The Taiwanese Species of the Cerambycid Genus Linda (Coleoptera, Cerambycidae, Lamiinae)

Tatsuya NIISATO

Bioindicator Co. Ltd., Kamiochiai 1-29-7, Shinjuku, Tokyo, 161 Japan

and

Yoshiyasu KUSAKABE

Sumiregaoka 21-12, Kouhoku, Yokohama, Kanagawa, 223 Japan

Abstract The Taiwanese species of the saperdine genus *Linda* are revised. Three species, *Linda annulicornis* MATSUSHITA, *L. pratti signaticornis* SCHWARZER, stat. nov., and *L. femorata* (CHEVROLAT) are recognized in the fauna of Taiwan. *Linda subannulata* BREUNING is regarded as a junior synonym of *L. annulicornis*. The former Taiwanese record of *L. fraterna* (CHEVROLAT) is omitted. A key to the Taiwanese species is provided.

The cerambycid beetles of the genus *Linda* THOMSON comprises unique group of the Saperdini restricted to the temperate to subtropical forests of the Asian Continent and neighbouring islands. The members of the genus are characterized by the presence of tubercles on pronotum, and is divided into two different lineages, *Linda* s. str. and *Dasylinda* THOMSON, by the presence or absence of antennal bristles. In his revisional study, GRESSITT (1947) dealt with fifteen Chinese species of the genus, and suggested that four of them occurred on the Island of Taiwan. After that one species was added to the Taiwanese fauna by BREUNING and OHBAYASHI (1967). According to the recent check-list of the Taiwanese Cerambycidae (NAKAMURA *et al.*, 1992), five species of the genus including the subgenus *Linda* have so far been known from the island; they are: *Linda annulicornis* MATSUSHITA, *L. subannulata* BREUNING, *L. femorata* (CHEVROLAT), *L. signaticornis* SCHWARZER and *L. fraterna* (CHEVROLAT).

In the course of invesetigation of the Taiwanese *Linda*, we became aware of two taxonomical problems to be solved; one was the true affinity of *L. subannulata*, and the other was the distributional record of *L. fraterna* by KANO (1926). Through the courtesy of Dr. N. OHBAYASHI, we had an opportunity to examine the holotype of *L. subannulata* and to compare it with the specimens of *L. annulicornis*. It was revealed that *L. subannulata* was in fact an aberrant form of *L. annulicornis*. As regards the record of *L. fraterna*, KANO (1926) may have recorded it upon a true *fraterna* specimen, since his description almost agrees with this continental species. It seems most probable that he did it on a specimen with misplaced collecting label. Therefore, the record of *L. fraterna* should be omitted from the Taiwanese fauna until new specimens

192

are collected. Besides, we have regarded *L. signaticornis*, which has so far been known only from Taiwan, as a geographical race of *L. pratti* Pic, as the result of comparative examination of Taiwanese and continental materials.

The purpose of this paper is to revise the Taiwanese species of the genus *Linda*. The three species presently known will be redescribed, and a key to the species will be provided.

The following abbreviations are used in the measurement of body parts: BL – body length, AL – antennal length, HW – maximum width of head, PL – length of pronotum, PW – maximum width of pronotum across lateral tubercles, PA – apical width of pronotum, PB – basal width of pronotum, EL – length of elytra, EW – humeral width of elytra, M – arithmetic mean.

Genus Linda THOMSON

Linda THOMSON, 1864, Syst. Ceramb., pp. 200, 400; type species: Amphionycha femorata CHEVROLAT. Miocris FAIRMAIRE, 1902, Bull. Soc. ent. France, 1902, p. 245; type species: Miocris nigroscutatus FAIRMAIRE.

Key to the Taiwanese Species of the Genus Linda

- 1 (3) Antennae uniformly black, fringed with pale pubescence at the base of each segment; ventral surface entirely yellowish.
- 2(1) Antennal segments 4–5 reddish at each base; sides of metathorax largely black; body length 14.4–17.2 mmL. pratti signaticornis.
- 3 (4) Body thick; pronotal tubercles strongly prominent; eyes hardly prominent laterad; elytral punctures forming more than 15 irregular rows near the middle; anal sternite of female arcuately and distinctly emarginate at the apex; body length 17.3-20.7 mm...... L. annulicornis.
- 4 (3) Body slender; pronotal tubercles weak; eyes large and strongly prominent laterad; elytral punctures forming 7 irregular rows near the middle; anal sternite of female subtransversely truncate at the apex; body length 12.9–17.8 mm...... L. femorata.

