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# Notes on distribution and synonymy of sericid beetles of Taiwan, with descriptions of new species (Coleoptera, Scarabaeoidea: Melolonthidae)

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**Abstract** – A study of an assemblage (72 taxa) of Sericini from Taiwan (Republic of China) resulted in five new combinations and 12 new synonymies: *Eumaladera latitibia* (NOMURA, 1974) comb. n., *Eumaladera nitididorsis* (KOBAYASHI, 1991) comb. n., *Microserica fukiensis* (FREY, 1972) comb. n. (= *Microserica inornata* NOMURA, 1974, syn. n.), *Cephaloserica parva* MOSER, 1908 (= *Cephaloserica kojimai* MIYAKE, 1991, syn. n.), *Pachyserica nantouensis* KOBAYASHI et YU, 1993 (= *Pachyserica similis* KOBAYASHI et YU, 1993, syn. n.), *Pachyserica pulvinosa* (FREY, 1972) comb. n. (= *Serica albosquamosa* FREY, 1972, syn. n.; = *Pachyserica taiwana* NOMURA, 1974, syn. n.), *Paramadera kiyoyamai* NOMURA, 1974 (= *Paramadera babai* KOBAYASHI, 1991, syn. n.), *Microserica nitidipyga* NOMURA, 1974 (= *Gastroserica formosana* KOBAYASHI, 1991, syn. n.), *Trioserica macrophthalma* (MOSER, 1918) comb. n. (= *Selaserica rufocastanea* KOBAYASHI, 1980, syn. n.), *Serica formosana* MOSER, 1915 (=*Maladera curvifemora* NOMURA, 1974, syn. n., = *Maladera brevipilosa* KOBAYASHI, 1985, syn. n.), *Paramaladera aserrata* KOBAYASHI et NOMURA, 1979 (= *Paramaladera cariniprinceps* KOBAYASHI et NOMURA, 1979, syn. n.; = *Paramaladera wulaiana* KOBAYASHI, 1980, syn. n.). New distributional data are given. Six new species are described: *Taiwanoserica chunlinlii* sp. n., *Neosericania habonensis* sp. n., *Trichomaladera infortunata* sp. n., *Eumaladera paralatitibia* sp. n., *Eumaladera puliensis* sp. n., *Eumaladera fushanica* sp. n. *Maladera satoi* (NIIJIMA et KINOSHITA, 1927) comb. n. is removed from synonymy with *Maladera invenusta* (MOSER, 1918). Lectotype of *Cephaloserica parva* MOSER, 1908 is designated. *Trioserica lepichaeta* MOSER, 1922 is fixed as type species of *Trioserica* MOSER, 1922. With 35 figures.

**Key words** – Coleoptera, Melolonthidae, Sericini, Taiwan, new species, new synonymy, distributional data.

## INTRODUCTION

The sericid beetle fauna of Taiwan is highly speciose, with 111 hitherto described species, and is one of the best known in Asia. Since the important contribution of NOMURA (1974), numerous papers with descriptions of new taxa have been published (KOBAYASHI 1975, 1978, 1980, 1983, 1985, 1988, 1990, 1991*a*, *b*, 1993, 2001, KOBAYASHI & YU 1993, 1997, 2000, HIRASAWA 1985, 1991, MIYAKE

1986, 1989, MIYAKE *et al.* 1991, 1994). YU *et al.* (1998) gave a summarizing overview of Taiwanese Sericini with a ckecklist and a key for determination of genera and species. Although most species may be considered endemic to Taiwan, exact distributions of many species is very poorly known.

During revisionary work with the Oriental and eastern Palearctic Sericini, interesting data concerning Taiwanese species have been accumulated and are presented in this paper. Included are several new synonymies revealed through review of type material and the descriptions of eight previously unknown species.

*Abbreviations of depositories* – BMNH – The Natural History Museum, London; BPBM – Bernice P. Bishop Museum, Hawaii; CA – Coll. D. AHRENS, Eberswalde; CCLL – Coll. C.-L. LI, Taipei; CF – Coll. G. FREY, at Naturhistorisches Museum Basel; CN – Coll. M. NIKODÝM, Prague; CNA – Coll. A. NAPOLOV, Riga; CP – Coll. P. PACHOLÁTKO, Brno; DEI – Deutsches Entomologisches Institut, Eberswalde-Finow; HAHC – Coll. HENRY and ANNE HOWDEN, Ottawa; HMNH – Hiwa Museum for Natural History; HNHM – Hungarian Natural History Museum, Budapest; MHNG – Muséum d'Histoire Naturelle de Geneve; MNHN – Muséum National d'Histoire Naturelle, Paris; USMB – Überseemuseum, Bremen; ZMHB – Zoologisches Museum der Humboldt-Universität, Berlin.

## *Lasioserica (?) antennalis* NOMURA

*Lasioserica antennalis* NOMURA, 1974: 83.

*Material examined* – 1 ex.(♂) "Taiwan Taichung Hsien, Hsuehshan Chi-Ka 2460 m 6.V.91 A. Smetana (T 67)" (MHNG), 1 ex. "Taiwan, Taichung Prov. Anmashan region, 1650 m 20.VI.1997 B. Herczig & L. Ronkay" (HNHM), 2 ex. "Taiwan Taichung Hsien, Anmashan 2120 m 1.V.1990 A. Smetana [T36]" (MHNG), 1 ex. "Taiwan Taichung Hsien, Anmashan 2230 m 30.IV.–4.V.90 A. Smetana [T32]" (MHNG), 2 ex. "Taiwan: Meifeng 26.IV.1983 H. Townes 2150 m" (HAHC), 2 ex. "Taiwan: Meifeng 15., 22.V.1983 H. Townes 2150 m" (HAHC), 4 ex. "Taiwan: Meifeng 3.V.1983 H. Townes 2150 m" (HAHC), 3 ex. "Taiwan: Meifeng 10.V.1983 H. Townes 2150 m" (HAHC), 4 ex. "Taiwan: Meifeng 29.V.1983 H. Townes 2150 m" (HAHC), 5 ex. "Taiwan, Prov. Tai-Tung, 2 km E of Hsingyang, 2200 m, 11–13.03.1996 leg.: Gy. Fábián & L. Németh" (HNHM), 1 ex. "Taiwan, Nantou county, Hohuachi, between Lishan and Tayuling, at the road No., 8, 1950 m,/ 24°11'N, 121°16'E, at light, 31.III.2000, A. Kun & L. Peregovits" (HNHM).

## *Amiserica rufidula* NOMURA

*Amiserica rufidula* NOMURA, 1974: 84.

*Material examined* – 5 ex. (♂) "Taiwan: Tao Yuan Co. 65 km N Crossing Highway alt. 1400 m 28.VIII.1993 Collr. C. C. Chen" (CA), 1 ex. "NE Taiwan: I Lan Co. Tai Ping Shan, alt. 1700 m 1/VII/1991 Coll. C. H. Tseng" (CA), 1 ex. "Taiwan: Prov. Nan-Tou, Tayuling 2550 m, 07–08.1996 leg. Gy. Fábián & F. Nemes" (HNHM).

## *Amiserica shizumui* KOBAYASHI

*Amiserica shizumui* KOBAYASHI, 1980: 17.

*Material examined* – 1 ex. "Taiwan, Ilan Prov. Fu Shan Botanical Garden, 700 m/ at light 27–28.III.1997 G. Csorba & L. Ronkay" (HNHM).

## *Taiwanoserica lishana* NOMURA

*Taiwanoserica lishana* NOMURA, 1974: 85, 87.

*Material examined* – Paratype: 1 ♂ "Li-shan Taiwan 28.VII.1974 Y. Miyake" (HMNH).

## *Taiwanoserica kubotai* KOBAYASHI

*Taiwanoserica kubotai* KOBAYASHI, 1983: 16.

*Material examined* – 1 ♂ "Taiwan, Ilan Hsien Taipingshan 1895 m 13.VII.93 A. Smetana [T 149]" (HAHC).

## *Taiwanoserica anmashana* KOBAYASHI

*Taiwanoserica anmashana* KOBAYASHI, 1993: 71.

*Material examined* – 3 ex. "C. Taiwan: Nan Tou Co., Mt. Ha Bon alt. ca. 1500 m 12.VI.1988 collr. C. K. Yu" (CA), 2 ex. "Taiwan Taichung/ Anmashan, 2100 m 30.VII.97 leg. Y. Arita" (CA).

## *Taiwanoserica niitakana* (SAWADA)

*Serica niitakana* SAWADA, 1939: 49.
*Taiwanoserica niitakana* (SAWADA): NOMURA 1974: 86.

*Material examined* – 2 ex. "(near Hohuanshan) Nantou-Hsien Taiwan (3100 m) July 30th, 1983 Y. Shibata leg." (CA).

## *Taiwanoserica variegata* NOMURA (Figs 1–3)

*Taiwanoserica variegata* NOMURA, 1974: 86.

*Material examined* – 9 ex. "Rep. of China Formosa (Taiwan) A Li Shan 17–26.6.'95 P. Moravec" (CA, CP), 4 ex. "Formosa Alishan 2400 m 17–26.6.1995 Dalihod leg." (CP).

*Diagnosis of male* – Body length: 9.6 mm, width: 5.3 mm, elytral length: 6.7 mm. Antenna 10-segmented, club three segmented, straight, slightly longer than the remaining segments combined. Eyes small, ratio of diameter/ interocular width: 0.49. Pronotum widest at base, lateral margin posteriorly strongly curved, anterior two-thirds feebly curved, nearly straight and convergent anteriorly to weakly pointed anterior angles; proepisternum basally strongly produced and reflexed, deeply grooved transversely, lateral edge of pronotum sharp. Pygidium moderately convex, finely and densely punctate, without smooth midline, with few fine, long and dense hairs. Metatibia slender and long, subparallel, width/length ratio: 1/4.4, dorsally sharply edged, with two groups of spines, basal one behind middle, apical one at three fourth of metatibial length, basally with four single hairs with punctures having a serrated margin; outside longitudinally convex, glabrous, with moderately dense, fine punctures; ventral edge with two widely separated fine hairs, basal one at one fourth, apical one at three fourth of metatibial length, inside sparsely, finely punctate, apex interiorly near tarsal articulation shallowly concave, nearly truncate. Tarsal segments dorsally shallowly and moderately densely punctate, ventrally with sparse short setae; metatarsal segments laterally moderately edged and with a strongly serrated ridge ventrally, dorsally not longitudinally grooved, first metatarsomere distinctly shorter than the two following segments combined and more than one-third longer than the upper tibial spur. Protibia long, bidentate, external edge at middle convexly widened, claws of anterior symmetrical, normally developed. Aedeagus: Figs 1–3.

*Notes* – The original description of this species was based on a single female from Alishan. Although the type was not available for study, the specimens listed here most probably represent *T. variegata.* They agree closely with the original description and were collected from the type locality.

## *Taiwanoserica gracilipes* NOMURA

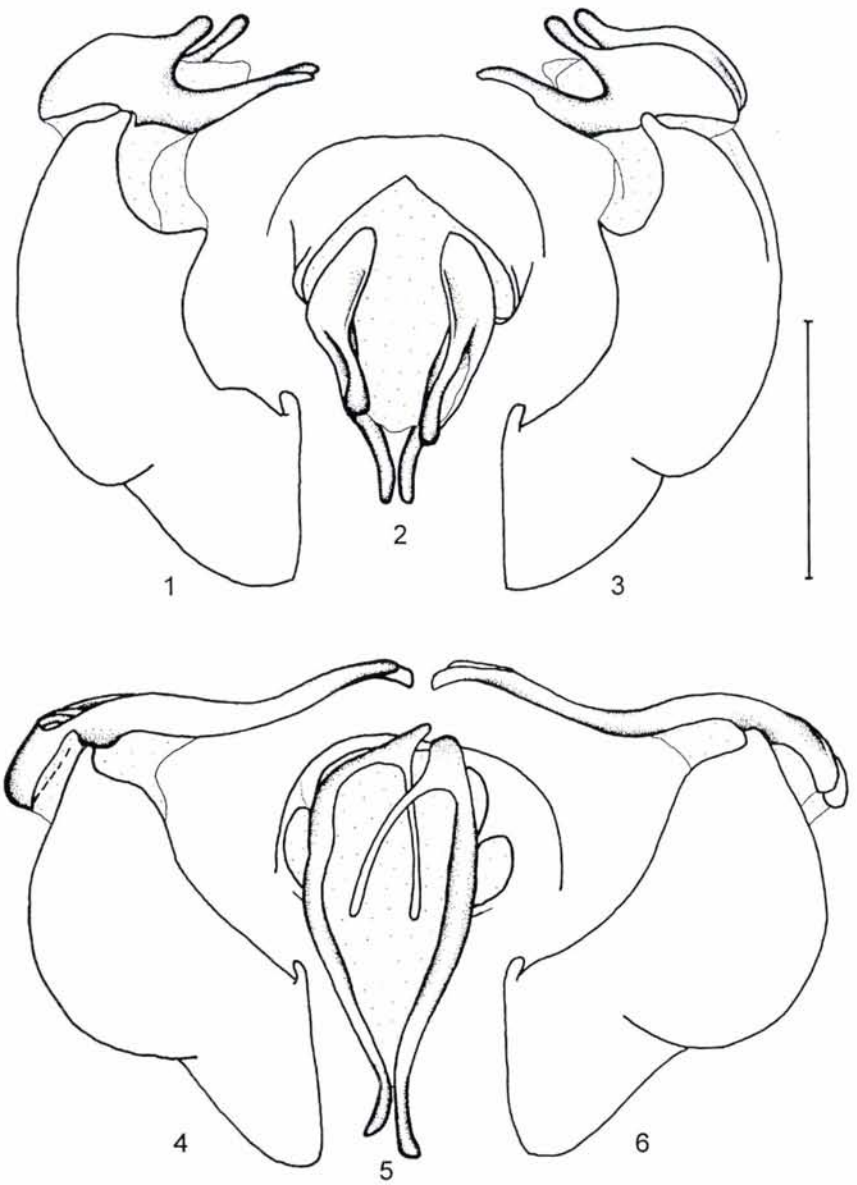
*Taiwanoserica gracilipes* NOMURA, 1974: 88.

*Material examined* – 11 ex. "Taiwan: Tai Chung Co. Yun Li, near Nan Hu Da Shan alt. 2600 m. 5–9/VIII/1990 Collr. C. L. Li" (CA).

## *Taiwanoserica elongata* NOMURA

*Taiwanoserica elongata* NOMURA, 1974: 88.

*Material examined* – 2 ex. "Taiwan Taichung/ Anmashan, 2100 m 30.VII.97 leg. Y. Arita" (CA), 1 ex. "Taiwan Taichung/ Anmashan, 2100 m 27.VII.97 leg. Y. Arita" (CA).




**Figs 1–6. 1–3:** *Taiwanoserica variegata* NOMURA, 1974 (Taiwan: A Li Shan). **4–6:** *Taiwanoserica chunlinlii* sp. n. (Holotype: Taiwan: An Ma Shan); 1, 3, 4, 6 = aedeagus lateral, 2, 5 = parameres dorsal (scale: 1 mm)

## **Taiwanoserica chunlinlii** sp. n.
(Figs 4–6)

*Type material* – Holotype: ♂ "Taiwan: Tai Chung Co. An Ma Shan, alt. 1800 m 2/VI/1991 Collr. C. L. Li" (CA). Paratype: 1 ♀ – same data as holotype (CA).

*Description* – Length: 9.0 mm, width: 4.8–5.1 mm, length of elytra: 6.3–6.7 mm. Body oblong, reddish brown, antenna and elytra yellow with dark spots, dorsal surface dull , except a few fine hairs on head and elytra almost glabrous.

