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The Genus Exocentrus Mulsant of Japan and its Adjacent

Regions: (2) The Revision of Taiwanese Species

By Keiichi Kusama and Yoshiaki Tahira

日本およびその近隣のアラゲケシカミキリ属:(2)台湾産種の総説

草間 慶一・多比良 嘉晃

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Biological Institute, Faculty of Science, Shizuoka University, Oya 836, Shizuoka-city, 422.

GRESSITT (1951) listed 6 species of Exocentrus including 1 new species from Taiwan, in his monograph "Longicorn Beetles of Chine". In 1958, BREUNING published "Révision du Genre Exocentrus MULSANT", in which he classified 258 species of this genus into 10 subgenera. In regard to Taiwanese 6 species, he referred brevisetosus and savioi to subgenus Exocentrus, immaculatus and rufithorax to Pseudocentrus, seriatomaculatus to Oligopsis, and variepennis to his newly established subgenus Formosexocentrus, however, he could not actually examined the specimens of brevisetosus, immaculatus and rufithorax.

The present paper includes the descriptions of 6 new species and 1 new subspecies, the synopsis of 6 known species, the discussion of the taxonomic status of some species and a key to 13 Taiwanese members of this genus. All holotypes treated in this paper are deposited in the National Science Museum of Tokyo, and paratypes are in the authores' and the collectors' private collections.

Genus Exocentrus MULSANT

Species of *Exocentrus* in Taiwan have the following characters: head slightly broader than prothorax at anterior margin, but much narrower than broadest portion of prothorax which produced with lateral tubercles; each apex of elytron narrowly rounded; first hind tarsal joint subequal to following two united togather in length, excepting *E. kentingensis*.

Subgenus Bicolorihirtus subgenus nov.

Antennal third segment equal to fourth. Elytra irregularly punctate. Antennae, prothorax, elytra and legs with two kinds of white hairs and black bristles or hairs.

Type species: Exocentrus venatoides sp. nov.

ELYTRA, Vol. 6, No. 1 (Aug. 1978)

Exocentrus (Bicolorihirtus) venatoides sp. nov. (Fig. 1).

(Japanese name: Kumonosumon-keshi-kamikiri)

Male-Dark reddish brown; frons nearly black except for anterior margin, vertex and occiput; labrum largely fulvous. Head moderately clothed with recumbent golden yellow pubescence; and with various length of blackish brown hairs, some of them lined transversely on anterior margin of frons; base of labrum with shorter and finer hairs. Antennae clothed same pubescence, becoming denser towards apices; each segment with one or a few very long milky white hairs and short brownish black bristles sparsely. Pronotum with denser white pubescence on anterior and posterior margin, median line and middle portions of each side of disc, remaining with golden one; and also with some black bristles on sides of a median line and marginal portions where intermixed with white hairs. Elytra clothed with much finer golden yellow pubescence, intermixed with tawnywhite one, which formed one or two faint and sho^It sublongitudinal stripes on humerus portions, shaped like W narrow transverse band between near base and basal 1/3, inverse W-shaped band on between middle and basal 2/3, these two faintly connected with a narrow longitudinal short stripe at middle of each elytron, and three or more short sublongitudinal stripes behind inverse W-shaped band irregularly connected with each other; each elytron also with six longitudinal rows from base to near spex, dorsal four constituted with long suberect brownish black bristles but one or more rows exchanged for milky white hairs at basal and apical ends, and lateral two formed with longer milky white hairs. Legs clothed with golden pubescence; and with short milky white hairs sparsely, and hind tibiae with short dark bristles.

Head rather densely scattered with distinct granules; frons about 1.5 times as broad as deep, feebly convex at middle; vertex broadly and somewhat strongly concave between antennal insertions; inferior eye-lobe about 1.2 times as deep as broad, and 2.4 times as deep as gena below it. Antennae about 1.4 times as long as body; scape moderately long, about 3.9 times as long as thick; ratio of segments as follows — 3.9:1.0:3.3:3.3:3.0:2.7:2.5:2.4:2.3:2.1:1.9. Prothorax about 1.7 times as broad as long, posterior margin as broad as anterior; lateral tubercles just behind middle long and stout, pointing rather backward and fairly upward; a pair of small and distinct teeth at near base of lateral margins furnishing one long hair (Fig. 1p); disc comparatively flattened at posterior half, and with distinct and fine granules rather densely. Scutellum broad and rounded-triangular. Elytra somewhat long, about 2.1 times as long as broad, breadth at base about 1.2 times as broad as prothorax at broadest portion; disc with feeble elevations just behind scutellum; irregularly deep punctate; interspaces of punctures with very fine granules and small feeble tubercles at basal 1/5. Underside of body scattered with fine granules.

Length: 4.7-6.7 mm, breadth: 1.6-2.5 mm.

Holotype—&, Near Meifeng, Hantou Hsien, central Taiwan, 22 May 1976, T. SHIMOMURA leg. Paratypes—Same locality as holotype: 1&, 22 May 1974, K. AKIYAMA leg.; 1&, 18 May;

3♦\$5♀♀, 19 May; 3♦\$, 20 May; 3♦\$, 22 May; 1♦1♀, 24 May; 2♦\$, 3 June; 1♦1♀, 7 June 1976, T. SHIMOMURA leg. Sungkan, Nantou Hsien: 1♀, 15 June 1970, S. FUKUDA leg.

f. mirabillialbus f. nov.

This form differs from the typical one in having elytra with extremly extended broad tawnywhite pubescent maculation behind inverse w-shaped band, leaving only brownish two small apical spots and narrow sutural stripes.

Type——♀, Near Meifeng, 7 June 1976, T. SHIMOMURA leg.

This new species is very unique in having two kinds of hairs or bristles, white and black ones on antennae, marginal portions of prothorax, lateral side of elytra and legs. The authors considered the characters sufficient enough to establish new subgenus *Bicolorihirtus*.

E. (Camptomyne) ciliatissimus GRESSITT (1956) from Palau Is. (Western Caroline Iss., Micronesia) also has two kinds of hairs or bristles. However this species differs from venatoides sp. nov. in the following respects: each elytron with six seriate punctures rows and six black bristles rows on disc, while the new species with irregular punctures and four black bristles rows. The authors considered E. ciliatissimus is the nearest allied to this new species, however they hesitate to classify it into subgenus Bicolorihirtus, because they could not have chance to examined the type specimen.

Exocentrus (Exocentrus) brevisetosus Gressitt (Fig. 2)

Exocentrus testudineus Matsushita subsp. brevisetosus Gressitt, 1938
Phillipp. Journ. Sc., 65: 167, pl. 1, fig. 4.

Exocentrus brevisetosus, Gressitt, 1951, Longicornia, 2: 526, 527.

Exocentrus (Exocentrus) brevisetosus, Breuning, 1958, Bull. Brit. Mus., 7(5): 214, 229.

"Dull chocolate brown" to dark reddish brown, head nearly black, sometimes reddish or partly paler. "Body clothed with pale (whitish golden) pubescence as follows: head thinly clothed over most of surface; prothorax thinly clothed, a distinct oblique spot on either side, and a fine midlongitudinal line, on disc; scutellum fairly densely clothed; elytra each with a faint longitudinal stripe extending back from base interior to humerus and a suboblique one extending from near suture behind scutellum, both meeting a narrow transverse band that reaches external margin but does not quite touch suture, next a longitudinal stripe along middle of dorsal disc, crossing slightly over the preceding band and extending to middle where it dichotomously divides, the two branches continuing obliquely, the inner to suture, the outer an equal distance and turning and continuing transversely to external margin, and lastly a zigzag band just beyond beginning of apical quarter; ventral surface moderately clothed." Body also clothed with short bristles, lined transversely on labrum and anterior margin of frons; "very sparse" on head, "pronotum, and legs"; each elytron

ELYTRA, Voi. 6, No. 1 (Aug. 1978)

arranged in eight longitudinal rows from base to near apex, but second and sixth rows, counting from suture side (in this paper, always counts this way), not reached near apex. And also "antennae with very short, slightly raised, dark hairs".

"Head feebly swollen, hardly concave at vertex, finely granulose"; frons about 1.3 times as broad as deep; eyes somewhat small, inferior eye-love about 1.1 times as broad as deep, and about 2.2 times as deep as gena below it. Antennae rather long, about 1.5 times as long as body in male, and about 1.3 times in female; scape about 4.1 times as long as thick; ratio of segments as follows—3.6:1.0:3.3:3.3:2.8:2.4:2.4:2.2:2.0:1.9:2.0. Prothorax about 1.6 times as broad as long, this ratio does not agree with GRESSITT's original description, "prothorax about twice as broad as long"; posterior margin slightly narrower than anterior margin; "strongly produced laterally", lateral tubercles behind middle of each side rather small, subtriangular, and flattened, directed somewhat "obliquely backward" and upward (Fig. 2p). Scutellum triangular, not "rounded" as GRESSITT described. Elytra about 2.0 times as long as broad; disc feebly convex behind scutellum, then feebly impressed at basal 1/3; also surface deeply, "closely and irregularlated punctured to apices."