Linda (s. str.) annulicornis MATSUSHITA

(Figs. 1 a–c, 2 a–b, 3 a–b, 4 a, e)

Linda annulicornis MATSUSHITA, 1933, J. Fac. Agric. Hokkaido imp. Univ., **34**, p. 424, pl. 5, fig. 14; type locality: Kagi, Formosa. — GRESSITT, 1947, Ann. ent. Soc. Am., **40**, p. 547; 1951, Longicornia, **2**, p. 605. — YU & NARA, 1988, Longic. Beetles Taiwan, p. 93, pl. 20, fig. 34.

Linda subannulata BREUNING, 1966, Bull. Inst. r. Sci. nat. Belg., 42 (19), p. 19 [nom. nov. pro Linda subannulicornis BREUNING et OHBAYASHI, 1964]. Syn. nov.

Linda subannulicornis BREUNING et OHBAYASHI, 1964, Bull. Jpn. ent. Acad., 1, p. 30; type locality: Hori, Formosa [nom. praeocc.].

Redescription. Large, robust and thick species, having stongly uneven pronotum; appendages short. Colour pale yellowish orange to yellowish orange, black in elytra,

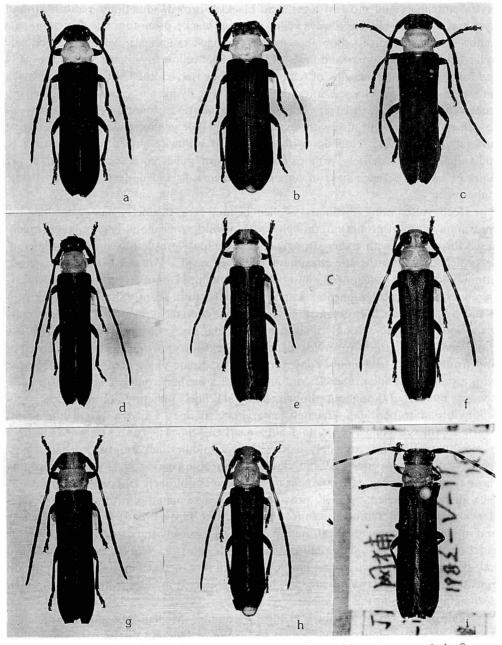


Fig. 1. Habitus of *Linda* (s. str.) spp. — a-c, *L. annulicornis* MATSUSHITA; a, ♂; b, ♀; c, holotype of *L. subannulata* BREUNING et OHBAYASHI, ♂. — d-e, *L. femorata* (CHEVROLAT); d, ♂; e, ♀. — f-g, *L. pratti signaticornis* SCHWARZER, stat. nov.; f, ♂; g, ♀; h, *L. p. pratti* PIC, ♂, from Beijing. — i, *L. fraterna* (CHEVROLAT), from Guangdong.

194 Tatsuya Niisato and Yoshiyasu Kusakabe

elytra, antennae, and most of legs; head blackish brown, sometimes reddish around eyes and on frons, clypeus always yellowish, eyes black; pronotum and scutellum pale yellow (though reddish yellow in a female specimen examined); ventral surface pale yellow; coxae, trochanters and bases of femora pale yellow to yellowish brown, usually reddish on posterior margins of femora. Body densely clothed with brownish black and pale yellow pubescence, intermixed with short flying hairs; head rather densely pubescent, partially with silvery pubescence near vertex; pronotum densely with yellowish pubescence, and also with appressed dense pale yellow pubescence near discal and lateral tubercles; scutellum with blackish or yellowish pubescence according to individuals; elytra densely with castaneous brown pubescence, sparsely with flying hairs in basal 2/3; each base of antennal segments 4–11 densely with silvery white pubescence.