Labroclypeus transversely subtrapezoidal, widest at base, lateral margins straight and slightly convergent, anterior angles feebly rounded, margins weakly reflexed, anteriorly deeply but not widely sinuate medially; surface flat and dull in male, shiny in female, coarsely and densely punctate, with numerous fine erect hairs, some fine, bare punctures occur between the coarse punctures; frontoclypeal suture feebly incised and weakly curved; smooth area in front of eye approximately 1.5 times as wide as long; ocular canthus moderately long and very slender, with a few very fine punctures and a terminal hair. Frons with fine, moderately dense punctures partly vanishing under the thick dull cover. Eyes moderately large, ratio diameter/interocular width: 0.66 (♂), 0.58 (♀). Antenna yellow, 10-segmented; club with three segments, in male 1.5 times as long as remaining segments together, in female a little shorter than remaining segments together. Mentum weakly elevated, anteriorly flattened.

Pronotum transverse, widest in posterior third, lateral margins uniformly strongly curved, weakly narrowed to very strongly rounded posterior angles, more strongly narrowed in anterior half, anterior angles protruding and right-angled, moderately rounded at the tip, anterior margin medially with broad marginal line and strongly convexly produced; surface densely and finely punctate, punctures partly with extremely fine setae; anterior and lateral border setaceous. Scutellum slender, triangular, with fine and dense punctures, smooth medially in basal half.

Elytra oblong, feebly widened posteriorly, striae finely impressed and finely and densely punctate, intervals flat, with very fine and sparsely scattered punctures concentrated along striae, intervals with few fine, moderately long, slender scale like hairs; epipleural edge fine, ending at strongly curved external apical angle of elytra, epipleura densely setaceous, apical border chitinous, covered with very short microtrichomes.

Ventral surface dull, finely and not densely punctate, sparsely hairy, metacoxal plates laterally with a few long hairs; each abdominal sternite with a transversal row of coarse punctures bearing short hairs between fine and dense punctation. Mesosternum between mesocoxae half as wide as mesofemur. Ratio of length of metepisternum/ metacoxa: 1/1.39. Pygidium moderately convex, finely and densely punctate, without smooth midline, with few fine, long and dense hairs.

Legs slender; femora with two longitudinal rows of hairs, finely and moderately densely punctate between the rows; metafemur shiny, anteriorly sharply edged, behind anterior edge with a continuously serrated line, posterior margin in apical half dorsally serrated, ventrally completely serrated, in basal half with a few long hairs. Metatibia slender and long, widest at apex, ratio of width/ length: 1/4.4, dorsally sharply edged, with two groups of spines, basal one behind middle, apical one at three-fourth of metatibial length, basally with four single hairs with punctures having a serrated margin; outside longitudinally convex, with moderately dense, fine punctures and glabrous; ventral edge with two widely separated fine hairs, basal one at one-fourth, apical one at three-fourth of metatibial length, inside sparsely scattered, finely punctate, apex interiorly near tarsal articulation shallowly concavely truncate. Tarsal segments dorsally shallowly and moderately densely punctate, ventrally with sparse, short setae; metatarsal segments laterally moderately edged and ventrally with

a strongly serrated ridge, dorsally strongly longitudinally grooved and rugose, first metatarsomere distinctly shorter than the two following segments combined and more than one-third longer than the upper tibial spur. Protibia long, bidentate, external edge behind middle bluntly widened, protarsal claws symmetrical, normally developed.

Aedeagus: Figs 4–6.

*Notes* – In females, the anterior angles of the pronotum are less strongly rounded. The male genital morphology is rather similar to that of *T. niitakana* (SAWADA), but the parameres differ significantly in shape. Externally, *Taiwanoserica chunlinlii* sp. n. can be distinguished from *T. niitakana* (SAWADA) by broadly rounded posterior angles of pronotum, the 10-segmented antenna with a longer club in male, as well as the densely setose frons.

*Derivatio nominis* – The species is dedicated to its collector, the authority of Melolonthinae, CHUN-LIN LI (University of Taipei).

## *Gastroserica bicolor* NIJIMA et KINOSHITA

*Gastroserica bicolor* NIJIMA et KINOSHITA, 1923: 36; NOMURA 1974: 92.

*Material examined* – 1 ex. "Taiwan: Hsin Chu Co. Xi Ma Ku Xi ca. 1550 m, by light 31/V–1/VI/2000 collr. C.L. Li" (CA), 3 ex. "Taiwan: Nan Tou Co., Bei Dong Yen Shan, alt. 1750 m 1/VI/1991 Collr. C.L. Li" (CA), 1 ex. "Taiwan: I Lan Co., Fu Shan Botanical Garden, alt 600 m 22/IV/1995 Collr. C. L. Li" (CA), 7 ex. "Chuchen/ Nantou, Taiwan 19.VI.1994 H. Kobayashi leg." (CA).

## *Microserica fukiensis* (FREY), **comb. n.**

*Gastroserica fukiensis* FREY, 1972: 174.
*Microserica inornata* NOMURA, 1974: 98, **syn. n.**

*Type material* – Holotype (*fukiensis*): ♂ "Kuatun (2300 m) 27, 40 n.Br. 117, 40 ö.L. J. Klapperich 20.5.1938 (Fukien)/ Type *Gastroserica fukiensis* G. Frey 1971" (CF). Paratypes: 1 ♂, 1 ♀ "Kuatun (2300 m) 27, 40 n.Br. 117, 40 ö.L. J. Klapperich 20.5.1938 (Fukien)/ Paratype *Gastroserica fukiensis* G. Frey 1971" (CF).

*Additional material examined* – Taiwan: 5 ex. "Taiwan: I Lan Co. Fu Shan Botanical Garden alt. 600 m 22/IV/1995 Collr. C. L. Li" (CA), 1 ex. "Taiwan, Ilan Prov., Fu Shan Bot. Garden, LTER site, 700 m 24°45'13''N, 121°35'39''E, 8–9.IV.1997, leg. L. Peregovits & A. Kun" (HNHM), 1 ex. "Taiwan: Tai Chung Co. An Ma Shan, alt. 1800 m 2/VI/1981 Collr. C. L. Li" (CA), 61 ex. "Taiwan: Nan Tou Co. Bei Dong Yen Shan, alt. 1700–1750 m 1.VI.1991 C. L. Li" (CA), 2 ex. "Taiwan: Hwa Lien Co. Wan Jung logging Road ca 22 k., alt. 1350 m 30/VI/1998 light trap Collr. C. L. Li" (CA), 1 ex. "Taiwan: Hsin Chu Co., Xi Ma Ku Xi alt. ca. 1550 m, by light, 31/V–1/VI/2000 collr. C. L. Li"

(CA), 5 ex. "Chuchen/ Natou Taiwan 19.VI.1994 H. Kobayashi leg." (CA), 3 ex. "Taiwan: Taipei Prov. Pi Hu 450 m 24°54'02''N, 121°45'27''E, 4–5.IV.1997 leg. Peregovits & A. Kun" (HNHM), 2 3ex. "Taiwan, Pingtung Prov., 300 m, Kenting N.P., Kenting Forest Recr. Area,/ 21°57'62''N, 120°48'89''E, 17–18.IV.1997 leg. L. Peregovits & A. Kun" (HNHM), 1 ex. "Rep. of China Formosa (Taiwan) A Li Shan 17–26.6.95 P. Moravec" (CP). Fujian: 1 ex. "Fukien, S. China Shaowu, Tachulan 1000 m T. Maa/ 16.V.43" (BPBM).

*Notes* – The parameres of the holotype of *Microserica fukiensis* (FREY), the specimens of Taiwanese populations examined by the author, and the illustrations provided for *M. inornata* by NOMURA (1974) are identical in shape.

## *Microserica bisignata* NOMURA

*Microserica bisignata* NOMURA, 1974: 98, 99.

*Material examined* – 2 ex. "Taiwan: Hain Chu Co., Yu Lao alt. 1400 m, 25.IV.1993 Collr. I. S. Hsu" (CA), 1 ex. "Nan Tou Co., Bei Dong Yen Shan, alt. 1750 m 1/VI/1991 Collr. C. L. Li" (CA), 1 ex. "Taiwan: Hsin Chu Co., Xi Ma Ku Fu alt. ca. 1550 m 27–28/VI/2000 collr. C. L. Li" (CA), 1 ex. "Taiwan: Hsin Chu Co., Xi Ma Ku Xi alt. ca. 1550 m, by light, 31/V–1/VI/2000 collr. C. L. Li" (CA).

## *Microserica nitidipyga* NOMURA

*Microserica nitidipyga* NOMURA, 1974: 98, 99.
*Gastroserica formosana* KOBAYASHI, 1991*b*: 217, **syn. n.**

*Material examined* – 1 ex. "Kuatun (2300 m) 27, 40n. Br. 117, 40ö. L. J. Klapperich 12.5. 1938 (Fukien)/ *G. herzi* Heyd. det. G. Frey 1972" (CF).

*Notes* – Parameres shown in original descriptions of these two taxa are identical in shape. The species was previously unknown from Fujian.

## *Trioserica macrophthalma* (MOSER), **comb. n.**
(Figs 7–9)

*Neoserica macrophthalma* MOSER, 1918: 219.
*Selaserica rufocastanea* KOBAYASHI, 1980: 18, **syn. n.**
*Neoserica sauteri* MOSER, in litteris.

*Type material* – Syntypes (*macrophthalma*): 1 ♂ "Kosempo Formosa H. Sauter 1912/ Paratypus/ *Neoserica sauteri* Moser [not an original label of MOSER]" (BMNH), 1 ♂ "Kosempo

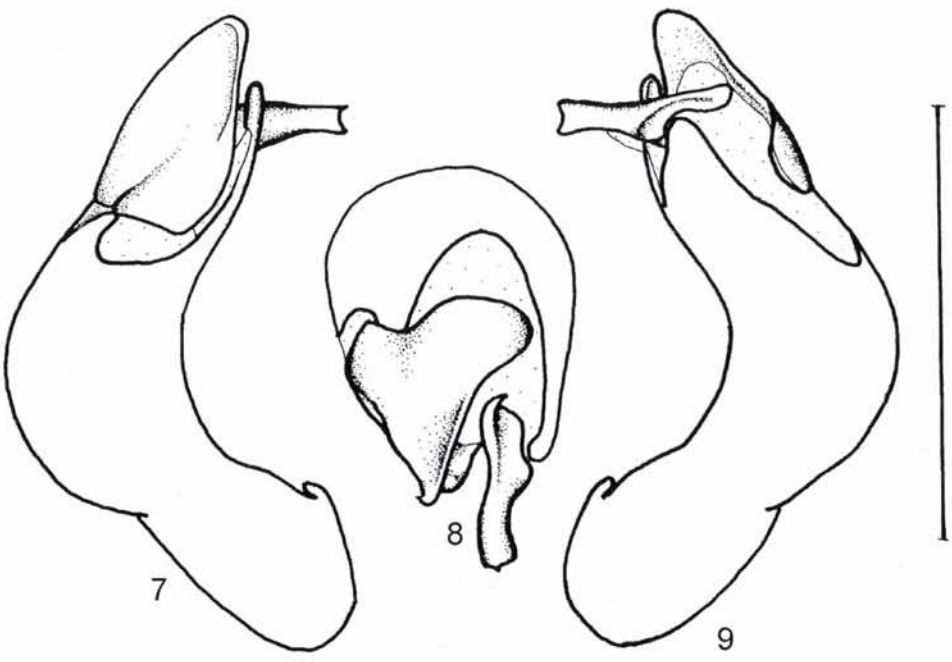
Formosa H. Sauter 1912/ 22.V./ Syntypus/ *Neoserica sauteri* Mos. J. Moser sp. n." (DEI), 3 ♂♂, 1 ♀ "Kosempo Formosa H. Sauter 1912/ 22.V./ Syntypus" (DEI).

*Additional material examined* – 1 ex. (♂) "Taiwan, Pingtung Prov. 10 km E of Mutan, 400 m, 12.VI.1997 B. Herczig & L. Ronkay" (HNHM), 6 ex. "Taiwan: Wushe 22., 29.V.1983 H. Townes 1150 m" (HAHC),

*Notes* – Aedeagus: Figs 7–9. *Selaserica rufocastanea* KOBAYASHI is a junior synonym of *Trioserica macrophthalma* (MOSER) (= *N. sauteri* MOSER, in litteris). The slight differences in the parameres are not significant and should be regarded as individual variation.

The type species of *Trioserica* MOSER, 1922 is fixed here: *Trioserica lepichaeta* MOSER, 1922. Syntype (examined): 1 ♂ "Philippinen Mindoro Subaan" (ZMHB).

The species *Selaserica antennalis* NOMURA, 1974 and *Selaserica alternata* NOMURA, 1974 were not examined during this study, but on the basis of NOMURA's drawings accompanying the original descriptions, these species should also be placed into *Trioserica*. In addition, a revision of the species placed in *Trioserica* by MOSER (1922) is needed.




**Figs 7–9.** *Trioserica macrophthalma* (MOSER, 1918) (Syntype: Kosempo); 7, 9 = aedeagus lateral, 8 = parameres dorsal (scale: 1 mm)

## *Pachyserica nigroguttata* (BRENSKE)

*Serica nigroguttata* BRENSKE, 1897: 389.
*Pachyserica nigroguttata* (BRENSKE): NOMURA 1974: 97, 98; KOBAYASHI & YU 1993: 354.

*Type material* – Syntypes: 1 ♂ "Kiukiang May 1887 A.E. Pratt/ *nigroguttata* m./ coll. Brenske" (ZMHUB), 1 ♂ "Hills near Kiukiang IV. V. VI. VII./ *Serica nigroguttata* typ. Brsk./ Typus/ coll. Brenske", 2 ♀♀ "Hills near Kiukiang IV. V. VI. VII./ *nigroguttata* m./ coll. Brenske" (ZMHUB), 1 ♂ "Hills near Kiukiang IV. V. VI. VII./ Coll. C. Felsche Kauf 20, 1918/ *nigroguttata* Type Brsk.", 2 ♂♂, 4 ♀♀ "Hills near Kiukiang IV. V. VI. VII./ Coll. C. Felsche Kauf 20, 1918", 2 ♂♂ "Hongkong/ Coll. C. Felsche Kauf 20, 1918/ *Serica nigroguttata* China n. sp." (SMTD), 1 ♀ "Hills near Kiukiang IV. V. VI. VII./ Musuem Paris Kiu-kiang/ Brenske 1896/ Cotype/ *Serica nigroguttata* cotyp. Brsk." (MNHN), 1 ♂ "Foochau April 1886/ Ex Museo H.W. Bates 1892/ *nigroguttata* ♂ Brsk./ E. Brenske 1896/ Museum Paris ex Coll. R. Oberthür" (MNHN), 1 ♀ "Formosa/ Ex Museo H.W. Bates 1892/ ♀/ *nigroguttata* var. Brsk./ Brenske 1896/ Museum Paris ex Coll. R. Oberthür" (MNHN).