The sentences or wards in " " are cited from the original description by GRESSITT (1938).

Material examined — Roshan, Nantou Hsien, central Taiwan: 1 ex., 1-2 May 1973, K. KINUGASA leg. Nanshanchi, Nantou Hsien: 2♀♀, 7 May; 1♠, 15 May 1976, T. SHIMOMURA leg. Palin, Taoyuan Hsien, northern Taiwan: 1♀, 26 May 1977, J. ITO leg. (Pl. I-2). Taman, Taoyuan Hsien: 1♠, 27 May 1977, J. ITO leg. Senpei, Kaohsiung Hsien, southern Taiwan: 1♠, 5 June 1976, K. AKIYAMA leg., 1♀, 25 May 1977, H. FUJITA leg.

Length: 3.7-4.7 mm, breadth: 1.3-1.7 mm.

GRESSITT (1938) described brevisetosus as subspecies of E. testudineus MATSUSHITA (1931) distributed in Japan, but later he (1951) elevated to distinct species. This treatment is quite reasonable, for these two species are surely alike in elytral markings, but the former distinctly differs from the latter in form of prothorax, state of bristles and elytral punctures, etc. This species is structurally allied to E. (Exocentrus) galloisi MATSUSHITA (1933) in Japan rather than E. testudineus.

Exocentrus (Exocentrus) kentingensis sp. nov. (Fig. 3)

(Japanese name: Kuroobi-kebuto-keshi-kamikiri)

Male—Dark brown to pitchy brown; generally darker on head, pronotum, and metasternum; sometimes paler on mouthparts, gula, scape, anterior margin and lateral tubercles of prothorax, proand mesosternum, sutural portion of elytra, coxae and trochanter. Head sparsely clothed with whitish grey pubescence; intermixed with fine and long brownish black hairs; shorter ones lined transversely on anterior margin of frons and labrum. Antennae densely clothed with dark pubescence, but paler on insides of scape and pedicel, and bases of third to eighth or sometimes to tenth; scape and chiefly inside of following segments with brownish black bristles. Pronotum covered with gray pubsecence, but darker and finer one on each side of a median line and middle of disc; lateral parts of anterior margin with a pair of notable black bristles; apical half and posterior margins intermixed with shorter brownish black bristles and basal half with longer ones. Elytra with three ground-color areas, first band at basal portion, second at just behind middle fairly broad and subzigzag, and third subrounded at near each apex, these three areas clothed with very fine dark brown pubescence, remainder of surface with whitish yellow one; each elytron with very long and stout erect black bristles usually arranged in eight longitudinal rows from base to near apex, but second row only attaining basal 2/3; each bristle surrounded by a small irregular glabrous spot. Legs clothed with grey pubescence; and very sparsely with short bristles; apical 1/3 of middle and hind tibiae with short browish black hairs.

Head scattered with fine granules fairly densely; occiput with minute and sparse punctation; frons about 1.4 times as broad as deep, surface weakly convex; vertex feebly and broadly concave between antennal insertions; eyes somewhat small, inferior eye-lobe about 1.2 times as deep as broad, and about 1.6 times as deep as gena below it. Antennae somewhat long, 1.5 times as long as body; scape moderately long, about 4.2 times as long as thick; relative lengths of segments as follows—4.2:1.0:3.0:3.0:2.9:2.4:2.3:2.2:2.1:2.0:1.9. Prothorax about 1.6 times as broad as long, and breadth at posterior margin as broad as anterior margin; sides expanded laterally, on basal 1/3 lateral tubercles pointing to straight backward or to humeri and rather upward (Fig. 3p), disc finely and fairly densely granulose. Scutellum small, rounded-triangular. Elytra somewhat short, about 1.8 times as long as broad; broadly and shallowly impressed at sides of suture from basal 1/4 to 1/3; surface irregularly and rather sparsely scattered with minute and obscure punctures from base to near apices. First hind tarsal joints slightly longer than following two combined. Underside of body with fine granules moderately.

Length: 2.5-5.5 mm, breadth: 1.0-2.2 mm.

Holotype——令, Near Kenting Park, Pingtung Hsien, southern Taiwan: 30 Mar. 1971, K. MATSUKI leg. Paratypes——Same place as holotype: 1令, 14 Mar. 1971, N. YAMAMOTO leg., 45令令31♀♀, 29–31 Mar.; 14令令12♀♀, 9–12 Apr. 1971, K. MATSUKI leg.; 2♀, 26 and 27 Oct. 1976, J. ITO leg.

Elytral marking of this new species is very similar to *E. (Pseudocentrus) dalbergianus* GRESSITT (1951) collected in central China, but differs from the following points: the latter has "inferior eye-lobe nearly three times as deep as gena below it, and being prothorax about twice as broad as deep as long", while the new species has much smaller eye and less broader prothorax. *E. dalbergianus* was referred to *Pseudocentrus* by BREUNING (1958) without examined this species.

One of the important characters of this subgenus is that the third antennal segment is slightly longer than fourth, however, GRESSITT (1951) did not stated relative length of them in his original paper. Therefore it is questionable dalbergianus is belonged to Pseudocentrus, it might be to subgenus Exocentrus.

This new species is very unique for having extremely thick and long erect bristles, then there are no allied species in Taiwan and Japan.

Exocentrus (Exocentrus) nanshanensis sp. nov. (Fig. 4)

(Japanese name: Nansyan-usuobi-keshi-kamikiri)

Male-Integument blackish brown; head brownish black to black, anterior margin of frons more or less paler, labrum yellowish brown, other mouthparts largely reddish, gula dark reddish brown; antennae somewhat reddish, basal portion of each segment paler; anterior and posterior margins of prothorax and lateral tubercles dark reddish brown; elytra reddish brown; coxae, trochanters, bases of tibiae, and tarsi more or less paler. Head sparsely clothed with golden yellow pubescence; and sparsely and irregularly with thick brownish black hairs; some of them lined transversely on anterior margin of frons, shorter and finer ones on labrum. Antennae sparsely with finer pubescence; and with short and fine dark brown hairs; also sparsely with thick brownish black hairs. Pronotum with denser golden pubescence on midlongitudinal line broadly, elongate spot at each side of disc, and posterior margin; finer pubescence on both sides of midlongitudinal line; whole marginal portions and both sides of median line with brownish black bristles chiefly; lateral margins also with a few very fine paler hairs. Elytra entirely covered with very fine golden pubescence; thicker pubescent spots maculating irregular transverse bands at basal 1/3 and apical 2/5, seriated spots along suture extending from base to apex, and a few incomplete sublongitudinal rows in places; sometimes these maclae diminished and disappeared; each elytron furnished with fairly long brownish black bristles usually arranged in eight longitudinal rows from base to near apex, but second row lined from base to apical 1/3, and sixth at only middle portion with a few bristles. Legs moderately clothed with pubescence; sparsely with short and thick brownish black bristles; each trochanter with a long and fine pale brown hairs; apical halves of middle-and hind-tibiae, and underside of fore-tibiae densely with very short brownish black bristles. Beneath with finer pubescence than dorsal one, longer and denser on posterior margin of each abdominal sternite; lateral margins of each sternite and apical half of last one with a few long dark brown hairs.

Head densely scattered with distinct granules, finer and denser ones on occiput; from about 1.2 times as broad as deep; vertex broadly concave between antennal insertions; eyes large, inferior eye-lobe about 1.2 times as deep as broad, and about 2.7 times as deep as gena below it. Antennae about 1.4 times as long as body relative length of each segment—4.2:1.0:3.5:3.5:3.5:3.3:3.1:2.9:2.7:2.5:2.3:2.2. Prothorax about 1.6 times as broad as long, and posterior margin

as broad as anterior margin; sides moderately expanded, lateral tubercles at basal 1/3 long and rather upward, and fairly strongly bent inside (Fig. 4p); disc scattered with distinct and fine granules densely. Scutellum broad, nearly semicircular. Elytra about 2.0 times as long as broad; areas behind scutellum weakly raised, and broadly impressed behind them; surface sparsely and irregularly scattered with deep punctures. Each abdominal sternite with shallow oval depression on each side.

Length: 4.0-5.7 mm, breadth: 1.4-2.1 mm.