Head voluminous, distinctly swollen behind eyes, distinctly narrower than the maximum width of pronotum, though equal in width to pronotal base, coarsely punctured throughout, with rather strongly convex occiput; eyes hardly prominent laterad, separated by two-fifths the maximum width of head. Antennae thick and short, attaining to apical fourth (\mathcal{J}) or just behind apical third (\mathcal{Q}) of elytra, strongly decreasing in length in apical segments; scape moderately stout, slightly shorter than segment 3 and a little longer than segment 4, segment 3 moderately arcuate. Pronotum transverse and very wide, strongly uneven on sides and disc; sides provided with strongly prominent, large lateral tubercles, nearly parallel for a short distance both from apex and from base; disc strongly convex, distinctly carinate along median line, provided with a pair of rounded tubercles on middle and a median rounded one on basal 1/5, coarsely punctured thoughout, though closely and finely punctured on tubercles. Scutellum broad trapezoidal, arcuately emarginate at apex. Elytra broad and short, nearly 5.8 times as long as pronotal length, nearly 3.3 times (\mathcal{J}) or 3.1 times (\mathcal{Q}) as long as the humeral width, arcuately narrowed near middle then amply broadened posteriorly; discal punctures fine and close, though disappearing in apical 1/4, forming more than 15 subirregular rows near middle; apices obliquely truncate. Ventral surface finely shagreened, sparsely provided with coarse punctures at the sides of metasternum and 1st abdominal sternite. Anal sternite fairly broad; \mathcal{E} : subtriangularly and moderately concave, apical margin almost transversely trancate, with small emargination at the middle and weak projections at sides; \mathcal{Q} : weakly concave in apical half near the middle, with a median longitudinal furrow reaching just behind middle; apical margin rather strongly arcuate, broadly projected at sides, with a small though deep emargination at the middle.

Male genital organ as shown in Figs. 4 a and e. Median lobe a little more than 3/10 the length of elytra, thick, straight near the middle and rather strongly arcuate ventrad in profile; ventral plate arcuately narrowed to apex which is rounded at the extremity; endophallus with basal falcate sclerites large, and also provided with short transverse sclerites just before falcate sclerites.

Measurements (in mm). a: BL 16.10-19.20 (M 18.22), AL 19.50-20.70 (M 15.74),

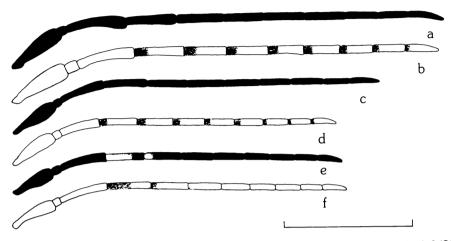


Fig. 2. Antennal segments of *Linda* (s. str.) spp.; a, c, e (♂), showing discal colour; b, d, f (♀), showing annuli of white pubescence. — a, b, *L. annulicornis* MATSUSHITA; c, d, *L. femorata* (CHEVROLAT); e, f, *L. pratti signaticornis* SCHWARZER, stat. nov. Scale: 5 mm.

HW 15.00–16.50 (M 15.57), PL 2.30–2.90 (M 2.54), PW 3.50–4.10 (M 3.76), PA 2.30– 2.90 (M 2.60), PB 3.00–3.40 (M 3.18), EL 13.80–16.40 (M 14.58), EW 4.20–4.70 (M 4.42). $\circlefteq:$ BL 19.50–20.70 (M 20.22), AL 14.80–16.70 (M 16.04), HW 3.40–3.70 (M 3.56), PL 2.30–3.00 (M 2.70), PW 4.30–4.50 (M 4.34), PA 3.20–3.30 (M 3.24), PB 3.50– 3.70 (M 3.64), EL 15.00–16.20 (M 15.80), EW 4.90–5.30 (M 5.12).

Specimens examined. 1 \Im , Lushan, Jenai Hsiang, Nantou Hsien, 24–V–1973, K. KOJIMA leg.; 1 \bigcirc , Shang-Paling, Fushing Hsiang, Taoyuan Hsien, 24–IV–1978, S. SAITO leg.; 1 \bigcirc , Shia-Paling, Fushing Hsiang, 12–V–1988; Ssu-yuanakou, Ilan Hsien, 30–V–1993, Q.-G. Luo leg.; 1 \Im , Jenai Hsiang, Nantou Hsien, 16–VII–1968, M. TOMOKUNI leg.; 1 \Im , Nanshanchi, Jenai Hsiang, 20–V–1977, T. NIISATO leg.; 1 \bigcirc , same locality & collector, 28–III–1978; 1 \bigcirc , Lienhwachi, Yuchih Hsiang, Nantou Hsien, 9–V–1978, same collector; 1 \bigcirc , Shizutou, Jenai Hsiang, 11~15–V–1991, Y. SHINTANI leg.; 1 \bigcirc , Mt. Kuantou Shan, Jenai Hsiang, 20–IV–1986; 1 \Im , Sungkang 2,100 m alt.), Jenai Hsiang, 16–VI–1991, Q.-G. Luo leg.; 1 \circlearrowright (holotype of *L. subannulata*), 'Hori, Formosa, VI–1963', R. KAWASAKI leg.; 1 \circlearrowright (holotype of *L. annulicornis*), 'Kagi, Taiwan, V–1923, S. HIRAYAMA'.