*Additional material examined* – China: 1 ex. "Chine 18.IV.46 Kuatun, Fukien leg. Tschung-Sen" (NHMG), 1 ex. "Chine 22.VII.46 Kuatun, Fukien leg. Tschung-Sen" (NHMG), 1 ex. "Honkong" (SMTD), 2 ex. "China Tsha-jiu-san, 5.V.11 Mell. S. V." (ZMHUB), 5 ex. "Kiantschou China" (ZMHUB), 1 ex. "Kiantschou China" (SMTD), 1 ex. "China Foochow M. S. Yang/ Pres. by Com. Inst. Ent. B. M. 1948–152" (BMNH), 1 ex. "China Sichuan Guanxian 550 m 21–26.Jun 1992 M. Bok lgt." (SMNS), 1 ex. "China prov. Fujian bor. occ. Shaowu env. 25 km road Shaowu-Taining 13.–16.6.*1991* leg. M. Nikodým" (CN). Taiwan: 1 ex. "Wushe, C. Formosa 29.IV.1973, leg. N. Ohtani" (HNHM), 1 ex. "Taiwan, Prov. Taoyuan, 14 km E of Fuhsing 800 m, 18.V.1995, 121°23'E, 24°50'N, leg. Márton Hreblay & Pál Stéger" (HNHM), 62 ex. "Taiwan: I Lan Co. Fu Shan Botanical Garden alt. 600 m 22/IV/1995 Collr. C. L. Li" (CA), 1 ex. "Formosa Kosempo Sauter VII.09" (MNHN), 1 ex. "N. Taiwan: Tao Yuan Co. Mt. Fu Fu Shan ca. 1450 m 27/V/2000 collr. C.L. Li" (CA), 2 ex. "Taiwan: Hsien Chu Co. Xi Ma Ku Xi ca. 1550 m, by light 31/V–1/VI/2000 collr. C.L. Li" (CA), 2 ex. "Taiwan: Hsin Chu Co., Xi Ma Ku Fu alt. ca. 1550 m 27–28/VI/2000 collr. C. L. Li" (CA), 1 ex. "Taiwan: Nan Tou Co., Nan Shan Xi, alt. 600 m 19/V/1991 Collr. C.L. Li" (CA). Vietnam: 6 ex. "Tonkin Montes Mauson April, Mai 2–3000' [feet] H. Fruhstorfer" (ZMHUB), 28 ex. "N. Vietnam (Tonkin) Tamdao 12.–24.5.1989 Pacholátko leg." (CP), 7 ex. "N Vietnam 21, 27N 105, 39E 70 km NW Hanoi, Tam Dao 9.–19.V.1996 900–1200 m Pacholátko & Dembický leg." (CP), 5 ex. "N. Vietnam/ Tonkin/ Tamdao pr. Vinhphu 2.–11.6.1985 Vit. Kuban leg." (CP), 2 ex. "Vietnam, Tam Dao 27.5.–2.6.1986 Vinh Phu prov. Jan Horak lgt." (CP), 1 ex. "Vietnam Tam Dao 3.6.1985 Vinh Phu prov. Strnad Jan lgt." (CP), 2 ex. "Vietnam N 1989 Tam Dao 12–24.5. Vinh Phu prov. Strnad Jan lgt." (CP, CN), 2 ex. "N Vietnam (Tonkin) pr. Vinh Phu 1990 Tam Dao 6.–9.V. Vit. Kuban leg." (CN), 1 ex. "Vietnam: Tamdao 80 km N of Hanoi Prov. Vinh Phu 900 m 20.4.1986" (SMNS), 1 ex. "Vietnam, Prov.Vinh Phu Tam Dao, 900 m, 20.–27.5.1985 ex. Coll. Mus. Moskau" (SMNS), 1 ex. "Vietnam N (Sa Pa) Lao Cai Prov., 250 km from Hanoi bearing 31°, Sa Pa vill. env. Hoang Lien Song Nat. Res. 16.–20.6.1998 1250 m leg. A. Napolov" (CNA), 1 ex. "Vietnam N (Sa Pa) Lao Cai Prov., 250 km from Hanoi bearing 31°, Sa Pa vill. env. Hoang Lien Song Nat. Res. 27.5.–16.6.1998 1250 m leg. A. Napolov" (CNA), 3 ex. "N. Vietnam 900 m Tam Dao 13.–24.5.1989 A. Olexa" (NHMB), 3 ex. "Vietnam, Tam Dao 27.5.–2.6.1986 Vinh Phu Prov. Jan Horak lgt." (NHMB), 4 ex. "Vietnam N, 1989 Tam Dao 12.–24.5. Vinh Phu prov. Strnad Jan lgt.." (NHMB), 1 ex. "Vietnam bor. Pr. Vinh Phu Tam Dao V. 1990 J. Picka lgt." (NHMB), 4 ex. "Vietnam N 1990 Sa Pa 11–19.VI., 1500 m Hong Lien Son prov. Strnad Jan lgt." (NHMB), 1 ex. "N. Vietnam 5–10.VI.1989 Tam Dao Brantlova lgt." (NHMB), 2 ex. "N. Vietnam 1991 75km NW Hanoi Tam

Dao 16.–23.5. leg. J. Strnad" (NHMW), 2 ex. "Tonkin Montes Mauson April, Mai 2–3000' [feet] H. Fruhstorfer" (MNHN). Thailand: 1 ex. "Thai 26/4–6/5.91 Umphang 500 m 16°04'N 98°53'E David Král lgt." (CK).

## *Pachyserica pulvinosa* (FREY), **comb. n.**

*Serica pulvinosa* FREY, 1972: 168.
*Serica albosquamosa* FREY, 1972: 163, **syn. n.**
*Pachyserica taiwana* NOMURA, 1974: 97; KOBAYASHI & YU 1993: 354, **syn. n.**

*Type material* – Holotype: ♂ "Kuatun (2300 m) 27, 40 n. Br. 117, 40 ö. L. J. Klapperich 27.5.1938 (Fukien)/ Type *Serica albosquamosa* G. Frey 1972" (ZMFKB). Paratypen: 1 ♀ -same data as holotype, 1 ♀ "Kuatun (2300 m) 27, 40 n. Br. 117, 40 ö. L. J. Klapperich 24.5.1938 (Fukien) / Paratype *Serica albosquamosa* G. Frey 1972", 1 ♀ "Kuatun (2300 m) 27, 40 n. Br. 117, 40 ö. L. J. Klapperich 1.6.1938 (Fukien) / Paratype *Serica albosquamosa* G. Frey 1972" (ZMFKB).

*Additional material examined* – 2 ex. "Chang Yang near Ichang 6–8000 ft. June 88/ Coll. C. Felsche Kauf 20, 1918" (SMTD), 2 ex. "Kuatun (2300 m) 27, 40 n. Br. 117, 40 ö. L. J. Klapperich 27.5.1938 (Fukien) (CF), 1 ex. "Chusan Is. China J. J. Walker/ G. C. Champion Coll. B. M. 1927–409" (BMNH).

*Notes* – Based on the figures presented in the original description, *Pachyserica taiwana* (NOMURA, 1974) must be regarded as junior synonym of *Serica pulvinosa* FREY, the parameres of the two species being identical in shape. The type of *Serica albosquamosa* FREY shows no characters in external or genital morphology that permit its separation from *S. pulvinosa* FREY, consequently it is synonymized here, also.

In order to avoid nomenclatural difficulties potentially arising from as yet unresolved systematic problems in the genera *Pachyserica* BRENSKE, 1897 and *Serica* MACLEAY, 1819 (e.g. possible secondary homonymy with *Pachyserica albosquamosa* BRENSKE, 1898), preference should be given to the name *Serica pulvinosa,* instead of *Serica albosquamosa* FREY. A high degree of similarity in male genital morphology suggests that this species is most closely related to *Pachyserica nigroguttata* (BRENSKE).

## *Pachyserica brevitarsis* KOBAYASHI et YU

*Pachyserica brevitarsis* KOBAYASHI et YU, 1993: 355.

*Type material* – Paratype: 1 ♂ "Palin [..] Taoyuan, Taiwan 5th vii. 1991 C. Yu. leg./ Paratype *Pachyserica brevitarsis* Kobayashi et Yu, 1993" (CA, ex. coll. H. KOBAYASHI).

*Additional material examined* – 3 ex. "Taiwan: Hain Chu Co. Yu Lao alt. 1400 m 13/VII/1993 Collr. I. S. Hau", 7 ex. "Taiwan: Tao Yuan Co. Ba Lin alt. 650 m 22/VI/1990 Collr. I. S. Hau", 5 ex. "Taiwan: Tao Yuan Co. Hou Tzi, alt. 650 m 4–5/V/1991 Collr. I. S. Hau", 13 ex. "Taiwan: I Lan Co. Fu Shan Botanical Garden alt. 600 m 22/IV/1995 Collr. C. L. Li" (CA), 1 ex. "Taiwan: Hwa Lien Co., Hsin Bai Yang alt. 1600 m 8/VII/1991 Collr. C.L. Li" (CA), 1 ex. "Taiwan: Kao Shiung Co., Mei Larn logging Road, ca. 17.5 k[m] alt. 1500 m 21–22/VII/1998, light trap collr. C.L. Li" (CA), 4 ex. "Taiwan: Pingtung Prov. 10 km E of Mutan, 400 m at light, 7–8.IV.1997 G. Csorba & L. Ronkay" (HNHM), 1 ex. "Taiwan, Prov. Pingtung, 10 km SE Mutan, 470 m, 17–05.1997 leg. Gy. M. László & G. László" (HNHM), 1 ex. "Wushe, C. Formosa 29.IV.1973, leg. N. Ohtani" (HNHM), 1 ex. "C. Taiwan: Nan Tou Co., Mt. Ha Bon alt. ca. 1500 m 5/V/1988 collr. C.K. Yu" (CA), 1 ex. "Taiwan, Nantou Prov., Huisun Forest Area, 15 km N of Puli, 500 m,/ at light, 7.VI.1997, B. Herczig & L. Ronkay" (HNHM), 2 ex. "Taiwan, Pingtung Prov., 500 m, on the road No. 199, 22°14'38''N 120°51'51''E, 19.IV.1997, leg. L.Peregovits & A. Kun" (HNHM).

## *Pachyserica nantouensis* KOBAYASHI et YU

*Pachyserica nantouensis* KOBAYASHI et YU, 1993: 355.
*Pachyserica similis* KOBAYASHI et YU, 1993: 355, **syn. n.**

*Material examined* – 15 ex. "Taiwan, Ilan Prov., Fu Shan, Botanical Garden, 700 m/ at light 27–28.III.1997 G. Csorba & L. Ronkay" (HNHM), 1 ex. "Taiwan, Ilan Prov., Chihtuan, Ming-Chyr Forest Recr. Area/ 1200 m, at light, 30–31.III.1997, G. Csorba & L. Ronkay" (HNHM), 1 ex. "Taiwan, Nan Tou Co., Bei Dong Yen Shan, alt. 1700 m, 1/VII/1989 Collr. C. L. Li" (CA), 1 ex. "Taiwan: Tai Chung Co. An Ma Shan alt. 1800 m 2/VI/1991 Collr. C. L. Li" (CA), 1 ex. "Mautaisan 10.v.09/ Formosa A. E. Wileman. 1909–327" (BMNH), 1 ex. "Taiwan: Meifeng 29.V.1983 H. Townes 2150 m" (HAHC), 2 ex. "C. Taiwan: Nan Tou Co., Mt. Ha Bon alt. ca. 1500 m 5/V/1988 collr. C.K. Yu" (CA).

*Notes* – The shape of the posterior pronotal angle in this group is of little diagnostic value, the lateral margin and posterior angles of pronotum being quite variable. Due to highly similar genitalia (KOBAYASHI & YU 1993: 358), *Pachyserica nantouensis* KOBAYASHI et YU, *Pachyserica similis* KOBAYASHI et YU, and *Pachyserica striatipennis* MOSER (sensu KOBAYASHI & YU 1993) must be considered as a single species. The true *Pachyserica striatipennis* MOSER, 1908, described from northern Vietnam, is very distinct from that of KOBAYASHI & YU (1993: 358, fig 2 (5)), having a larger body size, and more oval body shape.

## *Pachyserica horishana* (NIJIMA et KINOSHITA)

*Serica horishana* NIJIMA et KINOSHITA, 1927: 3, 78.
*Pachyserica horishana* (NIJIMA et KINOSHITA): KOBAYASHI & YU 1993: 355.

*Material examined* – 4 ex. (♂) "Taiwan, Taichung, Hsien, Anmashan 2230 m 11.–15.V.92 A. Smetana (T 133)" (MHNG), 1 ex. "Taiwan: Tai Chung Co. An Me Shan, alt. 1800 m 2/VI/1991 Collr. C.L. Li" (CA), 2 ex. "Taiwan; Hwan Lien Co., Tze En, alt. 1700 m 3/V/, 15/VIII/1991 Collr. C. L. Li" (CA), 1 ex. "C. Taiwan: Nan Tou Co., Mt. Ha Bon alt. ca. 1500 m 5/V/1988 collr. C. K. Yu" (CA).

## *Serica* (s. str.) *fusifemorata* NOMURA, 1974

*Serica fusifemorata* NOMURA, 1974: 90, 91.

*Material examined* – 6 ex. "Taiwan: Alishan, Chiayi Hsien, 2400 m 12.–16.VI.1965/ T. Maa & K. S. Lin Collectors Bishop Museum" (BPBM), 1 ex. (♀) "Taiwan: (SC.) Arisan 2000 m VI–32 Gressit" (BPBM), 4 ex. "Taiwan, Taitung Prov. Hsiangyang, 2200 m, 13–14.VI.1997 B. Herczig & L. Ronkay" (HNHM), 1 ex. "Taiwan, Taichung Prov., Anmashan region, 2200 m, Tashueshan Forest Rec. Area, 19.VI.1997 B. Herczig & L. Ronkay" (HNHM), 9 ex. "Taiwan Taichung/ Anmashan, 2100 m 27.–30.VII.97 leg. Y. Arita" (CA), 1 ex. "Taiwan, Prov. Kaoshiung, 15 km W of Hsingyang, 1700 m, 7.VII.1996, G. Csorba & L. Németh" (HNHM), 2 ex. "Taiwan: Meifeng 29.V.1983 H. Townes 2150 m" (HAHC), 3 ex. "Taiwan: Kao Shiung Co., Mei Larn logging Road ca 17.5 k. alt. 1500 m/ 21–22/VII/1998 collr. C.L. Li" (CA), 3 ex. "Formosa Alishan 2400 m 17–26.6.1995 Dalihod leg." (CA, CP), 7 ex. "Taiwan: Tai Chung Co., An Ma Shan, alt. 1800 m, 2/VI/1991 Collr. C.L. Li" (CA), 3 ex. "Taiwan: Tai Chung Co., An Ma Shan, alt. 1800 m, 25/VII/1990 Collr. S.W. Yu" (CA), 4 ex. (♀) "Taiwan: Hwa Lien Co. Wan Jung logging Road ca 22k. alt. 1350 m, 30/VI/1998, light trap collr. C.L. Li" (CA), 3 ex. (♀) "Taiwan: Kao Shiung Co. Mei Larn logging Road, 35k. alt. 2000 m, light trap 3/VII/1998 coll. C.L.Li" (CA), 2 ex. "Taiwan: Hwa Lien Co. Tze En, alt. 1700 m 9/VII/1991 Collr. C.L. Li" (CA), 1 ex. (♀) "Taiwan, Taichung Hsien, Anmashan, 2150 m, 13.V.92 A. Smetana [T129]" (HAHC), 3 ex. "Taiwan, Hualien Prov., Yuanfeng 2750 m, 18.VI.1997, B. Herczig & L. Ronkay" (HNHM), 1 ex. "Taiwan, Ilan Prov., Suyuan-yakou, nr Pinan, 1550 m, 6.VI.1997, B. Herczig & L. Ronkay" (HNHM), 1 ex. "Taiwan, Hualien Prov., Kuanyan, 2400 m, at light, 9.VI.1997 B. Herczig & L. Ronkay" (HNHM).

## *Pseudosericania gibbiventris* KOBAYASHI

*Pseudosericania gibbiventris* KOBAYASHI, 1980: 15.

*Material examined* – 2 ex. "Taiwan: Tai Chung Co., Yun Lin, near Nan Hu Da Shan, alt. 2600 m/ 5–9/VIII/1990 Collr. C. L. Li" (CA).

## *Pseudosericania makiharai* HIRASAWA

*Pseudosericania makiharai* HIRASAWA, 1991: 172.

*Material examined* – 1 ex. (♂) "Taiwan Nantou Hsien, Shanlichi 1650 m 16.V.90 A. Smetana (T60)" (MHNG), 1 ex. "Taiwan, Hualien Prov., Yuanfeng 2750 m, 18.VI.1997, B. Herczig & L. Ronkay" (HNHM),

## *Nipponoserica quadrifoliata* NOMURA et KOBAYASHI

*Nipponoserica quadrifoliata* NOMURA et KOBAYASHI, 1979: 10.