Holotype—\$\tilde{\cap-}\$, Nanshanchi, Nantou Hsien, central Taiwan: 2 May 1977, J. Ito leg. Paratypes—Same locality as holotype: 2 exs. 3-4 May 1973, K. KINUGASA leg.; 1\$1\$, 29-30 Apr.; 3\$\$, 8, 10 & 25 May; 1\$, 1-2 June 1976, T. Shimomura leg.; 3 exs. 12 July; 1 ex. 26 July; 1 ex. 29 July 1976, H. Nara leg.; 1\$, 9 May 1977, W. Suzuki leg.; 1\$, 10 May 1977, J. Ito leg.; 2\$\$1\$, 23 July; 1\$1\$, 25 July, 1\$1\$, 4 Aug. 1977, K. Kusamaleg. Lienhwachi, Nantou Hsien: 1\$1\$, 21-23 May; 1\$1\$, 29-31 May 1976, T. Shimomura leg.; 2\$\$, 24 July 1976, M. Kubota leg. Jiuyuehtan, Nantou Hsien: 1\$1\$, 27 May 1976, T. Shimomura leg.

This new species is allied to *E.* (*Exocentrus*) testudineus MATSUSHITA located in Japan, but differs from the latter in having lateral prothoracic tubercles stouter and more strongly bent, elytra somewhat shorter and more largely punctured, elytral bristles longer, sparser and more erectable, and elytral marking formed with small spots of golden yellow pubescence, instead of continuous yellowish grey pubescence, not small spots, as the case of testudineus.

Exocentrus (Exocentrus) fulvobrunneus sp. nov. (Fig. 5)

(Japanese name: Kichamadara-keshi-kamikiri)

Male—Head and mandibles pitchy black; clypeus and labrum fulvous; gena to gula, and antennae brunneus; but pedicel and base of each antennal segment more or less paler; pronotum brunneus, margined with dark reddish; elytra brunneus and patched with several irregular fulvous maculae from behind bases to apical 1/3, and near apices with large suboval areas; femora largely brunneus, other parts testaceous; beneath fuscus, anterior margin of prosternum brunneus, mesosternum and mesepisternum more or less rufescent. Head sparsely clothed with ivory-white pubescence and short pitchy hairs; some longer hairs lined transversely on anterior margin of frons and labrum. Apical portions of antennal third segment and fourth, and following ones exchanged with darker and denser pubescence; each segment with short suberect paler hairs and also long pitchy hairs mainly on inside. Pronotum with fine ivory-white pubescence, denser on a median line and each side of disc; and sparsely with fine long pitchy hairs near median line and at marginal portions. Elytra clothed with fine fuscous pubescence excepting on fulvous maculae which generally with thick ivory-white one; each elytron with piceous bristles arranged in eight longitudinal rows from base to near apex, but second row lined to just behind middle and sixth one to basal 2/3. Legs and under side of body clothed with pale aureate pubescence; legs sparsely with somewhat short

pitchy hairs; apical halves of middle and hind tibiae with very short piceous bristles; last abdominal sternite with short fine fuscous hairs chiefly on posterior margin.

Head rather densely scattered with fine granules; frons about 1.4 times as broad as deep, feebly convex at middle; vertex broadly and feebly concave between antennal insertions; eyes large, inferior eye-lobe about 1.3 times as broad as deep, and about 3.3 times as deep as gena below it. Antennae about 1.3 times as long as body; scape moderately long, about 3.9 times as long as thick; ratio of segments as follows—4.0:1.0:3.3:3.4:3.0:2.9:2.7:2.7:2.4:2.2:2.2. Prothorax about 1.6 times as broad as long, posterior margin slightly shorter than anterior margin; sides obliquely expanded; lateral tubercles at basal 1/3 somewhat short and slender, directed moderately backward and rather upward (Fig. 5p); disc densely scattered with fine granules. Scutellum rounded-triangular. Elytra about 2.1 times as long as broad; basal areas behind scutellum raised weakly and broadly, following portions impressed feebly and broadly; disc sparsely and irregularly punctured till near apices, but subseriately in places. Beneath granulose very finely.

Length: 3.9 mm, breadth: 1.4 mm.

Holotype—— 3, Roshan, Nantou Hsien, central Taiwan: 1–2 May 1973, K. KINUGASA leg. Paratype—— 3, same place as holotype, 9 May 1977, H. FUJITA leg.

This new species is very closely allied to *E.* (*Exocentrus*) nanshanensis sp. nov., but differs from the latter as following characters: pronotum dark red except for anterior margin and middle portion, elytra with several irregular fulvous areas, which clothed with ivory white pabescence, bristles of antennae and elytra shorter and somewhat fewer, inferior eye-lobe larger, and then ratio of eye in depth to gena below it larger, lateral tubercles almost straight.

Exocentrus (Exocentrus) savioi PIC (Fig. 6)

Exocentrus curtipennis var. savioi PIC, 1925, Bull. Soc. ent. Fr.: 138

Exocentrus curtipennis var. savioi, SAVIO, 1929, Note. d'Ent. chin., 1(3): 3

Exocentrus curtipennis savioi, GRESSITT, 1937, Lingnan Sc. Journ., 16: 615;

GRESSITT, 1951, Longicornia, 2: 527

Exocentrus (Exocentrus) savioi, BREUNING, 1958, Bull. Brit. Mus., 7(5): 214, 228

Head, prothorax, femora and large part of metasternum brownish black; elytra dark brown; antennae, gena to gula, lateral tubercles of prothorax, pro-and mesosternum, middle of metasternum, and legs except for femora more or less reddish, but becoming darker to apex on each antennal segment and each tibia. Surface clothed with greyish pubescence, according to "Longicornia" by GRESSITT (1951), "marked with vague glabrous spots", which surrounding insertion of each bristle on pronotum and elytra, and "a postmedian subtransverse glabrous band" on elytra, while PIC described in his original paper about this species, "dépassant les élytres d'environ un article". Bristles fairly long, relatively oblique, and arranged in eight longitudinal rows from base to near apex on

each elytron, but second and sixth rows not reached apex utterly.

Head finely granulose, but hardly to see for with dense pubescence; from 1.6 times as broad as deep; eyes rather small, inferior eye-lobe 1.3 timess as deep as broad, and about 1.6 times as deep as gena below it. Antennae somewhat longer, about 1.5 times as long as body; scape about 4.0 times as long as thick; relative length of segments—4.4:1.0:3.9:3.8:3.0:2.8:2.7:2.6:2.2:2.1:2.0. Prothorax about 1.6 times as broad as long, this ratio does not agree with GRESSITT's description "prothorax about twice as broad as long" in his key; posterior margin slightly narrow than anterior margin; sides moderately expanded; lateral tubercles at basal 1/4 stout and somewhat flattened, directed slightly outside of humerus and fairly upward (Fig. 6p). Elytra about 1.9 times as long as broad; disc broadly and feebly convex behind scutellum; "elytral punctures mediocre, not very regular, rather close."

Material examined——Roshan, Nantou Hsien, central Taiwan: 1 ♂, 1–2 May 1973, K. KINUGASA leg. (Pl. ∥-8)

Length: 4.7 mm, breadth: 1.8 mm.

Distribution: China: Zi-Ka-Wai (type locality); Kiangsi; Kiangsu; Chekiang. Taiwan: Kakku (W, Miwa leg., in Taiwan Agr. Res. Inst.).

There is a discrepansy about the figure of prothorax mentioned above, but the authors guess the specimen used by GRESSITT may be female or his expression may a little bit exaggerated.

Exocentrus (Camptomyne) formosofasciolatus sp. nov. (Fig. 7)

(Japanese name: Taiwan-kumogata-keshi-kamikiri)

Female—Integument blackish brown; head black, reddish on gena, more or less paler on gula, insides of mandibles, clypeus and labrum except for both borders of them, antennae paler at base of each segment; prothorax usually paler on anterior margin; trochanters, basal portions of tibiae and first tarsal joints reddish brown; sometimes reddish on anterior portion of mesosterum. Head sparsely clothed with yellowish grey pubescence; and with comparatively short and oblique brownish black hairs very sparsely, some longer suberect ones transversely lined on anterior margin of frons and shorter ones on labrum. Antennae somewhat densely clothed with dark brown pubescence excepting inside of scape, pedicel and basal partions of third and fourth segments, which with yellowish grey one; mainly inside of each segment with fine oblique brownish black bristles. Prothorax clothed with fine dark brown pubescence, except for dorsal three longitudinal stripes, somewhat narrow median line and two broad stripes on each side of line, which consisted with thick paler grey pubescence, but sometimes these stripes faint or deminished; anterior angle of disc with a notable bristle; lateral side sparsely and irregularly with various length of hairs. Elytra with several ground-colored areas, basal portions, before middle of each side, broadly on apical 1/3, near apices, and sometimes scattered on middle portions; these ground-colored areas clothed

with very fine dark brown pubescence; remaining parts densely furnished with longer yellowish grey one; each elytron with thick and long erect brownish black bristles, arranged in seven longitudinal rows from base to near apex, but second one attaining only middle. Legs clothed with pale pubescence; and with a few short and fine hairs; apical 2/5 of middle and hind tibiae with very short black bristles. Underside with finer pubescence; lateral margins of abdominal sternites with a few dark long hairs and denser on apical half of last sternite.