Notes. Linda subannulata was separated from L. annulicornis mainly by configuration of tubercles on the pronotum and puntuation of the elytra. Actually, the holotype of L. subannulata is strange in facies due to reddish body, which gives us an impression of a peculiar species. Our comparative examination of an adequate series of L. annulicornis and the holotype of L. subannulata has revealed that no morphological difference exists between the two species. The latter is an individual variation within the same species and should be regarded as a junior synonym of L. annulicornis. It is not certain whether the reddish coloration of the holotype of L. subannulata was

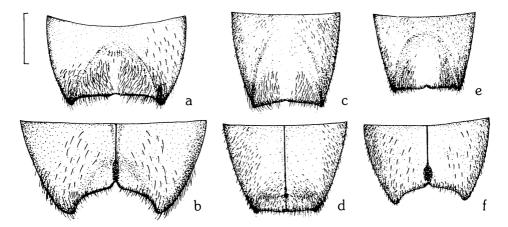


Fig. 3. Anal sternite of Linda (s. str.) spp.; a, c, e (♂), b, d, f (♀). — a, b, L. annulicornis MATSUSHITA; c, d, L. femorata (CHEVROLAT); e, f, L. pratti signaticornis SCHWARZER, stat. nov. Scale: 2 mm.

caused by immaturity or aberrancy.

Ecological information including that of host plants of *L. annulicornis* has been almost unknown. The adult in flight is usually found on slopes at the edges of broad-leaved forests under cloudy weather.

Linda (s. str.) femorata (CHEVROLAT)

(Figs. 1 d-e, 2 c-d, 3 c-d, 4 b, f)

Amphionycha femorata CHEVROLAT, 1852, Revue Zool., (2), 4, p. 419.

Linda femorata: THOMSON, 1864, Syst., Ceramb., p. 122. — LACORDAIRE, 1872, Gen. Coléopt., 9, p. 870. — SCHWARZER, 1925, Ent. Blätt., 21, p. 152. — SAVIO, 1929, Notes Ent. chin., 1, pp. 1, 4. — MATSUSHITA, 1933, J. Fac. Agric. Hokkaido imp. Univ., 34, p. 425. — GRESSITT, 1937, Lingnan Sci. J., 16, p. 620; 1939, ditto, 18, p. 108; 1939, Notes Ent. chin., 6, p. 127; 1940, ditto, 7, p. 197; 1942, Lingnan nat. Hist. Surv. & Mus. Spec. Publ., 7, p. 10; 1942, ditto, 8, p. 41; 1947, Ann. ent. Soc. Am., 40, p. 549; 1951, Longicornia, 2, p. 605. — PU, 1980, Ecol. Ins., Fauna China, 19, p. 118, pl. 12, fig. 165. — HUA, 1992, Icon. For. Ins. Hunan China, p. 505, fig. 1568; HUA, NARA & YU, 1993, Longic. Beetles Hainan & Guangdong, pp. 170, 304, fig. 391 a-b.

Redescription. Slender and medium-sized species, with elongate hind body. Colour yellowish orange with nearly black appendages and elytra; head black to reddish brown, especially infuscate in mandibles and labrum, and near vertex; eyes black; pronotum and scutellum yellow; elytra brownish black to black; ventral surface reddish yellow; antennae black; legs black though coxae, trochanters, and posterior margins of femora are reddish yellow. Body clothed with pale or yellowish pubescence; head sparsely pubescent on posterior part, though moderately so on frons; pronotum with dense appressed yellow pubescence and a few long flying hairs; elytra densely with brownish pubescence, with basal portion provided with a few long flying hairs; antenCerambycid Genus Linda from Taiwan