*Material examined* – 17 ex. "Taiwan: Meifeng 15.V.1983 H. Townes 2150 m" (HAHC), 22 ex. "Taiwan: Meifeng 22.V.1983 H. Townes 2150 m" (HAHC), 20 ex. "Taiwan: Meifeng 29.V.1983 H. Townes 2150 m" (HAHC), 13 ex. "Taiwan: Meifeng 3.V.83 H. Townes 2150 m" (HAHC), 1 ex. "Taiwan: Meifeng 26.IV.1983 H. Townes 2150 m" (HAHC), 1 ex. "Taiwan: Meifeng 5.V.1983 H. Townes 2150 m" (HAHC), 1 ex. (♂) "Taiwan: Wushe 29.IV.1983 H. Townes 1150 m" (HAHC).

## *Nipponoserica nitididorsis* NOMURA
(Figs 10–11)

*Nipponoserica nitididorsis* NOMURA, 1974: 89.

*Material examined* – 2 ex. "Taiwan: Meifeng 15.V.1983 H. Townes 2150 m" (HAHC), 2 ex. "Taiwan: Meifeng 10.V.1983 H. Townes 2150 m" (HAHC), 2 ex. "Taiwan: Meifeng 3.V.1983 H. Townes 2150 m" (HAHC).

*Diagnosis of male* – Eyes large, ratio of diameter/ interocular width: 0.73. Antenna 9–segmented, club in male with four segments, 2.5times as long as remaining segments combined, strongly reflexed outward. Labroclypeus less wide than that of female. Male genitalia: Figs 10–11.

*Notes* – Previously known only from the female, described from Mt. Alishan.

## *Neosericania exisoclypeata* MIYAKE et YAMAYA, 1994

*Neosericania exisoclypeata* MIYAKE et YAMAYA, 1994: 37.

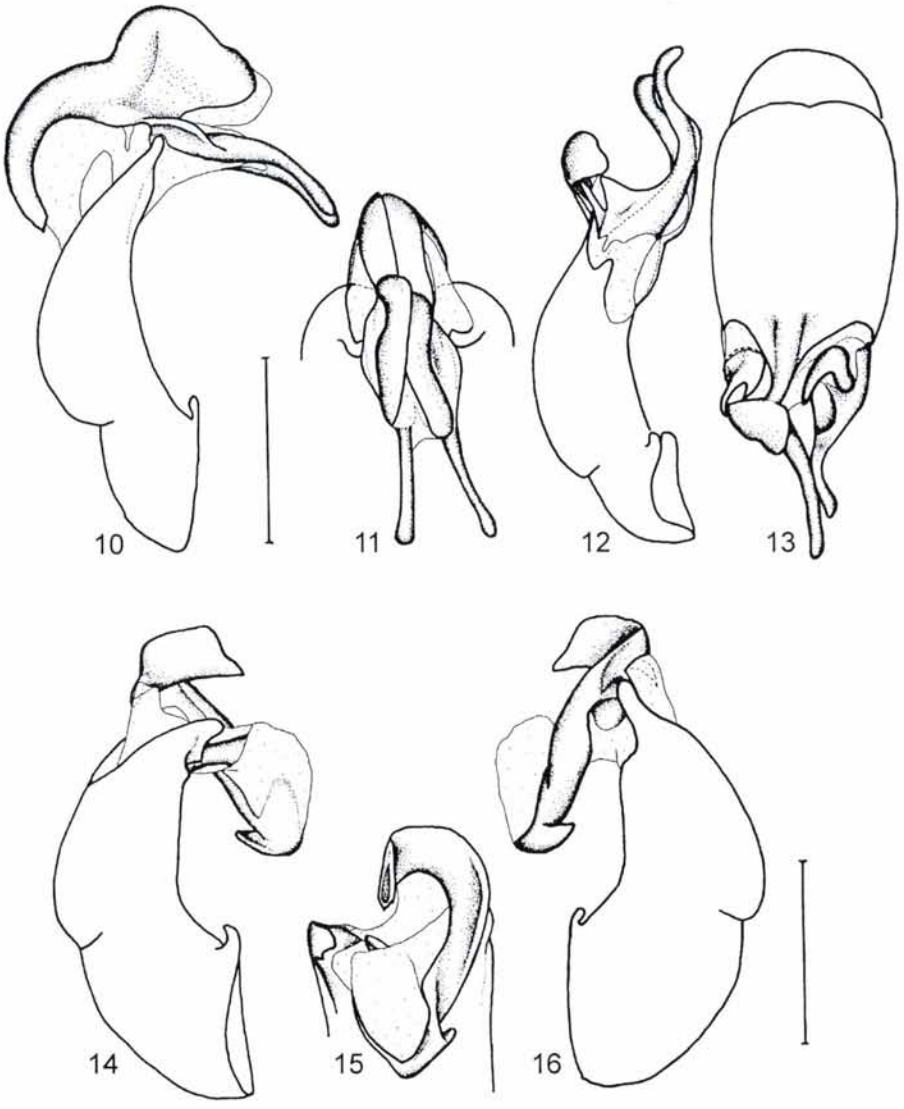
*Material examined* – 2 ex. "Taiwan, Kaohsiung Hsien, Peinatashan trail, 2080 m 6.VII.93 A. Smetana [T141, 140]" (CA).

## **Neosericania habonensis** sp. n.
(Figs 14–16)

*Type material* – Holotype: ♂ "C. Taiwan: Nan Tou Co., Mt. Ha Bon (... [chinese transciption]) alt. ca. 1500 m 12/VI/1988 collr. C. K. Yu" (CA).

*Description* – Length: 9.0 mm, width: 4.8 mm, length of elytra: 6.3 mm. Body oblong, yellowish brown, dorsal surface strongly shining, except a few fine hairs on head and elytra almost glabrous.

Labroclypeus subtrapezoidal, little wider than long, widest at base, lateral margins slightly curved, convergent; anterior angles strongly rounded, margins strongly reflexed, anteriorly deeply




**Figs 10–16. 10–11:** *Nipponoserica nitididorsis* NOMURA, 1974 (Taiwan: Meifeng). **12–13:** *Cephaloserica* (?) *parva* MOSER, 1908 (Taiwan: Ping Ling). **14–16:** *Neosericania habonensis* sp. n. (Holotype: C. Taiwan: Mt. Ha Bon); 10, 12, 14, 16 = aedeagus lateral, 11, 15 = parameres dorsal, 13 = aedeagus dorsal (scale: 1 mm)

and widely sinuate medially, anterior surface of labroclypeus deeply, concavely excavated within sinuation; surface flat, finely and coarsely, not densely punctate, larger punctures with fine erect hairs; frontoclypeal suture feebly incised but distinctly elevated and weakly curved; smooth area in front of eye almost twice as wide as long; ocular canthus very short and triangularly pointed, with very fine, not dense punctures and two long terminal hairs. Frons with fine, moderately dense punctures, in anterior half mixed with coarse ones bearing fine erect hairs. Eyes moderately large, ratio of diameter/ interocular width: 0.76. Antenna yellow, 10-segmented; club with four segments, 1.5-times as long as remaining segments together. Mentum weakly elevated, anteriorly feebly convex.

Pronotum transverse, widest at base, lateral border from base to middle subparallel, in anterior half weakly curved narrowed anteriorly, anterior angles protruding and not acute, slightly rounded at the tip, hind angles blunt, anterior margin medially without marginal line but strongly convexly produced; surface densely and coarsely punctate, punctures with microscopicaly fine hairs; anterior and lateral border setaceous. Scutellum slender, triangular, with fine and dense punctures, apical third and along lateral margins smooth.

Elytra oblong, distinctly widened posteriorly, striae distinctly impressed and very finely and densely punctate, intervals convex, with fine and sparsely scattered punctures concentrated along striae, odd intervals with few fine, long and erect hairs; epipleural edge fine, ending at strongly curved external apical angle of elytra, epipleura densely setaceous, apex chitinous, without microtrichomes.

Ventral surface shiny, finely and not densely punctate, metasternum sparsely hairy at sides, metacoxal plates only with microscopicaly fine hairs, laterally with a few longer ones; each abdominal sternite with a transversal irregular row of coarse punctures bearing thick hairs between fine and dense punctation, in the punctures with fine, moderately long hairs, at sides additionally with thick hairs. Mesosternum between mesocoxae half as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.33. Pygidium apically strongly convex, finely and densely punctate, medially with a smooth longitudinal line, with fine, long and dense hairs.

Legs slender, femora shiny, with two longitudinal rows of hairs, between them only finely and sparsely punctate; metafemur anteriorly sharply edged, without serrated line, posterior margin neither dorsally nor ventrally serrated, in basal half with a few long hairs. Metatibia slender and long, widest at apex, ratio width/ length: 1/3.6, dorsally sharply edged and apical two-thirds completely serrated, with two groups of spines, basal one at one-third, apical one at two-thirds of metatibial length; outside longitudinally convex, with sparsely scattered, fine punctures and fine short hairs; inside sparsely scattered, finely punctate, apex interiorly near tarsal articulation deeply truncate; ventral and apical margin strongly serrated. Tarsal segments dorsally impunctate, ventrally with sparse short setae; metatarsal segments sharply edged laterally, ventrally with a strongly serrated ridge, and dorsally with a strong longitudinal groove, rugose; first metatarsomere distinctly shorter than the two following segments combined and one-third longer than the upper tibial spur. Protibia moderately long, bidentate, claws of anterior asymmetrical, basal tooth of inner claw larger than that of other claws and bluntly truncate.

Aedeagus: Figs 14–16.

*Notes* – Compared to *N. exisoclypeata*, *N. habonensis* sp. n. is slightly larger, the antennal club is distinctly shorter and less curved, and the anterior angles of the pronotum protrude more strongly. The two species may easily be separated by characters of the male genitalia.

## *Hoplomaladera shibatai* NOMURA

*Hoplomaladera shibatai* NOMURA, 1974: 92.

*Material examined* – 2 ex. "Rep. of China Formosa (Taiwan) A Li Shan 17.–26.6.95 P. Moravec" (CA, CP), 1 ex. "Taiwan Hwa Lien Co. Wan Jung logging Road ca. 22k. alt. 135s0 m 30/VI/1998 light trap Collr. C. L. Li", 4 ex. "Suchih/ Nantou 8.VI.1994 H. Kobayashi lg." (CA), 1 ex. "Taiwan (C.) Bukai, 900 m VI–15–34 Gressit (BPBM), 1 ex. "Taiwan: Chaochi nr. Yilan to Pinglin, Taipei Hsien, 15–16.VI.65" (BPBM), 1 ex. "Taiwan, Ilan Prov. Suyuan-yakou, nr. Pinan 1550 m 6.VI.1997 B. Herczig & L. Ronkay" (HNHM).

## *Hoplomaladera monticola* KOBAYASHI

*Hoplomaladera monticola* KOBAYASHI, 1991*b*: 219.

*Material examined* – 1 ex. "Taiwan, Prov. Taichung 17 km SW Lishan, Techi Villa, 1500 m, 26–27.05.1997 leg. Gy. M. László & G. László" (HNHM).

## *Hoplomaladera hualiensis* KOBAYASHI

*Hoplomaladera hualiensis* KOBAYASHI, 2001: 337.

*Material examined* – 1 ex. "Taiwan: Kao Shiung Co., Teng Zi (.. [chinese spelling]) alt. ca. 1600 m 21–22/VI/2000 collr. C. L. Li" (CA).

## *Hoplomaladera kurosawai* KOBAYASHI

*Hoplomaladera kurosawai* KOBAYASHI, 2001: 337.

*Material examined* – 1 ex. "Taiwan: Ilan Prov., Suyuan-yakou, nr. Pinan 1550 m, 6.VI.1997, B. Herczig & L. Ronkay" (HNHM).

## *Paramaladera kiyoyamai* NOMURA

*Paramaladera kiyoyamai* NOMURA, 1974: 100, 101.
*Paramaladera babai* KOBAYASHI, 1991*a*: 49, **syn. n.**

*Material examined* – 3 ex. "Taiwan: IV–VI.77 Fenchihu 1400 m J. & S. Klapperich" (MHNG), 1 ex. "Taiwan: Koa Shiung Co., Teng Zi alt. ca. 1600 m 21–22/VI/2000 collr. C.L. Li" (CA).

*Notes* – In the figures presented by NOMURA (1974: Fig. 31), the right paramere is directed ventrally and, for that reason, its apex does not appear sharply pointed in dorsal view. There is no morphological evidence for separation of *Paramadera babai* from *Paramadera kiyoyamai* NOMURA.

## *Paramaladera major* NOMURA

*Paramaladera major* NOMURA, 1974: 100, 101.

*Material examined* – 5 ex. "Taiwan: IV–VI.77 Fenchihu 1400 m J. & S. Klapperich" (MHNG)

## *Paramaladera rufofusca* NOMURA

*Paramaladera rufofusca* NOMURA, 1974: 100, 102.

*Material examined* – 2 ex. "Taiwan: Hain Chu Co. Yu Lao , alt. 1400 m 13/VI/1993 Collr. I. S. Hau" (CA), 1 ex. "N. Taiwan: Hsin Chu Co. Yu Lau, alt. 1500 m 26/VII/1992" (CA), 1 ex. "Taiwan: Hsin Chu Co., Xi Ma Ku Xi alt. ca. 1550 m 27–28/VI/2000 collr. C.L. Li" (CA), 1 ex. "Taiwan: Hsin Chu Co., Xi Ma Ku Xi ca. 1550 m, by light 31/V–1/VI/2000 collr. C.L. Li" (CA), 1 ex. "Taiwan: Hsin Chu Co., Chu Tong, alt. 1000 m 3/VI/1991 collr. J. Lo" (CA), 1 ex. "Taiwan: Hsin Chu Co., Da Ping, alt. 1400 m 8/IX/1991 Collr. C.C. Chen" (CA), 2 ex. "Taiwan, Nantou Hsien, Meifeng 2130 m 10.–17.VII.93 yellow pan traps A. Smetana [T147]" (HAHC).

## *Paramaladera pishana* KOBAYASHI

*Paramaladera pishana* KOBAYASHI, 1991*a*: 50.

*Material examined* – 1 ex . "N. Taiwan: Tao Yuan Co. 74k. N. Cross High. alt. 1500 m 1/VIII/1992 Collr. C. C. Chen" (CA), 1 ex. "E. Taiwan: Hwa Lien Co., Chi Lai, by light, alt. ca. 1600 m 13/VIII/1991 collr. C.L. Li" (CA), 1 ex. "Taiwan, Ilan Prov., Suyuan-yakou, nr Pinan 1550 m, 6.VI.1997 B. Herczig & L. Ronkay" (HNHM).

## *Paramaladera aserrata* KOBAYASHI et NOMURA

*Paramaladera aserrata* KOBAYASHI et NOMURA, 1979: 9.
*Paramaladera cariniprinceps* KOBAYASHI et NOMURA, 1979: 8, **syn. n.**
*Paramaladera wulaiana* KOBAYASHI, 1980: 19, **syn. n.**

*Material examined* – 1 ex. "Taiwan: I Lan Co. Fu Shan Botanical Garden alt. 600 m 22/IV/1995 Collr. C. L. Li" (CA), 1 ex. "Taiwan: Wushe 29.V.1993 H. Townes 1150 m" (HAHC).

*Notes* – Differential diagnoses presented in the original descriptions of *P. cariniprinceps* and *P. wulaiana* compared these species with *Paramaladera major* NOMURA, 1974 and *P. rufofusca* NOMURA, 1974, respectively. Although male genitalia of the unique types of each species were extremely similar, no notes were made to distinguish between the two species. The discriminative characters given by YU *et al.* (1998) are very variable, consequently the taxa are regarded as synonyms.