Head scattered with obscure fine granules sparsely, becoming fewer and finer towards neck; frons about 1.2 times as broad as deep, surface feebly convex; vertex almost flattened between antennal insertions; eyes small, inferior eye-lobe about 1.4 times as deep as broad, and equal to gena below it in depth. Antennae about 1.3 times as long as body, scape about 4.0 times as long as thick; ratio of segments — 3.7:1.0:3.4:3.3:2.5:2.3:2.1:2.0:1.9:1.8:1.7. Prothorax suboblong, about 1.5 times as broad as long, and distinctly narrower at posterior margin than at anterior one; sides a little widened; lateral tubercles at basal 2/3, somewhat short, pointing almost to humeri and upward (Fig. 7p); disc scattered with very fine granules considerably densely. Scutellum rounded-triangular. Elytra about 1.9 times as long as broad; surface subseriately punctured excepting sutural 1/4 to apical 1/6. Metasternum and abdominal sternites with obscure and fine granules.

Length: 3.1-4.7 mm, breadth: 1.2-1.8 mm.

Holotype—♀, Nanshanchi, Nantou Hsien, central Taiwan, 27 Apr. 1977, J. ITO leg. Paratypes—Same locality as holotype: 1♠, 3–4 May 1973, K. KINUGASA leg. Roshan, Nantou Hsien: 1♀, 1–2 May 1973, K. KINUGASA leg. Sungkang, Nantou Hsien: 1♀, 15 May 1970, S. FUKUDA leg. Meifeng, Nantou Hsien: 1♠, 7 June 1976, T. SHIMOMURA leg. Tsuifeng, Nantou Hsien: 1♀, 20 June 1976, J. ITO leg.

This new species is closely allied to *E.* (*Camptomyne*) fasciolatus BATES (1873) distributed in Japan, but the latter differs from the former as the following characters: body generally larger; eyes larger, inferior eye-lobe nearly three times as deep as gena below it; anterior margin of pronotum rounder, sides strongly and arcuately expanded; and elytra with smaller ground-colored areas at base and each side of before middle and arranged in some greyish pubescent spots on broad transverse area behind middle.

Exocentrus (Camptomyne) pseudovariepennis sp. nov. (Fig. 8)

(Japanese name: Nise-monmadara-keshi-kamikiri)

Male—Body brown to brunneus, weakly shining; generally darker on head, antennae, apical halves of elytra, legs. and abdominal surface; labrum yellowish brown; pronotum nearly black, some times reddish on anterior and posterior margins. Head sparsely clothed with buff pubescence; and with piceous hairs, some of them lined transversely on anterior margin of frons

and labrum. Antennae densely clothed with dark recumbent pubescence; short piceous bristles chiefly at inside of segments. Pronotum rather sparsely clothed with buff pubescence; but middle of each side, basal area of lateral tubercle and posterior margin exchanged with thick white one; marginal portions and sides of median line with some bristles or hairs. Scutellum with thick white pubescence somewhat densely. Elytra crossed by three narrow irregular bands of thicker white pubescence, first band at basal 1/5, second behind middle, third subobliquely at near apices and connected with second band along by suture, and also longitudinal arranged in a few small white pubescent spots between first and third bands; each elytron with piceous bristles arranged in seven longitudinal rows from base to near apex, but fifth row lined with only three or four bristles at middle portion. Legs and beneath with whitish pubescence; legs with piceous bristles very sparsely; and with short piceous hairs chiefly on apical halves of tibiae; last abdominal sternite with dark brown hairs on apical half.

Head distinctly and irregularly granulose; frons about 1.1 times as broad as deep, surface weakly convex; vertex broadly and rather shallowly concave between antennal insertions; inferior eye-lobe about 1.2 times as deep as broad, and about 2.8 times as deep as gena below it. Antennae about 1.2 times as long as body; scape about 4.0 times as long as thick; relative length of segments as follows—4.6:1.0:3.2:3.2:2.7:2.6:2.5:2.2:2.2:2.0:2.0. Prothorax about 1.6 times as broad as long; and slightly narrower at posterior margin than at anterior one, moderately expanded at sides, lateral tubercles at basal 1/3 pointed obliquely backward and slightly upward; disc scattered with distinct granules rather densely except for middle of a median line (Fig. 8p). Scutellum broad, rounded triangular. Elytra about 2.0 times as long as broad; each with large and subseriate punctures in nine or ten longitudinal rows from base to apical 1/5, but irregular on deflexed portion. Mesosternum, mesepisternum and metasternum densely scattered with fine distinct granules, abdominal surface with finer ones.

Length: 3.3-4.4 mm, breadth: 1.2-1.4 mm.

Holotype—\$\display\$, Roshan, Nantou Hsien, central Taiwan: 1-2 May 1973, S. TSUYUKI leg. Paratypes—Lienwachi, Nantou Hsien: 2\display\$\display\$1\varphi\$, 12 May 1975, K. AKIYAMA leg. Nanchanchi, Nantou Hsien: 1\varphi\$, 15 May; 4\display\$\display\$\varphi\$, 25 May 1976, T. Shimomura leg.; 1\display\$, 19 June 1976, T. Matsumoto leg. Liukuei, Kaohsiung Hsien, southern Taiwan: 1\display\$1\varphi\$, 23 Sept. 1976, J. Ito leg.

GRESSITT (1938, 1951)* reported variepennis from Taiwan (Kuraru=Kueitzuchiao, Pingtung Hsien), but his description is quite different from that of BREUNING (1958) probably based on the type specimen. The specimens used in this paper are much identical with GRESSITT's description and also comparatively agrees with elytral markings originally stated by SCHWARZER, however, obviously differs from BREUNING's description as the following respects: third antennal

^{*} GRESSITT, 1938, Philipp. Journ. Sc., 65: 168; 1951, Longicornia, 2: 526, 530.

segment is much longer than the fourth, elytra are irregularly punctured, these are the characters of his newly established subgenus *Formosexocentrus*, while the specimens used by the present authors having equal length of third and fourth antennal segments, and elytron with nine or ten longitudinal rows of punctures. The authors considered these specimens to be a new species, and named *pseudovariepennis*. (see also in the paragraph of *E. variepennis*).

This new species closely allied to *E.* (*Camptomyne*) trifasciellus GRESSITT (1940) in Hainan Is., but the latter differs in having the prothorax more expanded laterally, the tubercles much longer, the puntures on elytra sparser, and three white transverse bands more anteriorly placed (according to GRESSITT original description).

Exocentrus (Pseudocentrus) immaculatus Gressitt (Fig. 9)

Exocentrus immaculatus GRESSITT, 1951, Longicornia, 2: 525, 529.

Exocentrus (Pseudocentrus) immaculatus, BREUNING, 1958, Bull. Brlt. Mus., 7(5): 222, 293.

Body largely black; antennae brunneus, apical half of each segment more or less darker, except for second; pronotum and elytra slightly reddish, and sutural portion at behind middle of elytra brunneus; legs blakish brown, reddish in parts; abdomen brunneus, middle portion of each sternite darker. "Body largely clothed with thin pale pubescence; elytra (each) with small brown glabrous spots arranged in about seven longitudinal rows (second and sixth rows not reached apex uterly), each spot surrounding the insertion of a bristles; bristles relatively short, but stout and suberect on elytra, nearly lacking on prothorax."

Head fairly densely scattered with fine and distinct granules; from about 1.5 times as broad as deep; inferior eye-lobe about 1.3 times as deep as broad, and about 2.3 times as deep as gena below it. Antennae about 1.2 times as long as body; scape about 4.2 times as long as thick, ratio of segment of examined specimen as follows—3.5:1.0:2.7:2.6:2.2:I.9:1.8:1.6:1.6:1.5:1.5. GRESSITT (1951) mentioned "fourth three-fourths as long as third, one-third longer than fifth", while about examined specimen fourth slightly shorter than third. Prothorax about 1.6 times as broad as long, slightly narrower at posterior margin than anterior one; sides moderately expanded; lateral tubercles at basal 1/3 "flattened and pointing subobliquely backwards" (Fig. 9p). "Scutellum rounded-triangular". Elytra about 2.1 times as long as broad; disc rather strongly convex behind scutellum, and impressed behind convex area; insertions of bristles distinctly and fairly strongly raised, "irregularly punctured in about a dozen rows to apical quarter."