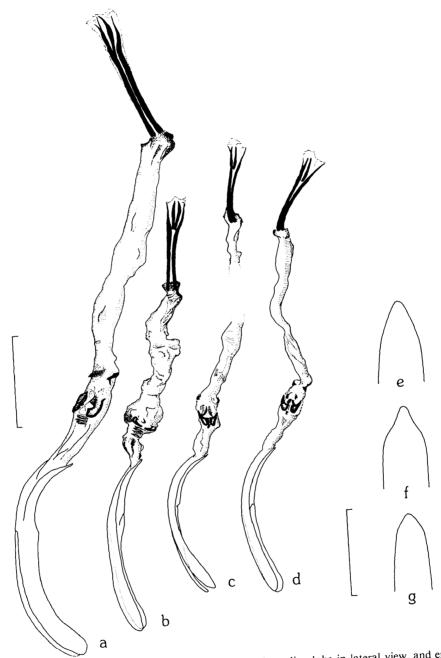


Fig. 4. Male genital organ of *Linda* (s. str.) spp.; a-d, median lobe in lateral view, and endophalli; e-g, apical part of median lobe in ventral view. — a, e, *L. annulicornis* MATSUSHITA; b, f, *L. femorata* (CHEVROLAT); c, g, *L. pratti signaticornis* SCHWARZER, stat. nov.; d, *L. pratti pratti* Pic. Scale: 2 mm (for Figs. a-d) and 1 mm (for Figs. e-g).

nae with each base of segments 4–6 rather moderately (sometimes sparsely) with silvery white pubescence.

Head small with strongly prominent eyes, slightly narrower than the maximum width of pronotum, closely provided with medium-sized punctures, with weakly raised occiput; eyes rather approximate to each other, separated by a half the maximum width of head. Antennae slightly shorter than body, fairly slender, not strongly decreasing in length in apical segments; scape moderately stout, slightly shorter than segment 3 and nearly equal in length to segment 4. Pronotum relatively long, not so uneven on sides and disc, sparsely provided with shallow punctures; sides with weak, though large, swellings at a level between apical and basal 1/4, parallel near bases; disc with median swelling evenly convex and forming a diamond-shape, and also with oblique lateral swellings on posterior portion to the median one. Scutellum broad linguiform. Elytra long and slender, nearly 6.6 times as long as pronotal length, nearly 3.9 times (\mathcal{F}) or 3.8 times (\mathcal{P}) as long as the humeral width, weakly and arcuately emarginate at sides; punctures nearly rounded, sparse, forming 7 subirregular rows near middle; apices emarginate, with external teeth. Ventral surface finely shagreened, with moderate punctures at the sides of metasternum. Anal sternite not so broad; d: deeply concave, deepest at apical 2/5, apical margin weakly arcuate, with vestigial emargination at the middle; Q: provided with a median longitudinal furrow reaching just before apex, apical margin very weakly bisinuate, with weak projection at the sides.

Male genital organ as shown in Figs. 4 b and f. Median lobe 3/10 the length of elytra, thickened near the middle, weakly arcuate in apical half in profile; ventral plate broad, straightly narrowed near apex, then arcuately and weakly emarginate at the sides, and bluntly pointed; endophallus with basal falcate sclerites narrow, provided with weak transverse sclerites just before the falcate ones.

Measurements (in mm). 3° : BL 12.90–17.80 (M 15.53), AL 11.10–15.20 (M 13.20), HW 2.30–2.80 (M 2.63), PL 1.60–2.30 (M 2.01), PW 2.50–3.20 (M 2.80), PA 1.70–2.30 M 2.01), PB 2.20–2.80 (M 2.45), EL 10.40–14.60 (M 12.45), EW 2.70–3.70 (M 3.20). 9° : BL 16.50, AL 13.00, HW 2.70, PL 2.10, PW 3.00, PA 2.30, PB 2.50, EL 13.00, EW 3.40.

Specimens examined. 1 3, Mt. Lala Shan, Taoyuan ~ Taipei Hsiens, 9–V–1978, T. SHIMOMURA leg.; 1 2, same locality, 16–VI–1982, M. NISHIMURA leg.; 1 3, Pilu-Shenmu, Hualien Hsien, 31–VII–1986, Q.-G. Luo leg.; 1 3, Lienhwachi, Yuchi Hsiang, Nantou Hsien, 24–III–1981, T. SHIMOMURA leg.

Distribution. Taiwan; Jiangsu, Zhejiang, Shaanxi, Jiangxi, Fujian, Guangdong, Sichuan, Guizhou, Guangxi Zhuangzu Ziziqu, Yunnan.