## *Cephaloserica* (?) *parva* MOSER
(Figs 12–13)

*Cephaloserica parva* MOSER, 1908: 326.
*Cephaloserica kojimai* MIYAKE, 1991: 9, **syn. n.**

*Type material examined* – Lectotype (here designated): ♂ "Central Tonkin Chiem-Hoa Aug. Sept. H. Fruhstorfer/ *parva* Mos." (ZMHB). Paralectotypes: 3 ♂♂, 2 ♀♀ "Central Tonkin Chiem-Hoa Aug. Sept. H. Fruhstorfer" (ZMHB). Paratypes (*kojimai*): 2 ♀♀ "Guan dao Xi Taiwan 31.V.1973 K. Kojima" (HMNH, specimens without determination label and type designation by MIYAKE).

*Additional material examined* – Taiwan: 2 ex. Taiwan: Tai Chung Co. Ping Ling, alt. 100 m 18.V.1995 Collr. M. L. Leng" (CA), 7 ex. "Taiwan: Tai Pei Co. Ba Li alt. 10 m, 23.VI.1990 Collr. I. S. Heu" (CA), 1 ex. "Formosa Takao 3.5.1907 H. Sauter" (USMB). Fujian: 2 ex. "Fukien, S. China Shaowu, Shuipei-kai V.1944/ T. C. Maa Collector" (BPBM), 1 ex. "Fukien, S. China Shaowu City 14.V.1942/ T. C. Maa" (BPBM).

*Notes* – Aedeagus: Figs 12–13.The description of *C. kojimai* is based only on females. Male are very similar to females, with no apparent sexual dimorphism. Male genitalia of the Taiwanese specimens are identical in shape to those of the type series of *C. parva* and those from Fujian.

## *Trichomaladera yui* KOBAYASHI

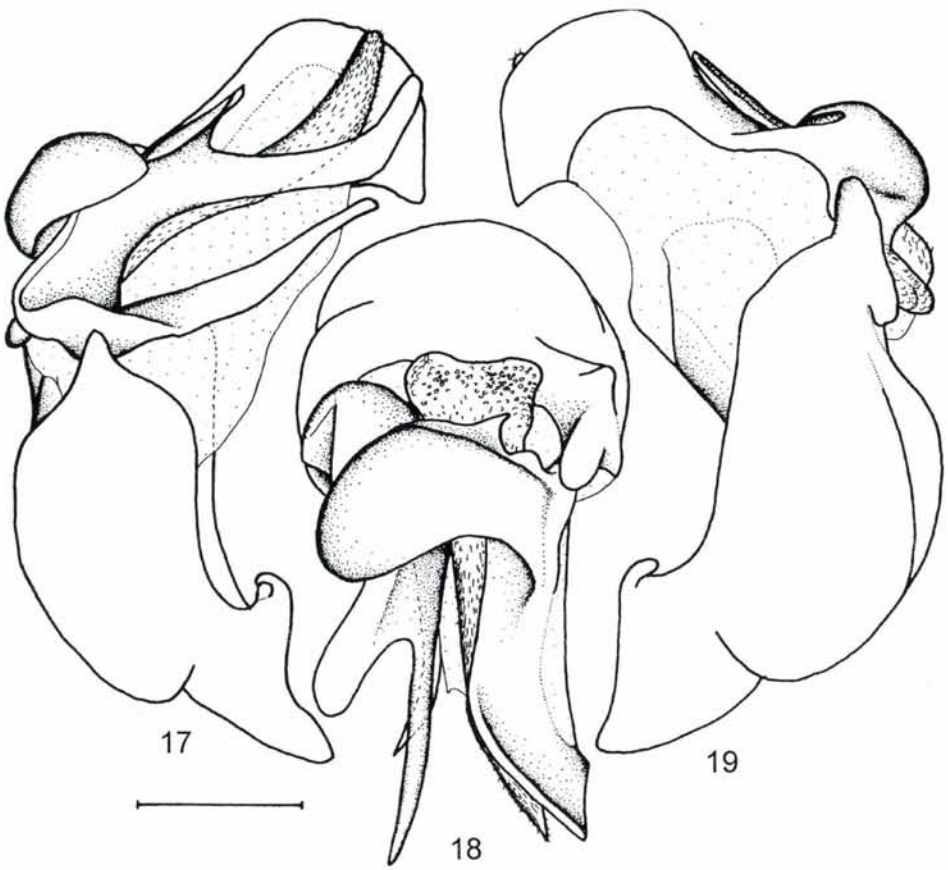
*Trichomaladera yui* KOBAYASHI, 1993: 68.

*Material examined* – 2 ex. "Taiwan: Tai Chung Co. An Ma Shan, alt. 1800 m 25/VII/1990 Collr. S. W. Yu" (CA), 2 ex. "Taiwan Taichung/ Anmashan, 2100 m 27.VII.97 leg. Y. Arita" (CA), 4 ex. "Taiwan Taichung/ Anmashan, 2200 m 29.VII.97 leg. Y. Arita" (CA), 4 ex. "Taiwan Taichung/ Anmashan, 2100 m 30.VII.97 leg. Y. Arita" (CA), .

## **Trichomaladera infortunata** sp. n.
(Figs 17–19)

*Type material* – Holotype: ♂ "N. Taiwan: Tao Yuan Co. Min Tze, N. Cross High. alt. 1600 m 25/VI/1992 collr. C. L. Li" (CA). Paratypes: 1 ♂ "N. Taiwan: Tao Yuan Co. Xi Chun, N. Cross High. alt. 1350 m 5/VIII/1992 collr. C. C. Chen" (CA), 2 ♂♂, 1 ♀ "Taiwan: Hsin Chu Co. Xi Ma Ku Xi (... [chinese spelling]), alt. ca. 1550 m 27–28/VI/2000 collr. C.L. Li" (CA, CCLL), ♂ "Taiwan: Hsin Chu Co. Xi Ma Ku Xi (... [chinese spelling]), alt. ca. 1550 m, by light 31/V–1/VI/2000 collr. C.L. Li" (CA).

*Description* – Length: 13.4–14.5 mm, width: 7.0–7.3 mm, length of elytra: 8.7–9.0 mm. Body oblong, dark to reddish brown, antenna yellow, dorsal surface, except shiny labroclypeus, dull, densely covered with erect setae.




**Figs 17–19.** *Trichomaladera infortunata* sp. n. (Holotype: N. Taiwan Min Tze); 17, 19 = aedeagus lateral, 16 = parameres dorsal (scale: 1 mm)

Labroclypeus subtrapezoidal, not very large, widest at base, lateral margins slightly curved and strongly convergent to feebly rounded anterior angles, lateral border and ocular canthus produce a distinctly blunt angle, margins weakly reflexed, anteriorly distinctly but not broadly sinuate medially; surface flat and shiny, finely and densely punctate, densely finely hairy; frontoclypeal suture feebly incised and medially weakly angled; smooth area in front of eye approximately 1.5-times as wide as long; ocular canthus moderately long and slender, densely setose. Frons with fine, moderately dense punctures, densely hairy. Eyes moderately large, ratio of diameter/ interocular width: 0.54. Antenna yellow, 10-segmented; club with three segments, in male 1.5times as long as remaining segments together, in female a little shorter than remaining segments together. Mentum not elevated, anteriorly with a v-shaped, nearly glabrous, excavation, anterior surface of labrum deeply sinuate medially.

Pronotum narrow, widest at base, lateral margins straight, weakly narrowed to the middle, in anterior half weakly curved and convergent anteriorly, anterior angles strongly produced and sharp, anterior margin without marginal line and weakly produced medially; surface densely and finely punctate, with long, erect, dense and fine pilosity; anterior and lateral border setaceous. Scutellum slender, triangular, with fine and very dense punctures, partly finely hairy.

Elytra oblong, distinctly widened posteriorly, striae strongly impressed and finely and densely punctate, intervals distinctly convex, with fine and sparsely scattered punctures, mostly concentrated along striae, punctures with numerous fine, short and long, erect hairs; epipleural edge fine, ending at strongly curved external apical angle of elytra, epipleura densely setaceous, apical border chitinous, covered with very short microtrichomes.

Ventral surface dull , finely and not densely punctate, sparsely hairy, metacoxal plates laterally with a few long setae; each abdominal sternite with a transversal row of coarse punctures bearing short hairs between fine and dense punctation, penultimate sternite apically with a shiny smooth chitinous border, which is more than half as long as sternite. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/ metacoxa: 1/1.63. Pygidium moderately convex, finely and densely punctate, without smooth midline, with numerous fine and long hairs.

Legs moderately slender; femora with two longitudinal rows of hairs, finely and densely punctate; metafemur dull, anteriorly sharply edged, behind anterior edge without serrated line, posterior margin medially bluntly widened, in apical half dorsally finely serrated, ventrally completely serrated, in basal half with a few long hairs. Metatibia slender and moderately long, widest at apex, ratio width/ length: 1/3.95, dorsally moderately edged, with two groups of spines, basal one slightly before middle, apical one at three-fourths of metatibial length, basally with three single hairs with punctures having a serrated margin; outside longitudinally convex, with moderately dense, fine punctures and glabrous; ventral edge with three strong spines equidistant from each other, inside sparsely and finely punctate, apex interiorly near tarsal articulation shallowly concavely truncate. Tarsal segments distinctly and densely punctate dorsally, ventrally with sparse, short setae; metatarsal segments ventrally with a strongly serrated ridge, beside which is a moderate longitudinal edge, segments one to four ventrally glabrous, first metatarsomere distinctly shorter than the two following segments combined and about one fourth longer than the upper tibial spur. Protibia moderately long, bidentate, all claws symmetrical, feebly curved and long, with basal tooth in apical half, normally developed.

Aedeagus: Figs 17–19.

*Notes* – The new species distinctly differs from the very similar *T. yui* KOBAYASHI and *T. rufofusca* KOBAYASHI et NOMURA by shape of the parameres. Furthermore, the metatibia is slightly shorter and wider than that of *T. yui*.

## *Eumaladera planiuscula* (NOMURA)

*Maladera (Eumaladera) planiuscula* NOMURA, 1974: 102, 105.

*Material examined* – 1 ex. (♂) "Taiwan IV–VI.77 Fenchihu 1400 m J. & S. Klapperich" (MHNG), 1 ex. "Taiwan, Taipei Prov., Pi Hu, 450 m, 24°54'02''N, 121°45'27''E, 4–5.IV.1997 leg. L. Peregovits & A. Kun" (HNHM).

## *Eumaladera nitididorsis* (KOBAYASHI), **comb. n.**

*Amiserica nitididorsis* KOBAYASHI, 1991*b*: 215.

*Material examined* – 1 ex. "C. Taiwan: Nan Tou Co. near Pu Li, alt. 550 m 1.V.1994 collr. C. C. Chen" (CA).

## *Eumaladera latitibia* (NOMURA), **comb. n.**

*Maladera latitibia* NOMURA, 1974: 102, 106.

*Material examined* – 2 ex. "Nanshanchi Nantou Hisen Taiwan 31 Jul. 1986 H. Kobayashi" (CA).

## **Eumaladera paralatitibia** sp. n.
(Figs 20–23)

*Type material* – Holotype: ♂ "Taiwan, Prov. Nan- Tou, 15 km N of Puli, 500 m, 15.03.1996, leg. Gy. Fábián & L. Németh" (HNHM). Paratype: 1 ♂ same data as holotype (CA).

*Description* – Length: 6.3–6.6 mm, width: 3.4–3.6 mm, length of elytra: 4.1–4.4 mm. Body oblong, reddish brown, antenna yellow, dorsal surface, except legs, head and anterior pronotum, dull, except a few hairs on head and elytra glabrous.

Labroclypeus very short, transversely subtrapezoidal, widest at base, lateral margins strongly curved and convergent to moderately rounded anterior angles, lateral border and ocular canthus produce an indistinct blunt angle, margins moderately reflexed, anteriorly very shallowly sinuate medially; surface plain, densely punctate, large and very large punctures mixed, distance between punctures less than their diameter, with a few moderately long, erect hairs; frontoclypeal suture indistinctly incised and medially weakly curved; smooth area in front of eye approximately three times as wide as long; ocular canthus short and wide, densely and finely punctate, with one or two long hairs. Frons with coarse and dense punctures, sparsely hairy. Eyes large, ratio of diameter/interocular width: 0.73. Antenna 10-segmented; club with three segments, in male as long as the remaining segments combined. Mentum anteriorly elevated and flattened.

Pronotum moderately transverse, widest at base, lateral margins in basal half subparallel and straight, in anterior half slightly curved and convergent anteriorly, anterior angles moderately pro-

duced and sharp, anterior margin straight and with a fine marginal line medially; surface shiny, on basal half medially dull, very densely and finely punctate, with microscopic hairs in the punctures; anterior and lateral border densely setaceous. Scutellum slender, triangular, dull and fine, moderately dense punctures, with microscopic hairs in the punctures.

Elytra oblong, widest behind middle, striae indistinctly impressed, finely and densely punctate, even intervals flat, odd ones weakly convex, with fine and moderately dense punctures, on odd intervals concentrated along striae, odd intervals with a few fine and long hairs, punctures partly microscopicly hairy; epipleural edge robust, ending at the strongly curved external apical angle of elytra, epipleura densely setaceous, apical border chitinous, with short microtrichomes.

Ventral surface dull, with very large and dense punctures, sparsely hairy, metacoxal plates laterally with numerous long hairs; each abdominal sternite with a transversal row of coarse punctures bearing short hairs between fine and dense punctation, penultimate sternite apically with only very narrow smooth chitinous border, not a quarter as long as sternite. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/ metacoxa: 1/1.5. Pygidium strongly convex, dull, coarsely and densely punctate, without smooth midline, with dense and long hairs, punctures partly with microscopic setae.

Legs moderately slender; femora with two longitudinal rows of hairs, coarsely and moderately densely punctate; metafemur shiny, sharply edged anteriorly, immediately beside anterior edge with a continuously serrated line, behind posterior longitudinal row of hairs punctation denser, punctures with microscopic hairs, posterior margin slightly concave, neither dorsally nor ventrally serrated, without longer hairs. Metatibia very broad and short, widest before apex, ratio of width/length: 1/ 2.36, dorsally sharply edged, with two groups of spines, basal one slightly behind middle, apical one at 4/5 of metatibial length, in basal third beside dorsal edge with a continuously serrated line, ending at 4/5 of metatibial length, in apical half line very close to dorsal edge, basally along the line with three single hairs; outside weakly longitudinally convex, with moderately dense, large superficial punctures, bearing long yellow hairs; ventral edge with four strong spines equidistant from each other, inside completely smooth and glabrous, apex interiorly near tarsal articulation shallowly concavely sinuate. Tarsal segments dorsally impunctate, with sparse, short setae ventrally; metatarsal segments ventrally with a strongly serrated ridge, first metatarsomere distinctly shorter than the two following segments combined and only slightly longer than the upper tibial spur. Protibia short, bidentate, external teeth small, all claws symmetrical, strongly curved and moderately long.

