2a (1, Kosempo, Taiwan, 25. IV. 1908, H. Sauter, holotype; 2, Kwei-Chow, China, paratype; 1, Fuhosho, Taiwan, VII. 1909, Sauter; 1, Suisharyo, Taiwan, ex coll. Veth.).

*Aulacochilus luniferus helleri*: Chûjô, 1964, Ann. Hist. Nat. Mus. Nation. Hung. **56** : 413 (Taiwan: Lake Candidius, Kosempo, Chip Chip & Fuhosho; raised to subspecies status from variety); 1964, Folia Ent. Hung. **17** (14) : 214 (Taiwan).

*Aulacochilus luniferus* (nec *luniferus luniferus* Guérin-Méneville): Heller, 1920, Archiv Naturg. **84** A (8) : 3 (Taiwan: Kosempo). — Miwa, 1929, Trans. Nat. Hist. Soc. Formosa **19** (101) : 122, 125 (distribution table) (Taiwan: Gyochi, Shinchiku, Karenkô & Baibara); 1931, Syst. Cat. Formosan Col.: 69 (Taiwan: Gyochi, Shinchiku, Karenkô, Baibara, Horisha & Arisan). — Chûjô, 1936, Fauna Nipponica, ser. 10, **8** (5) : 37 (key), 41, 168 (list), fig. 17, 18, 22, 25 (Taiwan: common from sea level to ca 2200 m).

SPECIMENS EXAMINED : 1, Nam-po-ts'uen in Loi Territory, Ch'engmai Distr., Hainan I., 24-26.VIII.1935, F. K. To; 7, Karapan near Tawu, Taitung-hsien, Taiwan, I-II.1964, T. C. Maa.

DISTRIBUTION : Taiwan; Hainan I.; S China.

### 12. *Aulacochilus quadripustulatus* (Fabricius)

*Erotylus 4pustulatus* Fabricius, 1801, Syst. Eleuth. **2** : 6 (Sumatra). — Schönherr, 1808, Syn. Ins. **1** (2) : 327 (Sumatra).

*Aulacocheilus quadripustulatus*: Lacordaire, 1842, Monogr. Erotyl.: 247 (Java & Sumatra).

*Aulacochilus quadripustulatus*: Bedel, 1871, Ann. Soc. Ent. France, ser. 5, **1** : 272 (key), 274 (Java, Sumatra & Malacca). — Crotch, 1876, Cist. Ent. **1** (13) : 497 (Java, Sumatra & Malacca). — Gorham, 1896, Ann. Mus. Civ. Stor. Nat. Gen., ser. 2, **16** : 280 (Burma, Pegu, Sumatra, Java & Ceylon). — Kuhnt, 1911, Coleopt. Cat. **34** : 5 (Sumatra, Java, Ceylon, Malay & Burma). — Arrow, 1922, Trans. Ent. Soc. Lond. (3-4) : 297 (Tonkin & Laos); 1925, Fauna Brit. India, Col. Clavicornia: 83 (key), 85 (Andaman Is., Lower Burma, Himalayas, Tonkin, Malay Peninsula, Java & Sumatra); 1925, Faune Colon. Franç. **2** : 336 (Tonkin, India, Ceylon, Malacca & Java). — Chûjô, 1936, Fauna Nipponica, ser. 10, **8** (5) : 37 (key), 46, 168 (list), fig. 29 (description in Japanese, fig. of adult ex. from Sumatra). — Deelder, 1942, Zool. Meded. **24** (1-2) : 80 (Java & Sumbawa).

*Engis subrotunda* MacLeay, 1825, Ann. Javanica: 42 (Java); 1833, ed. Lequien: 151 (Java). — Lacordaire, 1842, Monogr. Erotyl.: 247 [Synonymized with *Aulacochilus quadripustulatus* (Fabr.) with ?mark. Type in Brit. Mus. (Nat. Hist.) per Arrow, 1925].

*Aulacochilus quadripustulatus* (Fabricius) var. *celebensis* Schaufuss, 1887, Horae Soc. Ent. Ross. **21** : 141 (Celebes). — Kuhnt, 1911, Coleopt. Cat. **34** : 5 (Celebes).