Notes. Linda femorata is characterized by elongate hind body and slender unicoloured antennae. Though somewhat similar to *L. annulicornis* in the pubescent annuli of antennal segments, *L. femorata* has fairly slender body with almost even pronotal disc.

This species may be the rarest of the Taiwanese members of *Linda*, since we have been able to examine only four specimens recorded above. According to PU (1980),

198

the larvae of this species are known as a twig borer of apple trees in Continental China.

Linda (s. str.) pratti signaticornis SCHWARZER, stat. nov.

(Figs. 1 f-g, 2 e-f, 3 e-f, 4 c, g, 5 a-c)

Linda signaticornis SCHWARZER, 1925, Ent. Blätt., 21, p. 154; type localities: Kosempo, Kankau & Sokutsu. — MATSUSHITA, 1933, J. Fac. Agric. Hokkaido imp. Univ., 34, p. 424. — GRESSITT, 1947, Ann. ent. Soc. Am, 40, p. 554; 1951, Longicornia, 2, p. 607. — Yu & NARA, 1988, Longic. Beetles Taiwan, p. 93, pl. 20, fig. 33.

Redescription. Medium-sidzed species of rather robust body, with stout appendages. Colour reddish yellow to orange, with black elytra and legs; head largely reddish yellow, though always black near antennal insertions, eyes and most of mouthparts excluding labrum, sometimes marked with a pair of black triangular spots on middle of occiput; pronotum and scutellum yellow; elytra black; ventral surface reddish yellow to orange, infuscate near sides of metathorax; antennae black with reddish bases of segments 4–5; legs black except for reddish trochanters. Body clothed with pale or yellowish pubescence; head rather densely pubescent, usually with sparse blackish ones on posterior half, sides of frons and near vertex; pronotum densely with appressed pale yellow pubescence and a few long flying hairs; scutellum with pale hairs along margins; elytra densely with castaneous brown pubescence sparsely intermixed with flying hairs; antennae with basal half of segment 3 and base of 4 with silvery white pubescence,

Head rather large, slightly narrower than the maximum width of pronotum, closely provided with large punctures near vertex, finely rugose on apical half of frons, with strongly raised occiput; eyes not so approximate to each other, separated by 1/3 the width of head. Antennae fairly shorter than body, thick, moderately decreasing in length in apical segments; scape weakly stout, a little shorter than segment 3 and nearly equal to or a little longer than segment 4. Pronotum rather wide and moderately contracted to apex, finely rugose throughout and intermixed with a few moderate punctures; sides subparallel in front and just before base, with large and arcuate swellings; disc strongly convex, with a median longitudinal swelling and a pair of lateral ones rather obtuse. Scutellum rather small, deeply and triangularly concave at apex, polished on surface. Elytra moderately long though not so slender, nearly 5.5 times as long as pronotal length, nearly 3.51 times (\Im) or 3.23 times (\Im) as long as the humeral width, gently narrowed just before the middle, then moderately dilated to apices which are obliquely truncate or very shallowly emarginate; discal punctures nearly rounded and rather large, becoming shallower and more obvious towards apices, forming 7-8 subirregular rows near basal 1/3. Ventral surface finely shagreened, provided with coarse punctures at the sides of metathorax and basal abdominal sternite. Anal sternite relatively wide; A: disc weakly and rather broadly concave, gently declivous to apex, apical margin transversely truncate, with very small projections at the sides and with minute concavity at the middle; Q: a median longitudinal furrow reaching

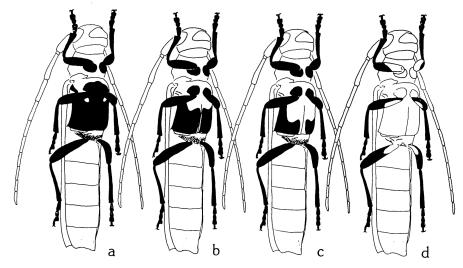


Fig. 5. Linda (s. str.) partti subspp., latero-ventral view, showing blackish parts. — a-c, L. pratti signaticornis SCHWARZER, stat. nov.; d, L. pratti pratti PIC.

apical 1/3, apical margin moderately arcuate and rather broadly projected at the sides, with small moderate emargination at the middle.