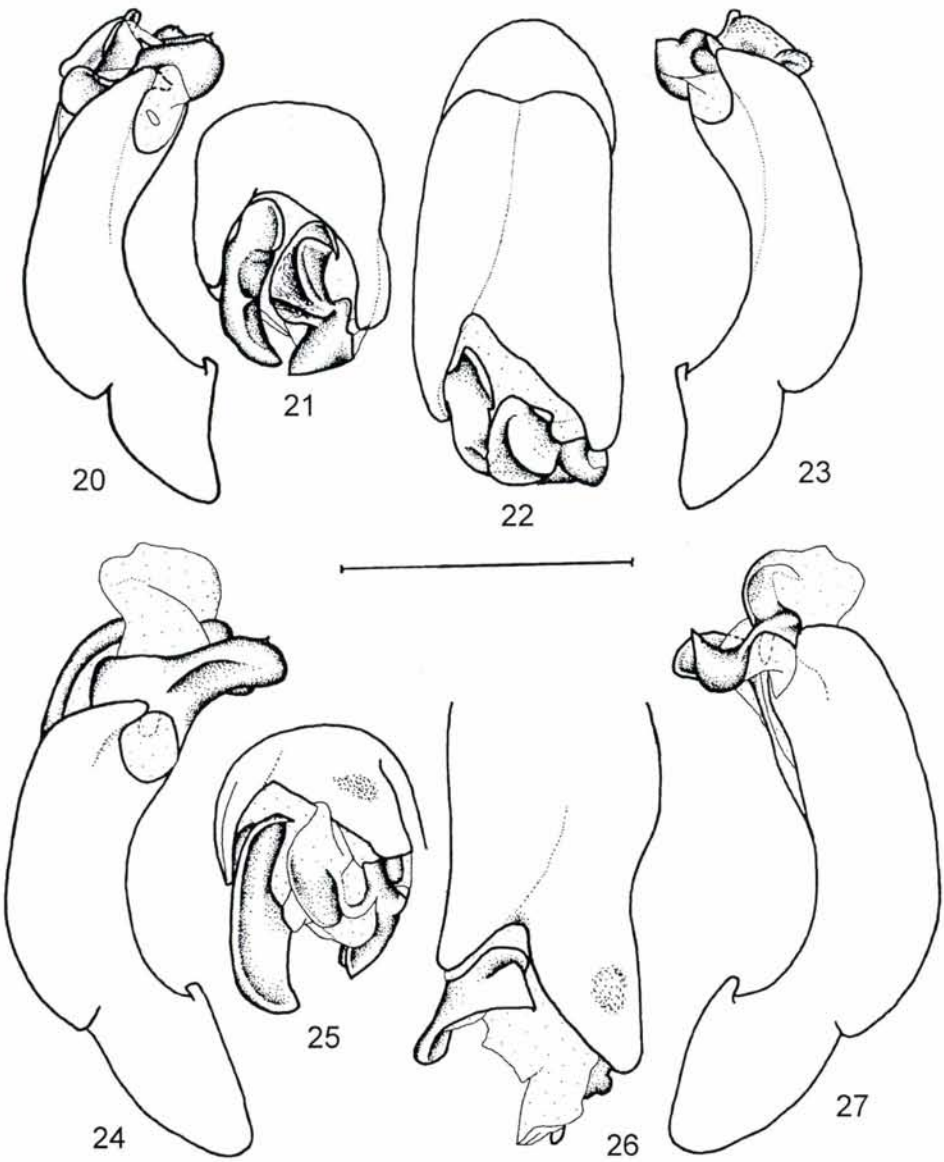
Aedeagus: Figs 20–23.

*Notes* – This species is very similar to *E. latitibia* (NOMURA), differing primarily in the shape of parameres and by the pronotum being less extensively dull.

## **Eumaladera fushanica** sp. n.
(Figs 24–27)

*Type material* – Holotype: ♂ "Taiwan, Ilan Prov., Fu Shan, Botanical Garden, 700 m/ at light, 27–28.III.1997, G. Csorba & L. Ronkay" (HNHM). Paratypes: 1 ♂ "Taiwan, Ilan Prov., Fu Shan Bot. Garden, LTER site, 700 m 24°45'13''N, 121°35'39''E, 8–9.IV.1997, leg. L. Peregovits & A. Kun" (CA), 2 ♂♂ "Taiwan, Ilan County, Fu Shan Botanical Garden LTER Site, 700 m, at light/ 24°45'47''N, 121°35'75''E, 5.VIII.1999 leg. A. Kun & E. Juhász" (Coll. NÁDAI, HNHM), 2 ♂♂, 1 ♀ "Taiwan, Ilan Prov., Fu Shan Bot. Garden, LTER site, 700 m 24°45'13''N, 121°35'39''E,

8–9.IV.1997, leg. L. Peregovits & A. Kun" (HNHM), 1 ♂ "Taiwan, Ilan County, Fu-Shan Botanical Garden, 700 m, at light,/ 25–27.IX.2000, leg. L. Papp, L. Peregovits & L. Ronkay" (HNHM).




**Figs 20–27. 20–23:** *Eumaladera paralatitibia* sp. n. (Holotype: Taiwan: 15 km N of Puli). **24–27:** *Eumaladera fushanica* sp. n. (Holotype: Taiwan: Fu Shan Botanical Garden); 20, 23, 24, 27 = aedeagus lateral, 21, 25 = parameres dorsal; 22, 26 = apical aedeagus dorsal (scale: 1 mm)

*Description* – Length: 7.3–7.7 mm, width: 4.0–4.1 mm, length of elytra: 4.9–5.1 mm. Body oblong, blackish brown, antenna brown, dorsal surface very shiny, ventrally dull, glabrous, except for a few setae on the head.

Labroclypeus short, transversely subtrapezoidal, widest at base, lateral margins slightly curved and convergent to broadly rounded anterior angles, lateral border and ocular canthus produce an indistinct blunt angle, margins moderately reflexed, anteriorly very shallowly sinuate medially; surface plain, finely and densely punctate, distance between punctures less than their diameter, with a few moderately long, erect hairs; frontoclypeal suture indistinctly incised and weakly angled medially; smooth area in front of eye approximately four times as wide as long; ocular canthus moderately short and broad, densely and finely punctate, with two long hairs. Frons with moderate, somewhat dense punctures, with sparse, long hairs. Eyes large, ratio of diameter/interocular width: 0.86. Antenna 10-segmented; club with three segments, in male distinctly longer than the remaining segments combined. Mentum anteriorly elevated and flattened.

Pronotum moderately transverse, widest at base, lateral margins in basal half subparallel and straight, in anterior half slightly curved and convergent anteriorly, anterior angles moderately produced and sharp, anterior margin medially with fine marginal line and straight; surface very densely and finely punctate, with microscopic hairs in the punctures; anterior and lateral border densely setaceous. Scutellum slender, triangular, dull, with fine and moderately dense punctures and with microscopic setae in the punctures.

Elytra oblong, widest behind middle, striae indistinctly impressed and coarsely and densely punctate, intervals coarsely and densely punctate, even intervals flat, odd intervals weakly convex and with punctures concentrated along striae, odd intervals with a few fine and long hairs, some punctures with microscopic setae; epipleural edge robust, ending at strongly curved external apical angle of elytra, epipleura densely setose, apical border membranous, without microtrichomes.

Ventral surface with very large and dense punctures, sparsely hairy, metacoxal plates laterally with numerous long hairs; each abdominal sternite with a transversal row of coarse punctures bearing short hairs between fine and dense punctation, penultimate sternite apically with very narrow smooth chitinous border, not a quarter as long as sternite. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/ metacoxa: 1/1.5. Pygidium strongly convex, dull, coarsely and densely punctate, without smooth midline, with numerous long hairs, some punctures with microscopic setae.

Legs moderately slender; femora with two longitudinal rows of hairs, coarsely and moderately densely punctate; metafemur shiny, sharply edged anteriorly, with a continuously serrated line immediately beside anterior edge, punctation denser behind posterior longitudinal row of hairs, punctures with microscopic setae, posterior margin slightly concave, neither dorsally nor ventrally serrated, without longer hairs. Metatibia very broad and short, widest before apex, ratio of width/ length: 1/ 2.1, sharply edged dorsally, with two groups of spines, basal one slightly behind middle, apical one at 4/5 of metatibial length, in basal third beside dorsal edge with a continuously serrated line, ending at 4/5 of metatibial length, in apical two-thirds line very close to dorsal edge, with three single hairs basally along the line; outside weakly longitudinally convex, with moderately dense, large superficial punctures, each bearing long yellow hairs; ventral edge with four strong spines equidistant from each other, inside completely smooth and glabrous, apex interiorly near tarsal articulation shallowly and concavely sinuate. Tarsal segments dorsally impunctate, ventrally with sparse, short setae; metatarsal segments ventrally with a strongly serrated ridge, first metatarsomere distinctly shorter than the two following segments combined and only slightly longer than the upper tibial spur. Protibia short, bidentate, external teeth small, all claws symmetrical, strongly curved and moderately long.

Aedeagus: Figs 24–27.

*Notes* – This species differs from the other *Eumaladera* with shiny dorsal surface, by having long pilosity on the frons, the metatibia short and very broad, and a smaller body size. The parameres are generally similar to those of *E. planiuscula* NOMURA, but are distinctly different in shape.

## **Eumaladera puliensis** sp. n.
(Figs 28–30)

*Type material* – Holotype: ♂ "C. Taiwan: Nan Tou Co. near Puli, alt. 550 m 30.IV.1994 collr. C. C. Chen" (CA).

*Description* – Length: 8.7 mm, width: 4.7 mm, length of elytra: 5.8 mm. Body oblong, blackish brown, antenna brown, dorsal and ventral surface very shiny, except a few hairs on head glabrous.

Labroclypeus short, transversely subtrapezoidal, widest at base, lateral margins straight and convergent to broadly rounded anterior angles, lateral margin and ocular canthus produce an indistinct blunt angle, margins moderately reflexed, anterior margin very shallowly sinuate medially; surface at middle slightly convex, very coarsely and densely punctate, distance between punctures less than their diameter, with a few moderately long, erect hairs; frontoclypeal suture feebly incised and weakly angled medially; smooth area in front of eye approximately three times as wide as long; ocular canthus moderately short and broad, very densely and coarsely punctate, with a single terminal hair. Frons coarsely and densely punctate, vertex very densely transversely ocellously punctate, with a few single long hairs beside eyes. Eyes large, ratio of diameter/interocular width: 0.77. Antenna 10-segmented; club with three segments, in male distinctly longer than the remaining segments combined. Mentum anteriorly elevated and flattened.

Pronotum moderately transverse, widest at base, lateral margins in basal half subparallel and straight, in anterior half slightly curved and convergent anteriorly, anterior angles strongly produced and sharp, anterior margin weakly convexly produced medially and with a fine marginal line; surface very densely and coarsely punctate, with microscopic hairs in the punctures; anterior and lateral margins densely setose. Scutellum slender, triangular, with coarse, dense punctures, the punctures with microscopic hairs.

Elytra oblong, posteriorly distinctly widened, striae indistinctly impressed and coarsely and densely punctate, intervals flat, with coarse and dense punctures, punctures concentrated along striae on odd intervals, penultimate external interval with a few fine and long hairs, some punctures with microscopic setae; epipleural edge robust, ending at strongly curved external apical angle of elytra, epipleura densely setose, apical border chitinous, covered with very short microtrichomes.

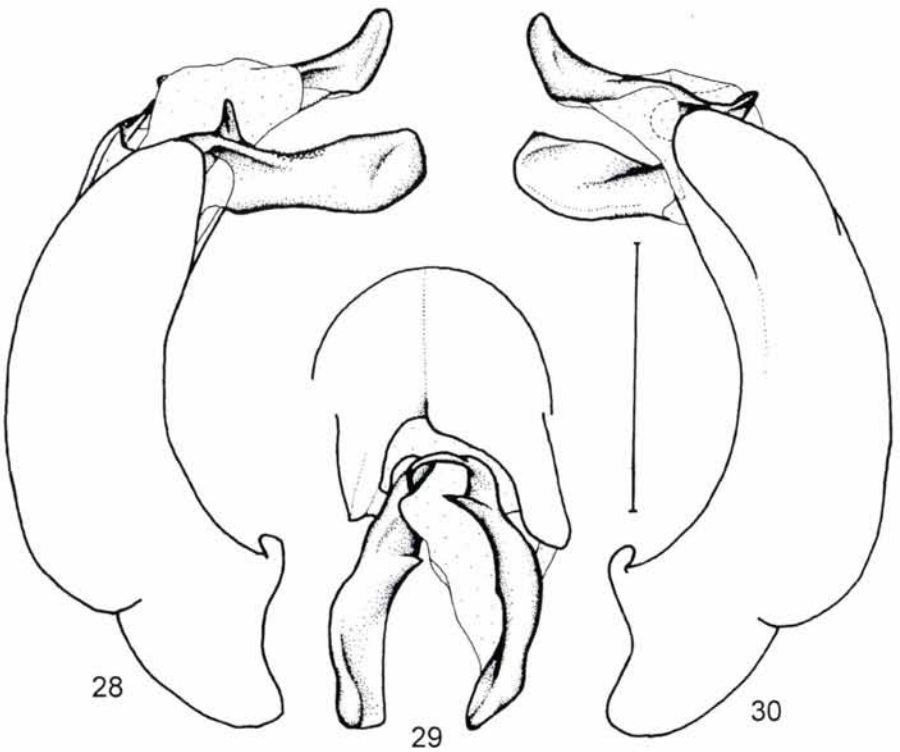
Ventral surface with very large and dense punctures, sparsely hairy, metacoxal plates laterally with numerous long hairs; each abdominal sternite with a transversal row of coarse punctures bearing short hairs between fine and dense punctation, penultimate sternite apically with a very narrow smooth chitinous border, not a quarter as long as sternite. Mesosternum between mesocoxae as wide as mesofemur. Ratio of length of metepisternum/metacoxa: 1/1.56. Pygidium strongly convex, coarsely and densely punctate, without smooth midline, with numerous long hairs, some punctures with microscopic setae.

Legs moderately slender; femora with two longitudinal rows of hairs, finely and moderately densely punctate; metafemur shiny, anteriorly sharply edged, immediately beside anterior edge with a continuously serrated line, behind posterior longitudinal row of hairs punctation denser, posterior

margin almost straight, neither dorsally nor ventrally serrated, without longer hairs. Metatibia broad and moderately long, widest at apex, ratio of width/length: 1/2.5, sharply edged dorsally, with two groups of spines, basal one slightly behind middle, apical one at 4/5 of metatibial length, with a continuously serrated line beside dorsal edge, ending at 4/5 of metatibial length, with three single hairs basally along the line; outside weakly longitudinally convex, with moderately dense, large superficial punctures, some punctures bearing long yellow hairs, others with microscopic setae; ventral edge with four strong spines equidistant from each other, inside completely smooth and glabrous, apex interiorly near tarsal articulation shallowly, concavely sinuate. Tarsal segments dorsally impunctate, ventrally with sparse, short setae; metatarsal segments ventrally with a strongly serrated ridge, first metatarsomere distinctly shorter than the two following segments combined and about one-fourth longer than the upper tibial spur. Protibia short, bidentate, external teeth small, all claws symmetrical, strongly curved and moderately long.

Aedeagus: Figs 28–30.

*Notes* – This species is very similar to *Eumaladera planiuscula* (NOMURA) and it is impossible to distinguish them by external features. *Eumaladera puliensis* sp. n. may be separated from *Eumaladera planiuscula* (NOMURA) only by the shape of the parameres.




**Figs 28–30.** *Eumaladera puliensis* sp. n. (Holotype: C.Taiwan: near Pu Li); 28, 30 = aedeagus lateral, 29 = parameres dorsal (scale: 1 mm)

## *Maladera secreta horaiana* (NOMURA)

*Maladera secreta horaiana* NOMURA, 1974: 105, 112.

*Material examined* – 1 ex. "Taiwan: Prov. Nan-Tou 15 km N of Puli, 500 m 15.10.1996 leg. Gy. Fábián & L. Németh" (HNHM).

## *Maladera fusca* (FREY)

*Autoserica fusca* FREY, 1972: 170.
*Maladera fusca* (FREY): NOMURA 1974: 113.

*Material examined* – 1 ex. "Taiwan: Hsin Chu Co. Yu Lao alt. 1400 m 13/VI/1993 Collr. I. S. Heu" (CA), 4 ex. "C. Taiwan: Nan Tou Co. near Pu Li, alt. 550 m 30.IV.1994 Collr. C. C. Chen" (CA), 1 ex. "C. Taiwan: Nan Tou Co. near Pu Li, alt. 550 m 1.V.1994 Collr. C. C. Chen" (CA), 1 ex. "Taiwan: Tai Pei Co. Wu Lai, alt. 500 m 4/VII/1988 Collr. C. L. Li" (CA), 1 ex. "Taiwan: Nan Tou Co. Hwei Sun Forestry alt. 600 m 4/V/1990 Collr. C. L. Li" (CA), 1 ex. "Puli (Hori) C. Formosa V–VII 1959" (HNHM), 1 ex. "Formosa Hoozan, V.10 H. Sauter S.G." (ZMHB), 1 ex. "Rep. of China Formosa (Taiwan) Sun Moon Lake 3.–12.6.95 P. Moravec" (CP).