SPECIMENS EXAMINED : 2, Tai-pin-ts'uen, Lam-ka-heung, Lai-mo-ling (mountain range), Kiung-shan Distr., Hainan I., 21-22.V.1935 (1 ex.) & 20-21.VII.1935 (1 ex.), F. K. To; 1, Tai-tsinglam-ts'uen (back of Lai-mo-ling range), Ting-an Distr., Hainan I., 17-18.VI. 1935, To; 1, Sam-kwong-ts'uen, Lam-wan-tung, Loi Territory in Kiung-shan Distr., Hainan I., 7-9.VIII. 1935, To.

DISTRIBUTION. Java; Sumbawa; Sumatra; Celebes; Malacca; Malaya; Thailand; Burma; Himalayas; India; Ceylon; Andaman Is.; Laos; Viet-Nam; Hainan I.

*Note* : According to Arrow (1925, Fauna Brit. India, Col. - Clavicornia : 86), the insect figured under the name of *Aulacochilus quadripustulatus* by Kuhnt in Wytsman's Genera Insectorum Coleoptera-Erotylidae (Erotylinae), pl. 3, fig. 12, 1909, is not that species but *A. doriae* Bedel.

### 13. *Micrencaustes liturata* (MacLeay)

*Engis liturata* MacLeay, 1825, Ann. Javanica : 42 (Java) ; 1833, ed. Lequien : 151 (Java).

*Encaustes liturata* : Lacordaire, 1842, Monogr. Erotyl. : 43 (Java).

*Micrencaustes liturata* : Crotch, 1876, Cist. Ent. 1 (13) : 103 (Java). — Gorham, 1896, Ann. Mus. Civ. Stor. Nat. Gen., ser. 2, 16 : 277 (Burma & Tenasserim). — Kuhnt, 1908, Deut. Ent. Z. : 630 (Burma : Bhamo) ; 1911, Coleopt. Cat. 34 : 38 (Java, Sumatra & Burma). — Arrow, 1922, Trans. Ent. Soc. Lond. (3-4) : 293 (Laos) ; 1925, Fauna Brit. India, Col.-Clavicornia : 78 (Burma, Malay Peninsula, Java & Borneo) ; 1928, Faune Colon. Franç. 2 : 335 (Laos). — Deelder, 1942, Zool. Meded. 24 (1-2) : 74 (Java, Sumatra, Nias I. & Laos).

*Micrencaustes liturata* (MacLeay) var. *nigripennis* Kuhnt, 1908, Deut. Ent. Z. : 630 (Burma : Teinzo) ; 1911, Coleopt. Cat. 34 : 38 (Burma). — Arrow, 1922, Trans. Ent. Soc. Lond. (3-4) : 293 (Laos) ; 1925, Fauna Brit. India, Col.-Clavicornia : 78 ; 1928, Faune Colon. Franç. 2 : 335 (Laos & Tonkin).

*Micrencaustes plagiatus* Gorham, 1883, Proc. Zool. Soc. Lond. : 76 (Java?) ; 1901, Stett. Ent. Ztg. 62 : 179 [Sumatra : Soekaranda ; var.? of *M. liturata* (MacLeay)]. — Kuhnt, 1911, Coleopt. Cat. 34 : 38 [as a synonym of *M. liturata* (MacLeay)].

SPECIMENS EXAMINED : 1 (forma typica) & 1 (f. *nigripennis* Kuhnt), Loh-fung-tung, Yai-hsien Distr., Hainan I., 27-28.II.1935, To ; 1 (f. *nigripennis* Kuhnt), Nam-kio, 140 m, Paoting Distr., Hainan I., 26.II.1947, Gressitt.

DISTRIBUTION : Java ; Sumatra ; Nias I. ; Burma ; Laos ; Viet-Nam ; Hainan I.

*Note* : Hainan I. is a new record for this species.

### Tribe TRIPLOCININI

#### 14. *Amblyopus csikii* Chûjô

*Amblyopus csikii* Chûjô, 1964, Ann. Hist. Nat. Mus. Nation. Hung. 56 : 414, fig. 2 (Taiwan : Fuhosho, Kosempo & Taihorinsho) ; 1964, Folia Ent. Hung. 17 (14) : 217 (Taiwan).