Length: 5.0 mm, breath: 1.8 mm.

Material examined — Nanshanchi, Nantou Hsien, central Taiwan, 1♀, 8 May 1976, T. SHIMOMURA leg. (Pl. II-9).

"Holotype specimen: ③, Kuraru, alt. 150 m, (=Kueitzuchiao, Pingtung Hsien, southern Taiwan), May 1935, GRESSITT leg. [in California Acad. Sci.]".

" " are cited from original description, but a ward or a sentence in () is the authors' observation or explanation.

Ratio of antennal segments third to fourth, and fairly darkened color of the body of a examined specimen do not agree with the description of GRESSITT, but the other characters are almost fit the original ones.

Exocentrus (Pseudocentrus?) rufithorax GEEESSITT (Fig. 10)

Exocentrus rufithorax GRESSITT, 1935, Trans. nat. Hist. soc. Formosa, 25: 286; GRESSITT, 1951, Longicornia, 2: 526, 530.

Exocentrus (Pseudocentrus) rufithorax, BREUNING, 1958, Bull. Brit. Mus., 7(5): 222, 294.

Body pitchy chocorate brown to black; "the prothorax, lower portions of neck, genae and mouthparts red", but sometimes broadly dark at middle of pronotum and prosternum. Surface clothed with dark yellow pubescence, in addition to "a thin white pubescence of short subreclining hairs, dense on the ventral surface and sparser on the elytra where they are irregularly grouped in longitudinal rows of faint spots"; antennae and elytra clothed thinly, but becoming denser apically. "Very long, erect fine bristle-like hairs" usually arranged in eleven longitudinal rows from base to near apex on each elytron, but fourth row lined with a few hairs from base to middle and sixth one from middle to apical 1/4, sometimes both rows diminished or disappeared.

"Head slightly concave between antennal insertions;" densly and finely granulated; from about 1.5 times as broad as deep; eyes somewhat small, inferior eye-lobe about 1.4 times as deep as broad, and about 1.9 times as deep as gena below it. Antennae about 1.1 times as long as body in female, somewhat longer in male; scape about 4.7 times as long as thick; ratio of segments as follows—5.3:1.0:4.2:3.6:3.0:2.6:2.5:2.1:2.0:1.8:1.9 (this ratio in female). Prothorax about 1.7 times as broad as long in female, about 1.5 times in male. Elytra about 2.0 times as long as broad (Fig. 10p); punctures rather irregular, and becoming gradually smaller apically. Beneath with very fine obscure granules.

Sentences in " " are cited from the original description by GRESSITT (1935).

Length: 5.1-5.3 mm, breadth 1.7-1.9 mm.

Material examined—Yushin (=Miharashi), Nantou Hsien, central Taiwan: 1♀, 18 Apr. 1967, S. FUKUDA leg. (Pl. II-10). Meifeng, Nantou Hsien: 1♂, 20 May 1977, K. AKIYAMA leg. All specimens were collected at more than 1700 m altitude, including holotype of GRESSITT.

Hitherto, this species has been referred to subgenus *Pseudocentrus* by BREUNUNG, for third antennal segment is slightly longer than fourth, but the ratio of the third to the fourth was 1.0: 0.86 in female and 1.0:0.88 in male of examined specimens. *E.* (*Pseudocentrus*) guttulatus from Japan has the ratio of 1.0:0.93, and other species in Japan belonged to *Pseudocentrus* usually have the similar ratio. Considering from this ratio and irregular punctation on elytra, it

ELYTRA, Vol. 6, No. 1 (Aug. 1978)

might be better this species to transfer from subgenus *Pseudocentrus* to *Formosexocentrus*, the authors, however, have not examined any species of the latter, the decision have to postponed till such specimens will be collected.

Exocentrus (Formosexocentrus) variepennis (Schwarzer)

Camptomyne? variepennis SCHWARZER, 1952, Ent. Blatt., 21: 147.

Exocentrus (Formosexocentrus) variepennis, BREUNING, 1958, Bull. Brit. Mus., 7(5): 226, 322 (type species of this subgenus, monotypy).

The authors have not examined any specimen which correspond to the description by BEUNING (1958). According to his revision, characters are as follows: "Antennae one-third longer than body, third segment much longer than fourth and slightly longer than scape. Inferior eye-lobe slightly deeper than gena below it. Pronotum strongly transverse expanded, with a strongly bent lateral spine. Elytra rounded at apices, surface with fairly dense, very fine, and irregular punctures on basal 2/3. Body blckish brown. Elytra brown, with whitish marble pattern on basal half, and with a narrow, waved, transverse white band at behind middle. Fourth to tenth antennal segments ringed with whitish pubescence at each base. Surface furnished with long erect black bristles."

There are some discrepancy between the description of SCHWARZER and BREUNING, namely, SCHWARZER described three elytral banding "eine hinter der Schulter und eine hinter der Mitte gerade, die dritte vor der Spitze schrag" instead of two, also he described as to elytral punctation "Flugeldecken grob punctiert", while BREUNING stated "elytres assez densément et très finement ponctués". Furthermore, BREUNING mentioned whitish pubescence of fourth to tenth antennal segments, but SCHWARZER omitted it.

Length: 3 mm (by SCHWARZER and BREUNING), breadth: 1 mm (by BREUNING).

Holotype: W, 1912, Kankau (=Kangkou, Pingtung Hsien), southern Taiwan (in Senckenberg Museum, Frankfurt).

Exocentrus (Oligopsis) alboguttatus Fisher (1925)*

subsp. taiwanensis subsp. nov. (Fig. 11)

(Japanese name: Taiwan-shiroobi-gomahu-keshi-kamikiri)

Female—Body slightly brownish black; head entirely black, apical half of labrum yellowish brown; prothorax blackish brown, anterior and posterior margins and lateral tubercles reddish; elytra dull reddish brown, paler on near apices; trochanters more or less reddich brown; basal haves of tibiae brown. Antennae clothed with yellowish grey pubescence on insides of scape, pedicel, basal 2/3 of third to fifth segments, and bases of sixth to eighth ones; and with small glabrous spots surrounding insertion of a bristles on above greyish portion, but eleventh segment lacking bristles;

^{*} FISHER, 1925, Philipp. Journ., 28(2): 240.

each segment with long hairs as same as description of subspecies *subconjunctus* by GRESSITT (1940). Elytron at basal half with twelve longitudinal stripes consisting of isolated spots of yellowish grey pubescence, though apical half with nine ones; and a narrow, weakly waved, transverse band of same pubescence at middle; and also with thick but sharp brownish black bristles arranged in fourteen longitudinal rows from base to apex, but second and fourth ones attained to basal 2/3, sixth, eighth and tenth to basal 3/4, further thirteenth lined near lateral margin, which consisted of finer bristles incompletely.

Head somewhat densely and finely granulose; from about 1.2 times as broad as deep; eyes rather large, inferior eye-lobe about 1.5 times as deep as broad, and about 3.1 times as deep as gena below it. Antennae about 1.2 times as long as body; scape comparatively slender, about 5.7 times as long as thick; relative length of each segment—6.3:1.0:5.0:4.3:3.3:3.0:2.8:2.6:2.3:2.1:2.1. Prothorax about 1.6 times as broad as long and slightly narrower at posterior margin than at anterior one, side obliquely expanded; lateral tubercles very stout and rather flattened, placed at basal 1/4 and directed almost straight backward and somewhat upward (Fig. 11p). Elytra about 1.9 times as long as broad; disc feebly but broadly impressed at near basal 1/3; dorsal surface of each with subscriately large punctures in about ten longitudinal rows from base to apical 1/4, but irregularly on deflexed portion.

Length: 6.2, breadth: 2.3 mm.

Holotype: 9, Liukuei, Kaohsiung Hsien, southern Taiwan. 16 May 1977, J. ITO leg.

This new subspecies is very closely allied to typical form of Philippine Islands, but the latter, according to the original description, differs in being the body generally larger; the scape subequal in length to third antennal segment; the lateral tubercle of prothorax placed slightly behind middle, rather longer and more slender, and bent obliquely backward. This also resembles *E.* (Oligopsis) seriatomaculatus SCHWARZER (1925), but the latter is easily distinguished from the former by the antennal segment hardly ringed; the prothorax broader, about twice as long, sides rounded from just behind anterior margin to basal 1/4, and with some accessory teeth, each furnishing a bristle, the lateral tubercles directed obliquely backward (Fig. 12p); the elytra uniformly convex without impressed areas, each apex more broadly rounded, disc with larger punctures, small pubescent spots consisting seven or eight longitudinl stripes on basal half, four or five on apical half, instead of twelve and nine for taiwanensis subsp. nov., respectively, and a transverse median band more irregular, lacking pubescent spots just behind it; the bristles finer and denser, arranged in ten longitudinal rows on each elytron, while this new subspecies in fourteen ones.