Male genital organ as shown in Figs. 4 c and g. Median lobe a little less than 3/10 the length of elytra, not so thick, and rather strongly arcuate in profile; ventral plate straightly narrowed just behind apex, then rather strongly attenuate, apex bluntly rounded; endophallus with basal falcate sclerites medium-sized and narrowly pointed externally.

Measurements (in mm). 3: BL 14.40–16.40 (M 15.30), AL 12.10–13.30 (M 12.34), HW 2.70–2.80 (M 2.74), PL 1.80–2.10 (M 2.04), PW 2.70–3.20 (M 2.92), PA 2.10–2.50 (M 2.18), PB 2.30–2.70 (M 2.52), EL 11.00–12.30 (M 11.86), EW 3.10–3.60 (M 3.38). 9: BL 15.20–17.20 (M 16.10), AL 11.60–13.50 (M 12.30), HW 2.90–3.20 (M 2.94), PL 2.00–2.30 (M 2.14), PW 2.90–3.50 (M 3.16), PA 2.30–2.60 (M 2.40), PB 2.60–3.10 (M 2.76), EL 12.10–13.20 (M 11.70), EW 3.40–4.10 (M 3.62).

Specimens examined. 1 Å, Wulai, Taipei Hsien, 13–VI–1971, K. KOJIMA leg.; 1 Å, same locality, 1–VI–1976, H. MAKIHARA leg.; 1 \bigcirc , nr. Suling, Fushing Hsiang, Taoyuan Hsien, 1–V–1981, T. SHIMOMURA leg.; 1 Å, Puli, Nantou Hsien, VI–1963; 1 Å, Nanshanchi, Jenai Hsiang, Nantou Hsien, 26–V–1975, K. AKIYAMA leg.; 1 \bigcirc , same locality, 20–V–1972, S. OKAJIMA leg.; 1 \bigcirc , same locality, 27–V–1972, M. SAKAI leg.; 1 \bigcirc , same locality, 27–IV–1978, T. NIISATO leg.; 1 \bigcirc , same locality, 10–VIII–1992, Q.-G. LUO leg.; 1 Å, Wushe, Jenai Hsiang, 10–VI–1975, M. KUBOTA leg.; 4 ÅÅ, 1 \bigcirc , Lushan, Jenai Hsiang, 7~8–VI–1976, H. MAKIHARA leg.; Sungkang, Jenai Hsiang, 25–IV– 1991, Q.-G. LUO leg.; 1 \bigcirc , Jiyuetan, Taichung Hsien, 23–V–1972, M. SAKAI leg.; 1 Å, Tehuashe, Jiyuetan, 3–V–1978, Y. KOMIYA leg.; 1 \bigcirc , 'Horai (Paolai)', 20–VII–1968, K. YAMAMOTO leg. Comparative specimens examined. Linda pratti pratti PIC: $2 \stackrel{\circ}{\supset} \stackrel{\circ}{\supset}$, Beijing Zhiwuyuan, Beijing Shi, China, $29 \sim 30$ -VI-1992, M. FUKAYA leg.

Distribution. Taiwan.

Notes. Linda signaticornis was originally described from Kosempo, Kankau and Sokutsu, and has so far been known as being endemic to Taiwan, According to our comparative examination, this species almost completely agrees with *L. pratti* occurring in North to Northeast China except for coloration of metathorax and legs. The continental species has entirely yellowish metathorax and basal parts of legs (coxae, trochanters and bases of femora) instead of blackish ones. Although the median lobe of male genital organ of *L. pratti* is rather weakly arcuate than in that of *L. signaticornis*, other fundamental characters are common between the two species. Therefore, *L. singnaticornis* should be regarded as a geographical race of *L. pratti*.

This is a relatively common species in most mountainous areas of Taiwan. The adults are usually found on the undersides of leaves of pear trees in orchard.

Acknowledgements

We would like to thank Dr. Shun-Ichi UÉNO of the National Science Museum (Nat. Hist.), Tokyo, for his constant guidance and reading through the manuscript of this paper, and Prof. Lizhong HUA of Zhongshan University, Guangzhou, and Assoc. Prof. Toshio KUMATA of Hokkaido University, Sapporo, for allowing us to examine the collection preserved in their laboratories. We are grateful to the following persons for data and loan of specimens in the course of this study: Drs. Midori FUKAYA, Keizo KOJIMA, Yoshiaki KOMIYA, Shingo NAKAMURA and Nobuo OHBAYASHI, Messrs. Michiaki HASEGAWA, Hiroshi MAKIHARA, Akira NISHIYAMA, Tarô OGURI, Tôru SHIMOMURA, Yoshinori SHINTANI, Masatoshi TAKAKUWA and Masaaki TOMOKUNI. Thanks are also due to Ms. Zhang HUA for assistance in laboratory works.