*Amblyopus vittatus* (Olivier) var. *interruptus* Miwa, 1929, Trans. Nat. Hist. Soc. Formosa 19 (101) : 123, 126 (distribution table) (Taiwan : Musha, Horisha & Baibara) ; 1931, Syst. Cat. Formosan Col. : 70 (Taiwan : Tainan, Horisha, Musha & Baibara). — Chûjô, 1936, Fauna Nipponica, ser. 10, 8 (5) : 59 (key), 62, 169 (list), fig. 38 (Taiwan) ; 1964, Ann. Hist. Nat. Mus. Nation. Hung. 56 : 415 (corrected as *A. csikii* Chûjô).

SPECIMENS EXAMINED : 5, Tompo, 1500 m, Taiwan, 17.V.1928, F. C. Hadden.

DISTRIBUTION : Taiwan.

#### 14. *Amblyopus csikii* Chûjô f. *continuus* Chûjô

*Amblyopus csikii* Chûjô f. *continuus* Chûjô, 1964, Ann. Hist. Nat. Mus. Nation. Hung. 56 : 416 (Taiwan) ; 1964, Folia Ent. Hung. 17 (14) : 218 (Taiwan).

*Amblyopus vittatus* (Olivier): Kano, 1928, Konchū Sekai **32** (373): 295 (Taiwan: Kōshun & Sōzan).—Miwa, 1929, Trans. Nat. Hist. Soc. Formosa **19**(101): 123, 126 (distribution table) (Taiwan: Kuraru, Garambi, Horisha & Baibara); 1931, Syst. Cat. Formosan Col.: 70 (Taiwan: Horisha, Baibara, Kuraru, Garambi & Taihoku).—Chūjō, 1936, Fauna Nipponica, ser. 10, **8** (5): 59 (key), 60, 169 (list), fig. 37 (Taiwan: common on whole island).

SPECIMENS EXAMINED : 2, Kuraru, Taiwan, 5.V.1934, Gressitt.

DISTRIBUTION : Taiwan.

### 15. *Neotriplax arisana* Miwa

*Neotriplax arisana* Miwa, 1929, Trans. Nat. Hist. Soc. Formosa **19** (101): 124, 127 (distribution table) (Taiwan: Mt Arisan); 1931, Syst. Cat. Formosan Col.: 71 (Mt Arisan).—Chūjō, 1936, Fauna Nipponica, ser. 10, **8** (5): 73 (key), 78, 170 (list), fig. 46 (Taiwan: Mt Arisan, Hori, San-kakuho & Yusho in Taichu-shu); 1964, Folia Ent. Hung. **17** (14): 219 (Taiwan & S China). *Neotriplax Reitteri* Mader, 1939, Ent. Nachrbl. **13**: 71 (China: Tienmushan).—Chūjō, 1964, Folia Ent. Hung. **17** (14): 219 (Synonymized with *N. arisana* Miwa by the indication of K. Delkeskamp).

SPECIMENS EXAMINED : 2, Mt Arisan, 2000 m, Central Taiwan, 25.V.1934, Gressitt ; 1, Tachulan, Shaowu, Fukien, S China, 21-27.IV.1945, Maa.

DISTRIBUTION : Taiwan ; S China.

### 16. *Spondotriplax flavofasciata* Chūjō

*Spondotriplax flavofasciata* Chūjō, 1941, Kontyū **15** (1): 12, fig. 2 (Taiwan: Tyokakurai & Kuraru).—Araki, 1941, Trans. Kansai Ent. Soc. **11** (1): 56, fig. 2-4 (Taiwan: Kuraru & Chipon).—Nakanishi, 1950, Ent. Rev. Japan **5** (1): 12 (Loochoos: Amami-Ōshima I.); 1958, Shin-Konchū **11** (3): 50, fig. 11, 12 (Loochoos: Amami-Ōshima I.; Japan: Yaku-shima I.).—Chūjō, 1964, Folia Ent. Hung. **17** (14): 219 (Taiwan; Loochoos; Japan: Yaku-shima I.).