FISHER (1925) described *E. alboguttatus* from the Philippines. This species was treated by BREUNING (1958) as a subspecies of *E. guttulatus* BATES (1873) destributed in Japan (P1. V-13). The present authors, however, believed *alboguttatus* is a distinct species, not a subspecies of *guttulatus*. The differences between two species are as follows: *alboguttatus* has the antennal third

segment about equal in length to scape; the prothorax distinctly narrower at base than apex, sides nearly parallel from apical angles to teeth placed slightly behind middle; the elytra with coase and dense punctures which more or less arranged in rows at middle of disc, and with a distinct narrow transverse band and neumerous long erect black hairs, while *guttulatus* has the antennal third segment longer than scape; the prothorax at base as broad as at apex, sides arcuately expanded from apical angles to tubercles at basal 1/4 (Fig. 13p); the elytra scattered with small and entirely irregular punctures, and with a rather broad transverse band and sparsely with short black bristles.

E. alboguttatus was considered by BREUNING to belong subgenus Pseudocentrus, characterlized the third antennal segment slightly longer than fourth. However, FISHER stated in his original description "third joint distinctly longer than fourth". This character coincide also with that of Taiwanese specimens. The ratio of third to fourth of this new subspecies taken in Taiwan is 1.0:0.86, and E. (Oligopsis) seriatomaculatus is also 1.0:0.87 (details see in next paragraph). In the other hand, the ratio of guttulatus belonged to Pseudocentrus is 1.0:0.93. The ratio of the latter is much larger than the formers. Based on these facts, the author replaced alboguttatus from subgenus Pseudocentrus to Oligopsis.

Exocentrus (Oligopsis) alboguttatus subconjunctus Gressitt, comb. nov.

Exocentrus alboguttatus subconjunctus GRESSITT, 1940, Philipp. Journ. Sci.,

72: 184; GRESSITT, 1951, Longicornia, 2: 526.

Exocentrus (Pseudocentrus) guttulatus subconjunctus, BREUNING, 1958,

Bull. Brit. Mus., 7(5): 293.

The authors replaced *subconjunctus* from subspecies of *guttulatus* to of *alboguttatus* as original description by GRESSITT, and belonged to subgenus *Oligopsis*.

This subspecies, according to the original, differs from new subspecies taiwanesis in having the elytra with six or more longitudinal stripes of spots; the scape subequal in length to third antennal segment; the prothorax about twice as broad as long; and others.

Distribution: Hainan Island.

Exocentrus (Oligopsis) alboguttatus obscurior Pic, comb. nov.

Exocentrus guttulatus var. obscurior PIC, 1929, Mel. exot. ent., 53: 30.

Exocentrus (Pseudocentrus) guttulatus obscurior, BREUNING, 1958, Bull. Brit. Mus., 7(5):

293; Breuning & Rondon, 1970, Pacif. Ins. Monogr., 24: 512, Fig. 42-b.

Exocentrus guttulatus var. rufescens PIC, 1929, Mel. exot. ent., 53: 30.

Exocentrus (Pseudocentrus) guttulatus var. rufescens, BREUNING, 1958,

Bull. Brit. Mus., 7(5): 293, syn. nov.

Judging from the figure of guttulatus obscurior collected at Laos in "Longicornes du Laos" (Pacif. Ins. Monogr. 24, 1970), distribution of this subspecies as shown below, and the description

of BREUNING's revision, this subspecies had better be referred to alboguttatus than to guttulatus.

E. alboguttatus obscurior differs from subspecies taiwanensis nov. in having the elytra with smaller pubescent spots, thicker and denser bristles, and smaller punctures.

Distribution: Bhutan, Andamanes Is., Sumatra, Laos, Tonkin, and China.

Exocentrus (Oligopsis) seriatomaculatus Schwarzer (Pl. II-12)

Exocentrus seriatomaculatus SCHWARZER, 1925, Ent. Blatt., 21: 147.

Exocentrus lineatus seriatomaculatus, MITONO, 1940, Cat. Col. Jap., 8: 197.

Exocentrus seriatomaculatus, GRESSITT, 1951, Longicornia, 2: 526, 530.

Exocentrus (Oligopsis) seriatomaculatus, BREUNING, 1958, Bull. Brit. Mus., 7(5): 225, 322.

Body "reddish brown to dark brown, shinning in places". Head; antennal scape, pedicel and basal portions of third and fourth segments; pronotum at a broad midlongitudinal stripe, large spots on each side of disc and underside of body clothed with yellowish-grey pubescence, but remaining parts of antennae and prothorax with dark brown pubescence. Elytra furnished with seven or "eight longitudinal rows of small spots of white (yellowish-grey) pubescence, sometimes these rows interrupted by an obscure whitsh transverse band behind middle", and among these rows with sparse and fine dark yellow pubescence, and disc also furnished with long brownish black bristles densely, usually lined in ten longitudinal rows from base to near apex on each elytron, but fourth row lined from base to behind middle.

Head moderately granulose; from about 1.5 times as broad as deep; inferior eye-lobe about 1.2 times as deep as broad, and 2.6 times as deep as gena below it. Antennae about 1.3 times as long as body in male, slightly shorter in female; scape somewhat long, about 4.9 times as long as thick; ratio of segments as follows — 4.6:1.0:3.9:3.4:2.6:2.4:2.3:20:2.0:1.8:1.8. Prothorax about 1.8 times as broad as long in male and 2.0 times in female; lateral tubercles produced at basal 1/4, sides with some accessory teeth furnished with a bristle (Fig. 12p); disc fairly densely granulose. Elytra slightly short, about 1.9 times as long as broad; disc lacking impressed area at all; subseriately arranged large and deep punctures from base to near apices, but becoming smaller and shallower apically.

Length 3.8-6.8 mm, breadth: 1.5-2.6 mm.

Material examined — Nanshanchi, Nantou Hsien, central Taiwan: 2 exs., 10 & 12 June 1970, S. Fukuda leg.; 1 ex., 3-4 May 1973, K. Kinugasa leg.; 1 念, 21 May 1974, K. Akiyama leg.; 1 念 1 ♀, 7 May; 1 念 1 ♀, 15 May; 1 ♀, 25 May 1976, T. Shimomura leg.; 2 念 念, 12 & 14 June 1976, T. Matsumoto leg.; 2 exs. 12 July 1976, H. Nara leg.; 1 ♀, 8 May 1977, J. Ito leg.; 1 ♀, 25 July; 2 念 念 2 ♀♀, 1 Aug.; 2 念 念 3 ♀♀, 4 Aug. 1977, K. Kusama leg. Lienhwachi, Nantou Hsien: 2 念 念, 16 May; 1 念, 30 May 1975, K. Akiyama leg. Liukuei, Kaohsing Hsien, southern Taiwan: 1 念, 5 June 1976, T. Shimomura leg.

This species is one of the most common species in Taiwan. Sentences in " " were cited from original description by SCHWARZER, but Germany was translated to English.