## *Maladera sauteri* (MOSER)

*Autoserica sauteri* MOSER, 1918: 213; NIIJIMA & KINOSHITA 1923: 28.
*Maladera sauteri* (MOSER): NOMURA 1965: 142; NOMURA 1974: 113.

*Type material* – Syntypes: 1 ♂ "Kosempo Formosa H. Sauter 1912/ 22.V./ *Autoserica sauteri* Type ♂ Mos." (ZMHB), 1 ♀ "Banshoryo Distr. Sokutsu (Formosa) H. Sauter 1912/ 1.VII./ *Autoserica sauteri* Type ♀ Mos." (ZMHB), 1 ♂ "Kosempo Formosa H. Sauter 1912/ 22.V./ Syntypus/ *Autoserica sauteri* Mos. J. Moser det n. sp." (DEI), 1 ♂, 3 ♀♀ "Kosempo Formosa H. Sauter 1912/ 22.V./ Syntypus" (DEI).

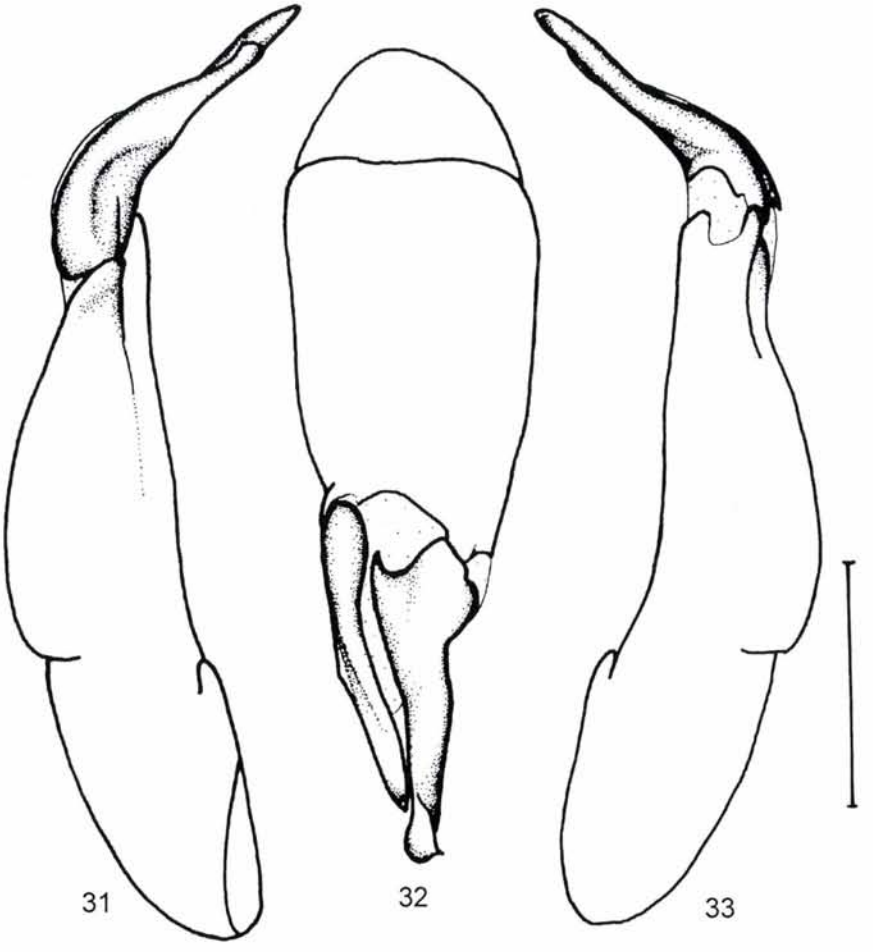
*Additional material examined* – 1 ex. "Formosa Sauter/ Kanshirei 908. V 9–17", 1 ex. "Formosa Sauter/ Kanshirei 908. VI 2–14" (HNHM), 3 ex. "Taiwan, IV–VI.77 Fenchihu, 1400 m J. & S. Klapperich" (MHNG), 4 ex. "Formosa Taihauroku 20.5.1908 H. Sauter" (USMB), 2 ex. "Formosa Taihorin III.10 H. Sauter S.G." (ZMHB), 8 ex. "Formosa Taihorin V.10 H. Sauter S.G." (ZMHB), 1 ex. "Formosa Taihorin XI.09 H. Sauter S.G." (ZMHB), 1 ex. "Formosa Taihorin XII.09 H. Sauter S.G." (ZMHB), 1 ex. "Formosa Pilam 25.5.04 Haberer S." (ZMHB).

*Notes* – Male genitalia of the syntypes are identical in shape to the figures of NOMURA (1974).

## *Maladera stridula* (BRENSKE)
## (Figs 31–33)

*Autoserica stridula* BRENSKE, 1897: 401; NIJIMA & KINOSHITA 1927: 6.
*Aserica stridula* (BRENSKE): MURAYAMA 1938: 13.
*Maladera stridula* (BRENSKE): KIM & LEE 1997: 129.
*Maladera hongkongica* (BRENSKE, 1898): NOMURA 1974: 112. (Misidentification.)

*Type material* – Syntype (*stridula*): 1 ♂ "China Tchefou Donkier/ *stridula* Type Brsk." (ZMHB).




**Figs 31–33.** *Maladera stridula* (BRENSKE, 1897) (Syntype: China Tchefou); 31, 33 = aedeagus lateral, 32 = aedeagus dorsal (scale: 1 mm)

*Additional material examined* – Taiwan: 5 ex. "Rep. of China Formosa (Taiwan) Kenting 3.–12.6.'95 P. Moravec" (CA, CP), 2 ex. "Formosa Kenting 17.6.1994 Dalihod leg." (CA), 7 ex. "Formosa Kenting 13.–17.6.1994 Dalihod lgt." (CP), 1 ex. "Formosa Alishan 2400 m 17.–26.6.1995 Dalihod leg." (CP), 2 ex. "Formosa Kenting 3–10.6.1995 Dalihod leg." (CP), 8 ex. "Taiwan: Tai Chung Co. Pin Ling, alt. 100 m 18.V.1995 Collr. M. L. Leng" (CA), 1 ex. "Formosa Kanshirei 10.6.1908 H. Sauter" (USMB), 1 ex. "Formosa Sauter/ Tailhanroku 908. 11.7.15" (HNHM). China: 3 ex. "China Tsingtau" (ZMHB), 1 ♂ "Conchinchina/ picea simile/ coll. Brenske" (ZMHB). Vietnam: 3 ex. "N Vietnam (Tonkin) Ha Noi (City) 4.–5.V.1990 Vit. Kuban leg." (CN), 1 ex. "Tonkin Hanoi", 2 ex. "Tonkin Dap ban" (ZMHB), 1 ex. (♀) "N-Vietnam, Prov. Lao Cai, Sa Pa, 1600–1700 m, N22°19'52'' E103°50'35'' 23.–27.V.1999 leg. Ahrens, Jäger, Fabrizi" (CA), 3 ex. "N-Vietnam Bac Ha env., Lao Cai prov. 22°32'05''N 104°17'32''E, 980–1000 m 28.–30.V.1999 lg. Fabrizi, Jäger, Ahrens" (CA), 2 ex. "N Vietnam (Tonkin) pr. Hoang Lien Son, Yen Bai, 10.V.1990 P. Pacholátko leg." (CP), 21 ex. "N Vietnam (Tonkin) Ha Noi (City) 4.–5.V.1990 P. Pacholátko leg." (CP), 2 ex. "Reg. de Luc-Nam (Tonkin) L. Blaise/ Museum Paris (Coll. Ph. Francois) Coll. L. Bedel 1922" (MNHN). Thailand: 2 ex. "NW Thailand 24.–27.4.1991 Chomthong leg. Pacholátko" (CP).

*Notes* – Aedeagus: Figs 31–33. This species was recorded previously from Taiwan by MIWA (1931). Its distribution extends from China to northern Vietnam and northern Thailand. Nomura (1974: 112) misidentified *Autoserica hongkongica* BRENSKE. The true *Autoserica hongkongica* BRENSKE belongs to the group of *Autoserica castanea* ARROW, 1913, which is characterized by having a very long tubular phallobasis.

## *Maladera yasutoshii* NOMURA

*Maladera yasutoshii* NOMURA, 1974: 104, 109.

*Material examined* – 2 ex. "C. Taiwan: Nan Tou Co. near Pu Li, alt. 550 m 30.IV.1994 Collr. C. C. Chen" (CA).

## *Maladera nomurai* HIRASAWA

*Maladera nomurai* HIRASAWA, 1991: 175.

*Material examined* – 11 ex. "Wushu, Taiwan 1150 m, 23.III.83 H. &. M. Townes" (HAHC), 6 ex. "Wushu, Taiwan 1150 m, 16.III.83 Henry Townes" (HAHC), 4 ex. "Wushu, Taiwan 1150 m, 2.IV.83 Henry Townes" (HAHC), 7 ex. "Taiwan, Wushu, 1150 m, 7.IV.83 H. Townes" (HAHC), 6 ex. "Taiwan, Wushu, 1150 m, 13.IV.83 H. Townes" (HAHC), 7 ex. "Taiwan, Wushu, 1150 m, 29.IV.83 H. Townes" (HAHC), 9 ex. "Taiwan, Wushu, 1150 m, 3.V.83 H. Townes" (HAHC), 3 ex. "Taiwan, Wushu, 1150 m, 10.V.83 H. Townes" (HAHC), 3 ex. "Taiwan, Wushu, 1150 m, 15.V.83 H. Townes" (HAHC), 4 ex. "Taiwan, Wushu, 1150 m, 22.V.83 H. Townes" (HAHC), 3 ex. "Taiwan, Wushu, 1150 m, 29.V.83 H. Townes" (HAHC), 1 ex. "Taiwan: I Lan Co. Fu Shan Botanical Garden

alt. 600 m 22/IV/1995 Collr. C.L. Li" (CA), 3 ex. "Taiwan, Ilan Prov., Fu Shan, Botanical Garden, 700 m/ at light, 27–28.III.1997, G. Csorba & L. Ronkay" (HNHM).

## *Maladera hayashii* HIRASAWA, **stat. n.**

*Maladera nomurai* ssp. *hayashii* HIRASAWA, 1991: 176.
*Autoserica taiwana* NIIJIMA, in litteris.

*Material examined* – 1 ex. "Kosempo Formosa H. Sauter 1912/ 22.V./5/ *Autoserica* spec? [Handwriting MOSER]/ *Autoserica taiwana* Niij. n. i. l. Niijima det. 1929" (DEI).

*Notes* – *Maladera nomurai* and *M. hayashii* do not seem to be sympatric. However, characters of male genital morphology of the two forms are very distinctive and these differences warrant separation into two species.

## *Maladera shouchiana* KOBAYASHI et YU

*Maladera shouchiana* KOBAYASHI et YU, 1997: 179.

*Material examined* – 1 ex. "Taiwan, Prov. Ping-Tung, 10 km SE of Mutan, 470 m, 07–10.3.1996, leg. Gy. Fábián & L. Németh" (HNHM), 1 ex. "Taiwan, Pingtung Prov., 10 km E of Mutan, 400 m, at light, 7–8.IV.1997, G. Csorba & L. Ronkay" (HNHM).

## *Maladera taiwana* NOMURA

*Maladera taiwana* NOMURA, 1974: 104, 109.

*Material examined* – Taiwan: 2 ex. "C. Taiwan: Nan Tou Co. near Pu Li, alt. 550 m 30.IV.1994 Collr. C. C. Chen" (CA), 2 ex. "C. Taiwan: Nan Tou Co., Nan Shan Si, alt. 600 m 19/V/1991 Collr. Jason Chen" (CA), 1 ex. "Taiwan: Prov. Nantou, 23 km NE Puli, 500 m 11.05.1997 leg. Gy. M. László & G. László" (HNHM), 1 ex. "Taiwan, Wushe, 22.IV.1983 H. Townes 1150 m" (HAHC), 1 ex. "Taiwan, Wushe, 29.V.1983 H. Townes 1150 m" (HAHC), 2 ex. "Wushe, C. Formosa 29.IV.1973, leg. N. Ohtani" (HNHM), 1 ex. "Formosa Taihorin IX.10 Sauter S." (ZMHB), 1 ex. "Formosa Taihorin, V.10 Sauter S.G." (ZMHB). Vietnam: 1 ex. "N. Vietnam (Tonkin) Tamdao 12.–24.5.1989 Pacholátko leg." (CP), 2 ex. "Vietnam 15.5.–16.6.1991 75 km NW from Hanoi, Tam Dao, E. Jendek leg." (CN), 4 ex. "N Vietnam (Tonkin) pr. Vinh Phu 1990, Tam Dao, 6.–9.V. Vit. Kubán leg." (CN), 9 ex. "Vietnam N 1989 Tam Dao, 12–24.5. Vinh Phu prov., Strnad Jan lgt." (CN), 1 ex. "N Vietnam (Tonkin) pr. Hoang Lien Son, Yen Bai, 10.V.1990 Vit. Kubán leg." (CN), 13 ex. "N-Vietnam Bac Ha env., Lao Cai Prov., 22°32'05''N 104°17'32''E 980–1000 m 28.–30.V.1999 leg. Fabrizi, Jäger, Ahrens" (CA, BPBM), 5 ex. "Vietnam N 1989 Tam Dao 12–24.5. Vinh Phu prov. Strnad Jan lgt." (CK).

## *Maladera kobayashii* NOMURA

*Maladera kobayashii* NOMURA, 1974: 102, 106.

*Material examined* – 1 ex. "Taiwan: Tao Yuan Co. 65k. N. Crossing Highway alt. 1400 m 2/IX/1991 Collr. C. C. Chen" (CA), 1 ex. "N. Taiwan: Tao Yuan Co. Min Tze, N. Cross High. alt. 1600 m 25/VI/1992 Collr. C. L. Li" (CA), 1 ex. "Taiwan: Hsin Chu Co. Xi Ma Ku Xi ca. 1550 m, by light 31/V–1/VI/2000 collr. C. L. Li" (CA), 1 ex. "Wushe, Taiwan 16.III.1983 H. & M. Townes 1150 m" (HAHC), 1 ex. "Wushe, Taiwan 23.III.1983 H. & M. Townes 1150 m" (HAHC), 1 ex. "Wushe, Taiwan 2.IV.1983 Henry Townes 1150 m" (HAHC), 1 ex. "Taiwan: Wushe 7.IV.1983 H. Townes 1150 m" (HAHC), 2 ex. "Taiwan: Wushe 22.V.1983 H. Townes 1150 m" (HAHC), 2 ex. "Taiwan: Wushe 15.V.1983 H. Townes 1150 m" (HAHC), 1 ex. "Taiwan: Wushe 10.V.1983 H. Townes 1150 m" (HAHC), 1 ex. "Taiwan: Wushe 29.V.1983 H. Townes 1150 m" (HAHC).

## *Maladera taoyuanensis* KOBAYASHI

*Maladera taoyuanensis* KOBAYASHI, 1991*b*: 212.

*Material examined* – 1 ex. "Taiwan: Tao Yuan Co. Ba lin, alt. 650 m 22/VI/1990 Collr. I. S. Hau" (CA).

## *Maladera liotibia* NOMURA

*Maladera liotibia* NOMURA, 1974: 104, 110.