要 約

新里達也・日下部良康: 台湾産のハバビロリンゴカミキリ属の再検討. — ハバビロリンゴカミキ リ属 Linda は、リンゴカミキリ属 Oberea に比較的近縁で、体が幅広く前胸背板が瘤状に隆起する特 異な種によって構成されている. 台湾からこれまでに、KANO (1926)、GRESSITT (1947)、NAKAMURA ほか (1992) などにより、5 種の分布が知られていたが、これらは同物異名や誤認記録を含んでいた ために、正確な実態が明らかではなかった. こんかい、基準標本を含む台湾産や大陸産の標本の比較 検討を行なった結果、L. annulicornis MATSUSHITA、L. femorata (CHEVROLAT) および L. pratti signaticornis SCHWARZER、stat. nov. の3 種を真の台湾産として認めた. 本論文では、これら3 種 の再記載を行なうとともに、これまで台湾から記録のある種のうち、L. subannulata BREUNING を L. annulicornis のシノニムとして、また L. signaticornis SCHWARZER を中国北部〜東部に分布す る L. pratti PIC の亜種として、それぞれ扱った. さらに、KANO (1926) による L. fraterna (CHEVROLAT) の記録を誤認として台湾産から除外した.

Literature Cited

- BREUNING, S. V., & K. OHBAYASHI, 1964. Nouveaux Lamiaires du Japon (2° partie) (Coleoptera, Cerambycidae). Bull. Jpn. ent. Acad., 1: 27–30.
- GRESSITT, J. L., 1942. New longicorn beetles from China, IX (Coleoptera; Cerambycidae). Lingnan nat. Hist. Surv. & Mus. Spec. Publ., (3): 1-8, pl. 1.
- ------ 1947. Chinese longicorn beetles of the genus Linda (Coleoptera: Cerambycidae). Ann. ent. Soc. Am., 40: 545-555.
- ——— 1951. Longicorn beetles of China. Longicornia, 2: 1-667, 22 pls.
- Hua, L.-Z., 1982. A Check List of the Longicorn Beetles of China, Coleoptera: Cerambycidae. 159 pp. Zhongshan University, Guangzhou.
 - ----- 1992. Coleoptera, Cerambycidae. Iconography of Forest Insect in Hunan, China, 467-523.
- -----, H. NARA & C.-K. YU, 1993. Longicorn Beetles of Hainan and Guangdong. 320 pp. Muh-Sheng Museum of Entomology, Taiwan.
- KANO, T., 1926. Notes on longicorn Coleoptera from Japan VI. Trans. nat. Hist. Soc. Formosa, 18: 118-128.
- MATSUSHITA, M., 1933. Beitrag zur Kenntnis der Cerambyciden des japanischen Reichs. J. Fac. Agric. Hokkaido imp. Univ., 34: 157-445, pls. 1-5.
- MITONO, T., 1940. A list of longicorn-beetles from Kwantung Province. Trans. Kansai ent. Soc., 10 (2): 16-24.
- NAKAMURA, S., H. MAKIHARA & A. SAITO, 1992. Check-list of Longicorn-Beetles of Taiwan. 126 pp. Hiba Soc. Nat. Hist., Hiroshima.
- PIC, M., 1924. Nouveautés diverses. Mél. Exot.-Ent., (41): 1-32.
- Pu, F.-J., 1980. Coleoptera: Cerambycidae (II). Economic Insect Fauna of China, 19: 1-146, pls. 1-12.
- SCHWARZER, B., 1925. Sauters Formosa-Ausbeute (Cerambycidae. Col.) (Subfamilie Lamiinae.). Ent. Blätt., 21: 145–154.

THOMSON, M. J., 1866. Systema Cerambycidarum. 559 pp.

- 1868. D'une classification nouvelle de la famille des Cérambycides (Insectes Coléoptères). Physis. Quatrième Partie. XI., 1–208.
- YU, C.-K., & H. NARA, 1988. Longicorn Beetles of Taiwan. 112 pp. Muh-Sheng Museum of Entomology, Taiwan.