Key to the Taiwanese species of Exocentrus

1.	Antennal 3rd segment nearly equal to 4th······2
	Antennal 3rd segment longer than 4th · · · 9
2.	Elytra irregularly punctate···································
-,	Elytra seriately punctate except for sutural 1/4, each arranged in seven longitudinal rows of bristles (Camptomyne)
3.	Surface clothed with long two kinds of white and black hairs (<i>Bicolorihirtus</i> subg. nov.), each elytron arranged in six longitudinal rows elytra brunneus, with two narrow, zigzag,
	transverse tawny white bands at near base and behind middlevenatoides sp. nov.
	Surface clothed with unicolor bristles or hairs, each elytron arranged in eight longitudinal rows of
	bristles (Exocentrus s. str.)
4.	Elytra with a testudineous pattern of whitish golden pubescence, and with very short bristles brevisetosus
_	Elytra without a testudineous pattern
5.	Elytra with very thick and very long bristles, and subirregularly clothed with whitish yellow
0,	pubescence except for three ground-color areas; lateral prothoracic tubercle directed to humerus
	Elytra with not very thick bristles but rather thin ones
6.	Pronotum brunneus and marginal portions of disc dark reddish; ground-color of elytra brunneus
	mottled with irregular fulvous maculae which clothed with ivory-white pubescence, and
	with fine and rather short bristles
	Pronotum largely blackish brown; ground-color of elytra uniformly dark brown
7.	Elytra clothed with golden yellow pubescence forming two irregular transverse bands and several
	spots longitudinally in places, and with fine and long bristlesnanshanensis sp. nov.
	Elytra more or less clothed with buff pubescence marked with brown spots and a postmedian
	subtransverse brown band, and with somewhat thick and fairly long bristlessavioi
8.	Elytra weakly shining, with three narrow transverse white bands at basal 1/5, behind middle, and
	near apex, and with thick and long bristlespseudovariepennis sp. nov.
Ξ.	Elytra not shining, without distinct transverse band, clothed with yellowish grey pubescence but
	lacking it and exposing ground color on basal portion, before middle of both sides, subtr-
	ansverse broad band at apical 1/3, and apex, and with thick and short bristles
9.	Antennal 3rd segment slightly longer than 4th (Pseudocentrus)
Ξ.	Antennal 3rd segment fairly longer than 4th
10.	Prothorax dark brown; elytra testaceous, without any stripe, or band, or distinct spot, with compar-
	atively short but thick bristles, each arranged in seven longitudinal rowsimmaculatus
	Prothorax red; elytra largely blackish, with obscure longitudinal rows of faint whitish pubescent
	spots, and with very thin and rather long bristles, each arranged in eleven longitudinal
	rows ————————————————————————————————————

- 11. Elytra irregularly punctate (Formosexocentrus); with marble pattern of white pubescence on basal half and a narrow waved transverse band behind middle; fourth to tenth antennal segments ringed with whitish pubescence at bases wariepennis
- 12. Prothorax less than twice as broad as long, lateral tubercle directed straight backward; elytra with each twelve longitudinal stripes of isolated yellowish grey pubescent spots on basal half and nine on apical half, arranged in fourteen longitudinal rows of bristles; 1st to 8th antennal segments more or less ringed with greyish pubescence at bases

albo guttatus taiwanensis subsp. nov.

-. Prothorax nearly twice as broad as long, lateral tubercle directed obliquely backward; elytra with each seven to eight longitudinal stripes of subseriate spots of yellowish grey pubescence on basal half and four or five from 1/3 to near apex, arranged in ten longitudinal rows of bristles; antennal segments hardly ringed ·······seriatomaculatus

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摘 要

従来台湾から発表されていた Exocentrus 属は 6 種であったが、今回新たに 6 新種 1 新亜種を記載追加して、計13種の検索表を示すと共に、6 新亜属 e 認め た。なお、既知 6 種のうち、1 種の個体を見ることができなかった。

- (1) 新亜属 Bicolorihirtus の創設;次の新種を本亜属の 模式種とする。
- (1') 新種 E. (Bicolorihirtus) venatoides (クモノスモンケシカミキリ) (Fig. 1)。原産地: 南投県梅峰。 この付近でのみ採集されており個体数は少ないようである。
- (2) E. (Exocentrus) brevisetosus GRESSITT (Fig. 2)。 原産地は南投県埔里近傍。桃園県巴稜, 南投県南山溪な どに産するが多くない。
- (3) 新種 *E.* (*Exocentrus*) *kentingensis* (クロオビケブトケシカミキリ) (Fig. 3)。 原産地: 屏東県墾丁公園。約120頭すべてが公園付近でのみ採集されており、3月末から4月にかけては個体数が多いようである。
- (4) 新種 E. (Exocentrus) nanshanensis (ナンシャンウスオビケシカミキリ) (Fig. 4)。原産地:南投県南山溪。その他蓮華池。日月潭などに普通。

- (5) 新種 *E.* (*Exocentrus*) fulvobrunneus (キチャマダラケシカミキリ) (Fig. 5)。 南投県蘆山温泉での 2 含のみ。
- (6) E. (Exocentrus) savioi PIC (サビオケシカミキリ) (Fig. 6)。南投県蘆山温泉での1含を検したのみ。
- (7) 新種 E. (Camptomyne) formosofasciolatus (タイワンクモガタケシカミキリ) (Fig. 7)。 原産地: 南投県南山溪。その他松崗、梅峯、翠峰、蘆山温泉などすべて南投県で採集。
- (8) 新種 E. (Camptomyne) pseudovariepennis (ニセモンマダラケシカミキリ) (Fig. 8)。 原産地:南投県蘆山温泉。その他同県蓮華池,南山溪,高雄県六亀にやや普通に産する。SCHWARZER のモンマダラケシカミキリの原記載に比較的よく一致し,従来その種として同定されていた。
- (9) *E.* (*Pseudocentrus*) *immaculatus* GRESSITT (ムモンケシカミキリ) (Fig. 9)。原産地は屛東県亀仔角(Kuraru)。南山溪で採集された1♀を検したのみ。
- เ⑩ E. (Pseudocentrus?) rufithorax GRESSITT (アカクビケシカミキリ) (Fig. 10)。模式標本は宜蘭県壁南の標高1700m付近での採集品で、今回検した2個体も1700m以上の南投県幼獅(二見晴)。同県梅峯での採集品である。本種は触角第3節と第4節の比からすると現在所属

している亜属については疑問である。

(II) *E.* (Formosexocentrus) variepennis SCHWARZER (モンマダラケシカミキリ)。原産地は屏東県港口。BREUNING は本種を模式種として1958年に新亜属 Formosexocentrus を創設しているが、筆者らは BREUNING の記述に該当する標本を検することができなかった。

112 新亜種 E. (Oligopsis) alboguttatus taiwanensis (タイワンシラオビケシカミキリ) (Fig. 11)。原産地:高雄県六亀。東南アジアから海南島,中国大陸に広く分布する E. alboguttatus FISHER の亜種として記載した。BREUNING は alboguttatus を日本の E (Pseudocentrus) guttulatus BATES (Fig. 13) の亜種にしていたが,筆者らが検討を重ねた結果,再び FISHER

の原記載通りに独立種に戻し、かつ Pseudocentrus 亜属から Oligopsis 亜属に移した。また、亜種としてGRESSITT により記載された subconjunctus は、その後 BREUNING により guttulatus の亜種に変更されたが、ここで再び原記載通りに戻した。さらに guttulatusの変種として記載され、後に同亜種に昇格したsubsp. obscurior も新たに alboguttatus の亜種とし、同じくguttulatus の変種 var. rufescence を obscurior のシノニムとした。

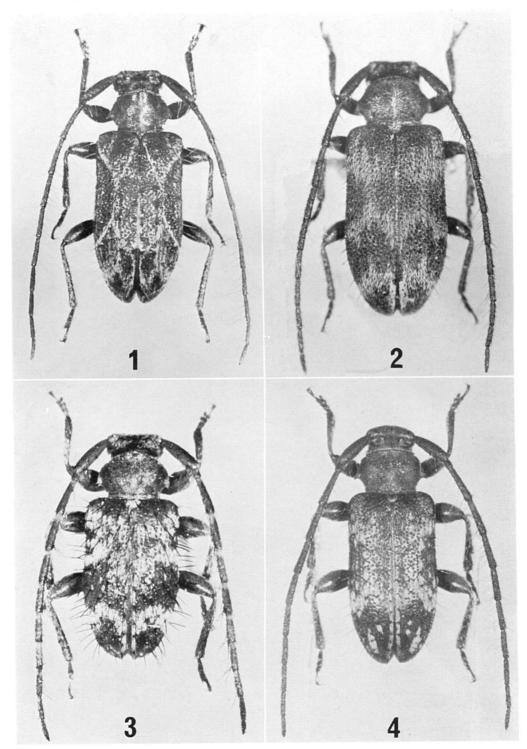
① E. (Oligopsis) seriatomaculatus SCHWARZER (タイワンアトモンマルケシカミキリ) (Fig. 12)。原産地は 屏東県港口。台湾産 Exocentrus 属中もっとも個体数が 多い種で南投県や高雄県六亀などに産する。