SPECIMENS EXAMINED : 5, Seisui, Amami-Ōshima I., Ryukyu Is., 22.VIII.1962, T. Yoro.

DISTRIBUTION : Taiwan ; Ryukyu Is. ; Japan (Yaku-shima I.).

### 17. *Spondotriplax obscura* Chūjō, new species

Body oblong-oval, moderately convex on dorsum, venter flattish. General color of dorsum obscure brown with marginal area more or less paler brown, venter and legs light brown; terminal segments of antennae more or less infuscated, lateral borders of pronotum and elytral epipleura piceous to black, and striated punctures or punctured striae of elytra piceous to black.

Head gently convex, rather finely and closely punctured, somewhat depressed at each side of clypeus and gently emarginated at front border of clypeus; ultimate segment of each maxillary palpus small, triangular and somewhat thickened. Antennae comparatively robust, not or hardly reaching base of pronotum; segment 3 nearly equal in length to the following 3 segments combined; club with 5 terminal segments which are rather loosely articulated to one another. Pronotum about 2× as broad as it is long, strongly narrowed anteriorly with a slight curvature

at each side; front border gently arched forwardly or nearly straight at median part; front corners strongly produced anteriorly with obtuse apex; basal corners nearly right angled; basal border markedly arched backwardly; dorsum lightly convex, punctured like on head. Scutellum subcordate, with a few microscopic minute punctures on surface which is flat or slightly depressed. Elytra rather strongly narrowed posteriorly with a gentle curvature at each side, rather strongly convex on dorsum; each elytron with 9 regular files of distinct punctures, but the 2 outer files vanished at basal 1/2 of elytron, interstices of these files of punctures minutely punctulate under a high power lens; elytral epipleura complete from base to apex of elytra, flat and finely but not closely punctured on surface. Venter rather strongly and sparsely pubescent-punctate; 3 pairs of coxal lines distinctly present, procoxal lines extending from procoxal cavities to about middle of prosternum and curved inwardly but not touching each other at their apices.

Length: 3.0–3.5 mm.

SPECIMENS EXAMINED: 4 syntypes, Ishigaki I., Ryukyu Is., 2.VIII.1962, Y. Hama.

DISTRIBUTION: Ryukyu Is.

The present new species is easily distinguished from the known species of the genus *Spondotriplax* by its peculiar body coloration. These syntypes are preserved in the following collections: 1, T. Shibata, Osaka, Japan; 2, my collection; 1, Bishop Museum (7766).

#### 18. *Triplax horni* (Chûjô)

*Tritoma horni* Chûjô, 1941, Kontyû **15** (1): 16, fig. 7 (Taiwan: Kosempo).

*Triplax horni*: Chûjô, 1964, Ann. Hist. Nat. Mus. Nation. Hung. **56**: 416 (Taiwan: Hoozan); 1964, Folia Ent. Hung. **17** (14): 216 (Taiwan).

SPECIMENS EXAMINED: 1, Sung-kang, 2044 m, near Musha, Central Taiwan, 6.XII.1963, T. C. Maa; 1, Tung-pu near Poli, C. Taiwan, 8.XII.1963, Maa; 1, Mt Yuwan, Amami-Ôshima I., Ryukyu Is., 8.VIII.1961, K. Yamada.

DISTRIBUTION: Taiwan; Ryukyu Is.

#### 19. *Triplax sinica* Chûjô, new species

Body elongate-oblong, parallel-sided at median part and rather flat in general appearance. Genenal color red-brown, with elytra black, lustrous; antennal segments 1–3 yellow- or red-brown with terminal part of 3 rather infuscated, segments 4–8 dark red-brown to piceous, 9–11 piceous to black.