*Material examined* – TAIWAN: 1 ex. "Taiwan, Pingtung Prov. 300 m, Kenting N. P. Kenting Forest Recr. Area/ 21°57'62''N, 120°48'89''E 17–18.IV.1997 leg. L. Peregovits & A. Kun" (HNHM), 2 ex. "Taiwan: Kenting I. 5–11.V.1991 C. Starr PT" (HAHC), 1 ex. "C. Taiwan: Nan Tou Co., Sun Moon Lake 6/VI/1988 collr. C. L. Li" (CA), 3 ex. "C. Taiwan: Nan Tou Co., Mt. Xou Chan Da Shan 14/VI/1988 collr. C.K. Yu" (CA), 1 ex. "Formosa Taihorin, V.10 H. Sauter S.G." (ZMHB). CHINA (MAINLAND): 2 ex. "Kuatun (2300 m) 27, 40 n.Br. 117, 40 ö.L. J. Klapperich 21.6.1938 (Fukien)" (CF).

## *Maladera gibbiventris* (BRENSKE)

*Autoserica gibbiventris* BRENSKE, 1897: 396.
*Aserica gibbiventris* (BRENSKE): MURAYAMA 1938: 12.
*Maladera gibbiventris* (BRENSKE): NOMURA 1974: 109.

*Material examined* – 1 ex. "Taiwan: Prov. Nam-Tou 15 km N of Puli, 500 m 15.3.1996 leg. Gy. Fábián & L. Németh" (HNHM), 1 ex. "Taiwan: Ilan Prov. Fu Shan, Botanical Garden, 700 m/ at light 27–28.III.1997 G. Csorba & L. Ronkay" (HNHM), 1 ex. "Taiwan: Ilan Prov. Chilan, Chilan Forest Recreation area/ 500 m at light, 14–15.IV.1997 G. Csorba & L. Ronkay" (HNHM).

## *Maladera invenusta* (MOSER) (Figs 34–35)

*Autoserica invenusta* MOSER, 1918: 212.
*Maladera invenusta* (MOSER): NOMURA 1974: 106.

*Type material* – Syntypes: 1 ♂ "Kosempo (Formosa) H. Sauter V.1912/ *Autoserica invenusta* Type Mos." (ZMHB), 1 ♂ "Sokutsu Banshoryo Distr. H. Sauter 1912/ 22.VI./ *Autoserica invenusta* Mos. J. Moser det. 1917 n. sp./ Syntype" (DEI), 1 ♀ "Kosempo Formosa H. Sauter 1912/ 22.V./ Moser det./ Syntype" (DEI).

*Additional material examined* – 1 ex. "Kanshirei 908.V.9–17./ Formosa Sauter" (HNHM, keine Type), 3 ex. (♀♀) "Formosa Kanshirei 20.6.1908 H. Sauter" (USMB), 1 ♀ "Formosa Takao 14.6.1907 H. Sauter" (USMB), 1 ex. "Formosa Taihorin III.10 H. Sauter S.G." (ZMHB), 2 ex. "2.–14.VI.08/ Formosa Kanshirei Sauter S.V." (ZMHB).

*Aedeagus* – Figs 34–35.

## *Maladera satoi* (NIIJIMA et KINOSHITA), **comb. n.**

*Autoserica satoi* NIIJIMA et KINOSHITA, 1927: 10.

*Material examined* – Taiwan: 2 ex. (♂, ♀) "Formosa Taihauruku 14.6.1908 H. Sauter" (USMB), 1 ex. (♀) "Formosa Sauter/ Kanshirei 908–19–17" (HNHM), 1 (♂) ex. "Formosa Sauter/ Kanshirei 908/ 19–27" (HNHM). Laos: 1 ex. "Bolikhamxai pr. 18°16'N 103°11'E 70 km NEE Vientiane 27–30.iv.1997, 150 m, Vit Kuban leg./ LS 64" (CP). Vietnam: 1 ex. "N. Vietnam Cuc Phong Nat. Park 21.–22.V.1996 Pacholátko & Dembický leg./ VS 111" (CP).

*Notes* – NIIJIMA & KINOSHITA (1927) have depicted parameres of *Maladera satoi*. They are significantly different from those of type material of *Maladera invenusta* (MOSER,1918) examined by the author. For that reason *Maladera satoi* should be considered as a valid species and removed from synonymy with *Maladera invenusta* (MOSER).

## *Maladera senta* (BRENSKE)

*Autoserica senta* BRENSKE, 1897: 405.
*Maladera senta* (BRENSKE): NOMURA 1974: 110.

*Type material* – Syntypes: 1 ♂ "Shanghai/ *Serica senta* Type Brsk./ E. Brenske 1896/ Ex. Museo H.W. Bates/ Museum Paris Coll. R. Oberthür/ Type" (MNHN), 1 ♀ "Chine A. David/ *Serica senta* Type Brsk./ E. Brenske 1896/ Museum Paris Coll. R. Oberthür/ Type" (MNHN).

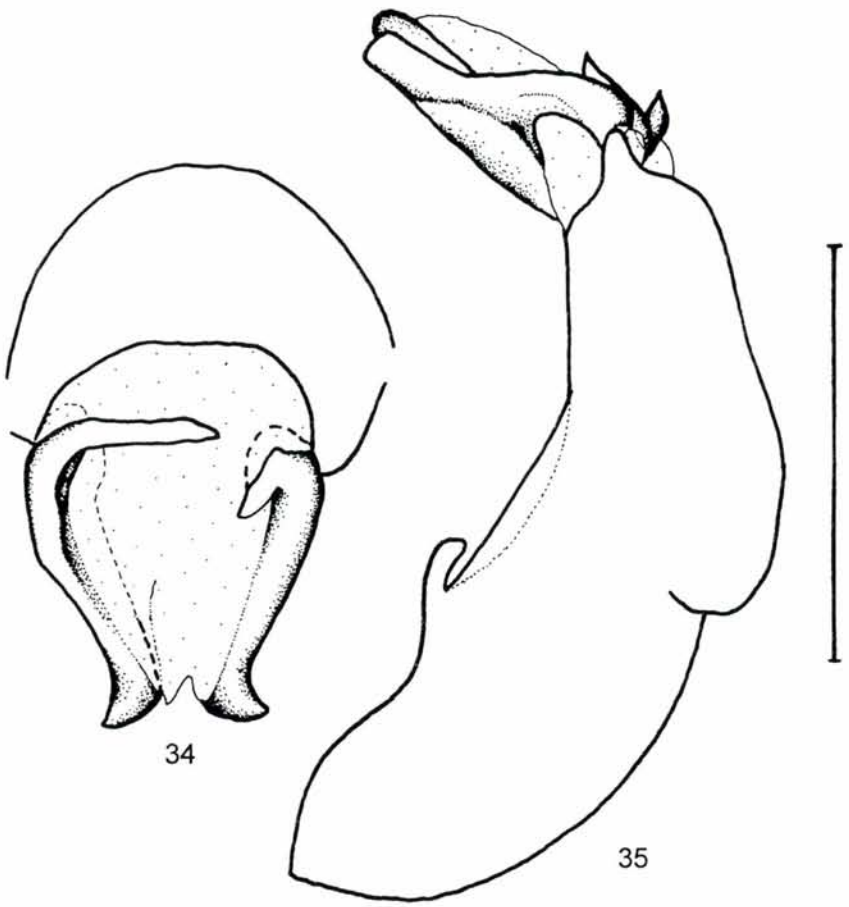
*Additional material examined* – 1 ex. (♂) "C. Taiwan: Nan Tou Co. near Pi Li, alt. 550 m 30.IV.1994 collr. C.C. Chen" (CA), 1 ex. "Wufeng 10.IV.1983 H. Townes" (HAHC).

## *Maladera formosae* (BRENSKE)

*Autoserica formosae* BRENSKE 1898: 210; NIJIMA & KINOSHITA 1923: 27.
*Maladera formosae* (BRENSKE): NOMURA 1974: 111.

*Type material* – Syntypus: 1 ♂ "Formosa/ *Autoserica formosae* Brsk." (MNHN).

*Additional material examined* – 1 ex. "Amping 908.VII.21/ Formosa Sauter" (HNHM), 1 ex. "Amping Formosa H. Sauter, 1911/ VII." (CA), 1 ex. "S. Taiwan: Pin Tun Co. Da Pu, alt. 30 m 6/V/1992" (CA), 2 ex. "Taiwan: Wufeng 10.IV.1983 H. Townes" (HAHC), 1 ex. "Taiwan: Wufeng 18.IV.1983 H. Townes" (HAHC), 1 ex. "Wu-feng, Taiwan April 6, 1983 Henry Townes" (HAHC), 2 ex. "Formosa Taihorin, V.10 H. Sauter S.G." (ZMHB), 2 ex. "Formosa Taihorin, IX.10 H. Sauter S." (ZMHB), 1 ex. "Formosa Anping 30.VI.08 Sauter S.G." (ZMHB), 1 ex. "Taiwan, S.O. China Puli-Tuchin Sun Khim lake 16.6.–24.6.1993 Dalihod lgt." (CP).




**Figs 34–35.** *Maladera invenusta* (MOSER, 1918) (Syntype: Sokutsu, Banshoryo Distr.): 34 = aedeagus lateral, 35 = parameres dorsal (scale: 1 mm)

## *Maladera nanshanchiana* (NOMURA)

*Maladera nanshanchiana* NOMURA, 1974: 105, 111.

*Material examined* – 26 ex. "C. Taiwan: Nan Tou Co. near Pu Li, alt. 850 m 30.IV.1994 collr. C.C. Chen" (CA).

## *Maladera orientalis* (MOTSCHULSKY)

*Serica orientalis* MOTSCHULSKY, 1857: 33.
*Aserica orientalis* (MOTSCHULSKY): LEWIS 1895: 395.
*Maladera orientalis* (MOTSCHULSKY): REITTER 1896: 187; NIKOLAEV 1977: 269; NIKOLAEV & PUNTSAGDULAM 1984: 251.
*Maladera cavifrons* REITTER, 1896: 188; NIKOLAEV & PUNTSAGDULAM 1984: 251.
*Maladera diffinis* REITTER, 1896: 188; NIKOLAEV 1977: 269.
*Serica famelica* BRENSKE, 1897: 391; NIKOLAEV & PUNTSAGDULAM 1984: 251.
*Serica pekingensis* BRENSKE, 1897: 366; NIKOLAEV & PUNTSAGDULAM 1984: 251.

*Material examined* – 2 ex. "Formosa Pilam 25.5.04 Haberer S." (ZMHB).

## *Maladera kreyenbergi* (MOSER)

*Autoserica kreyenbergi* MOSER, 1918: 211.
*Maladera kreyenbergi* (MOSER): NOMURA 1974: 108.

*Material examined* – 3 ex. "Taiwan, IV–VI.77 Fenchihu, 1400 m J. & S. Klapperich" (MHNG), 6 ex. "Taiwan, Taichung Hsien, Anmashan 2225 m 11–15.V.92 A. Smetena [T122]" (MHNG), 2 ex. "Taiwan: Nan Tou Co. Xi Tou, alt. 1200 m 26/II/1991 Collr.C. L. Li" (CA), 1 ex. "Taiwan: Meifeng 26.IV.1983 H. Townes 2150 m" (HAHC), 1 ex. "Taiwan: Meifeng 3.V.1983 H. Townes 2150 m" (HAHC), 1 ex. "Wushe, Taiwan 1150 m 16.III.83 Henry Townes" (HAHC), 1 ex. "Wushe, Taiwan 1150 m 23.III.83 Henry Townes" (HAHC), 2 ex. "Taiwan: Koa Shiung Co., Teng Zi alt. ca. 1600 m 21–22/VI/2000 collr. C.L. Li" (CA).

## *Maladera kubotai* NOMURA et KOBAYASHI

*Maladera kubotai* NOMURA et KOBAYASHI, 1979: 7.

*Material examined* – 1 ex. "Taiwan: Tao Yuan Co. Fu Hsin, alt. 450 m. 27/VIII/1993 Collr. C.C. Chen" (CA).

## *Maladera opacifrons* (FAIRMAIRE)

*Serica opacifrons* FAIRMAIRE, 1891: 195.
*Autoserica opacifrons* (FAIRMAIRE): BRENSKE 1897: 398; BRENSKE 1902: 45.
*Maladera opacifrons* (FAIRMAIRE): NOMURA 1965: 142; NOMURA 1974: 108.

*Type material* – Syntypes: 1 ♀ "N. Chin/ Yelutuna Reiche China/ Mus. Laferte 1828/ Ex. Museo D. Sharp 1890/ *Serica opacifrons* Fairm./ Museum Paris ex coll. R. Oberthür" (MNHN), 1 ♂ "Museum Paris 1906 Coll. Leon Fairmaire/ Chang Yang/ Type/ *Serica opacifrons* Fairm. Tchang Yang" (MNHN), 1 ♂ "Quingua F. Simon/ Museum Paris 1906 Coll. Leon Fairmaire" (syntype status doubtful, MNHN).

*Additional material examined* – 1 ex. "Taiwan: Kao Shiung Co. Teng Tzi, alt. 1600 m. 13/VII/1990 Coll. C. L. Li" (CA), 1 ex. "Taiwan, County Kaohsiung, 700 m Liu-Kuei, San-Ping Forest Res. Stat. 22°58'16'N, 120°41'15''E, 14–15.IV.1997, leg. L. Peregovits & A. Kun" (HNHM).

## *Maladera maedai* NOMURA

*Maladera maedai* NOMURA, 1974: 103, 108.

*Material examined* – 4 ex. "Taiwan, IV–VI.77 Fenchihu, 1400 m J. & S. Klapperich" (MHNG).

## *Maladera sinica* (HOPE), comb. n.

*Serica sinica* HOPE, 1845: 9.
*Autoserica sinica* (HOPE): BRENSKE 1897: 406.

*Material examined* – 1 ex. "Taiwan: Tao Yuan Co. Hou Tzi Hu, alt. 500 m. 24/III/1991 Collr. I.S. Hsu" (CA), 1 ex. "Taiwan: Tao Yuan Co. Hou Tzi Hu, alt. 500 m. 4–5/V/1991 Collr. I.S. Hsu" (CA).

*Notes* – This species was originally described from China, but without exact locality data. It is very closely related to *Maladera japonica* (MOTSCHULSKY), and the two may represent only geographical forms of the same species.

## *Maladera tridentipes* NOMURA

*Maladera tridentipes* NOMURA, 1974: 103, 107.

*Material examined* – 1 ex. "Taiwan: I Lan Co. Fu Shan Botanical Garden, alt. 600 m 22/IV/1995 Collr. C.L. Li" (CA).

## *Serica* (s. l.) *formosana* MOSER

*Serica formosana* MOSER, 1915: 338.
*Maladera curvifemora* NOMURA, 1974: 103, 107, **syn. n.**
*Maladera brevipilosa* KOBAYASHI, 1985: 13, 14, **syn. n.**

*Type material* – Holotype: ♂ "Formosa Tainan/ *Serica formosana* Type Mos./ *formosana* Mos." (ZMHB).

*Additional material examined* – 4 ex. "Wushe, Taiwan, 1150 m, 23.III.83 H. & M. Townes" (HAHC), 4 ex. "Wushe, Taiwan, 1150 m, 16.III.83 H. & M. Townes" (HAHC), 1 ex. "Taiwan, Wushe, 1150 m, 7.IV.83 H. Townes" (HAHC), 1 ex. "Taiwan, Wushe, 1150 m, 13.IV.83 H. Townes" (HAHC), 1 ex. "Taiwan, Wushe, 1150 m, 29.IV.83 H. Townes" (HAHC), 1 ex. "Taiwan, Wushe, 1150 m, 29.V.83 H. Townes" (HAHC), 1 ex. "Wushe, Taiwan, 1150 m, 29.IV.83 H. Townes" (HAHC), 1 ex. "Taiwan, Ilan Pr., Chihtuan, Ming-Chyr Forest Recr. Area, 1200 m, 12.VI.1997 B. Herczig & L. Ronkay" (HNHM)

*Notes* –Illustrations of genitalia by NOMURA (1974) and KOBAYASHI (1985) present one and the same species without any doubt. Both descriptions and figures fit the type specimen of *Serica formosana* MOSER, which was examined by the author.

*

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# *The oribatid species described by Berlese (Acari)*

by MAHUNKA, S. and L. MAHUNKA-PAPP

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