Head lightly convex, strongly and rather closely punctured, somewhat raised at each side near root of antenna, gently emarginated at front border of clypeus; ultimate segment of each maxillary palpus about or rather more than 4× as broad as long. Antennae extending a little beyond base of pronotum; segment 3 about as long as 2 succeeding segments combined; club segments comparatively narrow, rather loosely articulated to one another. Pronotum a little more than 2× as broad as long; front border straight, but produced obliquely-anteriorly at each side in connection with front corner which is rather sharply rounded; lateral borders gently rounded; basal corners nearly at right angles; basal border entirely marginated, nearly straight at lateral parts, but somewhat produced backwardly and forming a broad lobe at median part; dorsum lightly convex from side to side, distinctly punctured, but these punctures rather finer

and more sparsely distributed than those on head. Scutellum subcordate, with a few very fine microscopic punctures. Elytra elongate, simply marginated at base (not crenated at posterior border of this margin), distinctly punctate-striate (striae rather obtuse at posterior area in general and rarely rather disarranged by individual), with an irregular file of rather finer punctures on each interstice of these punctate-striae, finely but very sparsely pubescent on posterior area. Venter rather strongly, closely and irregularly pubescent-punctate; without any coxal line.

Length: 4.25-5.0 mm.

SPECIMENS EXAMINED: Holotype (BISHOP 7767), 2 paratotypes, Tachulan, 1000 m, Shaowu, Fukien, S China, 24.IV.1942, T. C. Maa.

DISTRIBUTION: SE China.

This new species belongs to the same group as *T. japonica* (Crotch, 1873) and *T. horni* (Chûjô, 1941), but is easily separated from these in the following points: Scutellum not black but red-brown and entire surface of body more strongly punctured, especially the interstitial punctures of elytra far stronger.

## 20. *Cyrtotriplax gressitti* Chûjô, new species

Body oval, moderately convex on dorsum. General color yellow to red-brown, lustrous; mandibles piceous, with their apices black; antennae with terminal segment somewhat infuscated; pronotum decorated with 4 black marks as follows: 2 small marks situated at middle touching fore border of pronotum, closely approaching each other but not quite connected; and 1 at each side of middle area of base, these marks much larger than anterior ones; basal 3/5 of elytra with 3 black marks as follows: transverse subquadrate one at each side behind humerus and subquadrate one just behind scutellum; posterior 2/5 of elytra black, with its frontal border quadrangular.

Head gently convex, rather strongly and sparsely punctured, lateral and anterior borders of clypeus narrowly but distinctly marginated and anterior border gently emarginated; ultimate segment of each maxillary palpus strongly expanded and thickened, more than 2× as broad as it is long. Antennae slender, not extending to basal border of pronotum; segment 3 about as long as 2 succeeding segments combined; 3 terminal segments distinctly expanded and forming a rather compactly articulated club. Pronotum rather more than 2× as broad as it is long, narrowed anteriorly; front border deeply emarginated, with median part nearly straight; lateral borders narrowly but distinctly marginated and nearly straight, with anterior and basal extremities gently convergent; basal border distinctly lobed posteriorly at median part which is not marginated; dorsum slightly convex, rather strongly and sparsely punctured. Scutellum semicircular, with subacuminated medio-posterior point; dorsum flat, with a few fine punctures. Elytra moderately convex on dorsum, with separately raised humeri; each elytron with 8 files of distinct punctures, with the exception of the external marginal file; interstices of these files finely but not closely punctured. Venter finely but not very closely pubescent-punctate; pro-coxal lines well developed, convergent forwardly, curved inwardly at a little behind middle of front border of prosternum, but not touching each other at their apices; meso- and meta-coxal lines well impressed, the latter extending near posterior border of 1st visible sternite of abdomen.

Length: 3.25 mm.

SPECIMENS EXAMINED: 1 (Holotype C.A.S.), Mt Arisan, 2000 m, Taiwan, 25.V.1934, J. L. Gressitt.

DISTRIBUTION : Taiwan.

This new species is allied to *T. pantherina* (Lewis, 1887) from Japan, but may easily be distinguished from it by the following characters : Head immaculated, pronotum with 4 black marks, scutellum not infuscated, elytra rather differently tinged with red-brown and black colorations, venter of thorax not infuscated, etc.

## 21. *Cyrtotriplax metasobrina* (Chûjô)

*Tritoma metasobrina* Chûjô, 1941, Mushi **13** (2) : 91, fig. 6 (Taiwan : Bandaisya in Taityû-syû).  
*Cyrtotriplax metasobrina* : Chûjô, 1964, Folia Ent. Hung. **17** (14) : 218 (Taiwan).

SPECIMENS EXAMINED : 1, Puli (Hori), 500 m, Central Taiwan, 1953.

DISTRIBUTION : Taiwan.

## 22. *Cyrtotriplax taiwana* (Chûjô), new comb.

*Tritoma taiwana* Chûjô, 1936, Trans. Nat. Hist. Soc. Formosa **26** (152) : 214 (Taiwan : Taitô, Mizuho & Chipon in Taitô-chô & Inoue in Shinchiku-shu); 1936, Fauna Nipponica, ser. 10, **8** (5) : 86 (key), 99, 173 (list), fig. 57 (Taiwan : Taitô, chipon, Mizuho & Inoue). — Araki, 1941, Konchûkai **9** (89) : 444 (Taiwan : Kuraru). — Nakane, 1950, Ent. Rev. Japan **5** (1) : 9 (Loochoos : Amami-Ôshima I.).

*Triplax taiwana* : Chûjô, 1964, Folia Ent. Hung. **17** (14) : 217 (Taiwan & Loochoos).

*Tritoma atripennis* Kuhnt : Miwa, 1931, Syst. Cat. Formosan Col. : 71 (Taiwan : Taitô). — Chûjô, 1936, Trans. Nat. Hist. Soc. Formosa **26** (152) : 214 (Synonymized with *T. taiwana* Chûjô).

SPECIMENS EXAMINED : 2, Puli (Hori), Taiwan, VI (1 ex.) & VII (1 ex.), 1954 ; 1, Torogawa, Ishigaki I., Ryukyu Is., 17.III.1964, Yoshimoto & Harrell ; 1, Nakagusuku Park, 100-150 m, Okinawa I., Ryukyu Is., 25.V.1964, Malaise trap, Gressitt.

DISTRIBUTION : Taiwan ; Ryukyu Is.

Notes : It may be better to think of this species as belonging to *Cyrtotriplax* Crotch, 1872 & 1873 (= *Tritoma* Fabricius, 1775 ; nec *Cyrtotriplax* Gorham, 1896) rather than *Triplax* Herbst, 1793 in the following characteristic points : Body shape broadly ovate (this is a most common character in the known species of *Cyrtotriplax* ; the typical shape in *Triplax*-species is far more elongate and often parallel- or subparallel-sided at middle) ; pronotum very broad, strongly narrowed in front with a distinct curvature at each side, strongly lobed posteriorly at median part of base (in genotype-species and allies of *Triplax* the basal border of pronotum is entirely strongly and evenly marginate ; generally the *Cyrtotriplax*-species have the basal border narrowly or finely marginate at side and immarginate at the median part, sometimes the median part also marginate, but this margination more or less weaker than those at the lateral parts and not of the same quality as those cases in the members of the genus *Triplax*) ; procoxal lines very short but distinctly present, meso- and metacoxal lines well developed, especially the metacoxal lines are very long ; mesosternum strongly transverse at intercoxal part (but not so broad as in those of the typical members of the genus *Cyrtotriplax*) ; anterior border of 1st visible sternite of abdomen straight between metacoxa (but length of this part not so long as in those of typical members of *Cyrtotriplax*).

Yet, this species does have affinities with some members of *Triplax*. They are: Basal border of elytra marginate with its posterior edge partly crenately indented (but this margin not as broad as those of typical members of *Triplax* and also with indentation not as strong) and lacinia with an extremely minute, thinly chitinized, hooklike projection at its apex (reexamination may be needed to determine if this character—lacinia with one or two denticular projections at its apex—is an absolute character throughout all members of *Triplax*).

23. **Cyrtotriplax yamazii** (Chûjô)

*Tritoma yamazii* Chûjô, 1941, Trans. Kansai Ent. Soc. **11** (2) : 5, fig. 3 (Taiwan: Mt Sô-zan in Taihoku-Syu).

*Cyrtotriplax yamazii*: Chûjô, 1964, Folia Ent. Hung. **17** (14) : 219 (Taiwan).

SPECIMENS EXAMINED: 1, Puli (Hori), Taiwan, VII.1953.

DISTRIBUTION: Taiwan.