8. 鞘翅は弱い光沢が有り, 基部%付近, 中央後方, および鞘

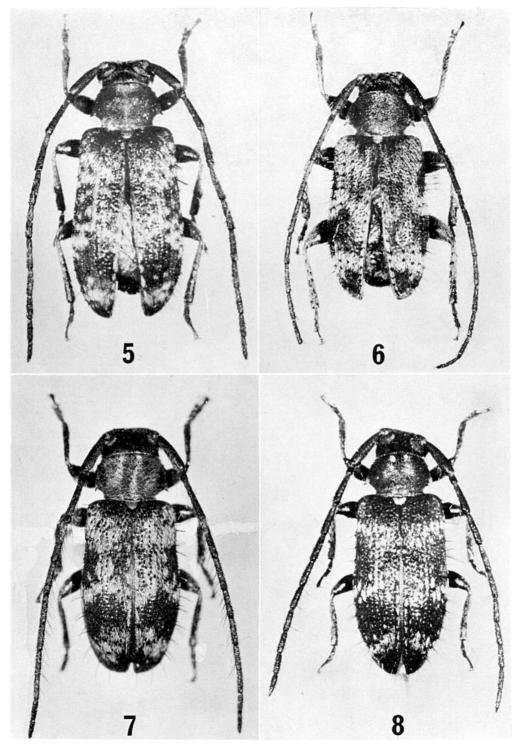
台湾産アラゲケシカミキリ属の検索表

1. 触角第3節は第4節とほぼ等長2
一. 触角第3節は第4節より長い9
2. 鞘翅は不規則に点刻される3
一. 鞘翅は縫合線付近の¼を除き列状に点刻され、各鞘翅には
7 列の剛毛縦列を有する (Camptomyne) ······ 8
3. 表面には白色および黒色の2色の長毛あるいは剛毛を装い
(Bicolorihirtus), 各鞘翅では背面に4列の黒色剛毛縦列お
よび側面に2列の白色長毛縦列の計6列の縦列を形成する;
鞘翅は暗赤褐色で, 基部後方および中央後方に細いジグザグ
の黄白色横帯を有する venatoides sp. nov.
一. 表面には1色の剛毛あるいは長毛を有し、各鞘翅では8列
の剛毛縦列を形成する (Exocentrus s. str.) ······ 4
4. 鞘翅には白金色縦毛から成る亀甲状紋様を有し、剛毛は非
常に短い brevisetosus
一. 鞘翅には亀甲状紋様を有しない5
5. 韓翅は非常に太くて長い剛毛を具え、基部、中央部、およ
び翅端付近の黒褐色部を除き灰白色微毛で不規則におおわれ
る;前胸側縁突起は肩部に向く kentingensis sp. nov.
一. 鞘翅はやや細い剛毛を具える6
6. 前胸背は前縁および中央部を除き暗赤色;鞘翅の地色は暗
褐色で不規則な黄褐色部を基部後方から中央にかけて有し,
その部分は明るい黄白色の微毛を装う、剛毛は細くてやや短
twww.fulvobruneus sp. nov.
一. 前胸背は大部分黒褐色;鞘翅の地色は一様に暗褐色を呈す
る7
7. 鞘翅は黄金色微毛から成る2本の不規則な横帯および部分
的に縦に並んだいくらかの小斑を装う、剛毛は細くて長い
nanshanensis sp. nov.
一. 鞘翅は多少とも淡黄色微毛でおおわれ、褐色の小斑および
中央後方にやや不完全な同色の横帯を形成する、剛毛はやや
太くてかなり長いsavioi

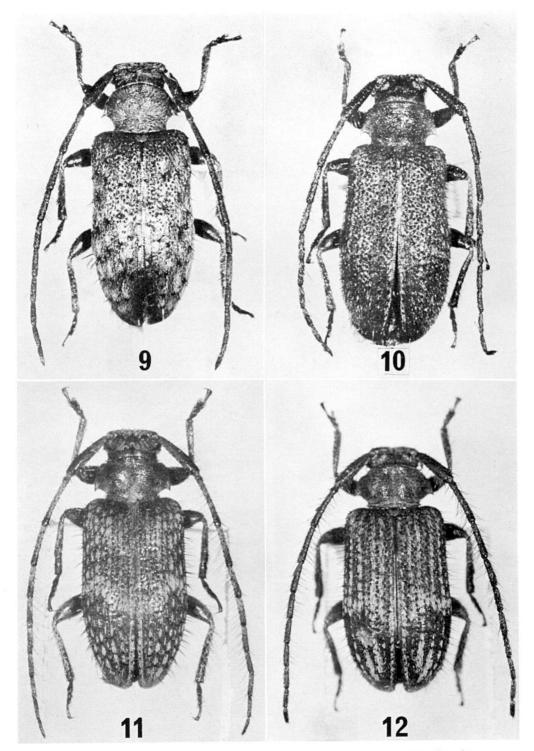
端近くに3本の細い白色横帯を有する, 勲毛は太くて長い
pseudovariepennis sp. nov.
一. 鞘翅は光沢なく、3本の横帯も欠く、灰黄色の微毛でおお
われるが、基部、両側中央前、翅端り3付近、および翅端では
その徴毛を欠き黒褐色を呈する、剛毛は太くて短い
formosofasciolatus sp. nov.
9. 触角第3節は第4節よりもわずかに長い (Pseudocentrus) 10
一. 触角第3節は第4節よりかなり長い11
10. 前胸背は暗褐色;鞘翅は赤褐色で白色微毛から成る縦条,
横帯,および明瞭な小斑は欠く,剛毛は比較的短いが太くて,
各鞘翅では7列の縦列を形成する immaculatus
一. 前胸背は赤色鞘翅は大部分黒色, 白色微毛から成る不明瞭
な小斑縦列を有する、剛毛は長くて非常に細く、各鞘翅では
10列の縦列を形成する······ rufithorax
11. 鞘翅は不規則に点刻され (Formosexocentrus), 基半には
大理石模様を、中央後方には波形の細い横帯を有する;触角
第4節ないし第10節の基部は白色微毛で飾られる
variepennis
一、鞘翅は縫合線付近の%を除き列状に点刻される(Oligo-
psis)12
12. 前胸背の幅は長さの2倍未満、側縁突起は真後ろを向く;
各鞘翅は基半に12列、後半に9列の灰黄色微毛から成る孤立
した小斑縦列を装い、さらに14列の剛毛縦列を具える;触角
第1節ないし第8節の基部は多少とも灰黄色微毛で飾られる
alboguttatus taiwanensis subsp. nov.
一. 前胸背の幅は長さのほぼ 2 倍, 側縁突起は斜め後方を向
く;各額麹は基半に7あるいは8列,翅端%から翅端近くに
かけて4あるいは5列の灰黄色微毛から成る部分的に連続し
た小斑縦列を装い、さらに10列の剛毛縦列を具える;触角各節
は灰黄色黴毛ではほとんど飾られない …seriatomaculatus
TANKA CINI CINING CIO CINING ANTA SCITATION ACTIVITIES



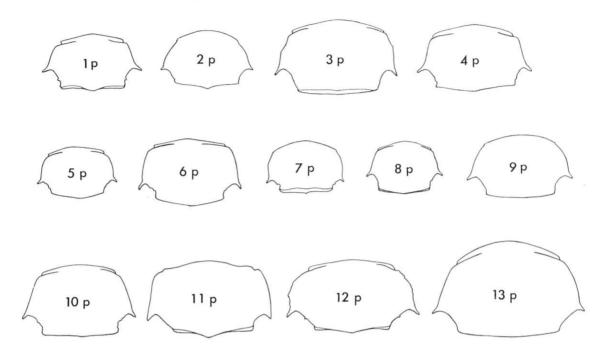
- 1. Exocentrus (Bicolohirtus subgen. nov.) venatoides sp. nov., 3, holotype.
- 3. E. (Exocentrus) kentingensis sp. nov., \diamondsuit , holotype.
- 4. E. (Exocentrus) nanshanensis sp. nov., 3, holotype.



- 5. E. (Exocentrus) fulvobrunneus sp. nov., \odot , holotype.
- 6. E. (Exocentrus) savioi PIC, &, 1-2. V. 1973, Roshan.
- 7. E. (Camptomyne) fromosofasciolatus sp. nov., ♀, holotype.
- 8. E. (Camptomyne) pseudovariepennis sp. nov., \diamondsuit , holotype.



- 10. E. (Pseudocentrus?) rufithorax GRESSITT, ♀, 18. W. 1967, Yushih.
- 12. E. (Oligopsis) seriatomaculatus SCHWARZER, 9, 8. V. 1977, Nanshanchi.





- 1p. E. (Bicolorhirtus subgen. nov.) venatoides sp. nov., ♂, prothorax.
- 2p. E. (Exocentrus) brevisetosus GRESSITT, ♀, prothorax.
- 3p. E. (Exocentrus) kentingensis sp. nov., φ , prothorax.
- 4p. E. (Exocentrus) nanshanensis sp. nov., \mathcal{P} , prothorax.
- 5p. E. (Exocentrus) fulvobrunneus sp. nov., \diamondsuit , prothorax.
- 6p. E. (Exocentrus) savioi PIC, ♦, prothorax.
- 7p. E. (Camptomyne) formosofasciolatus sp. nov., ♀, prothorax.
- 8p. E. (Camptomyne) pseudovariepennis sp. nov., 3, prothorax.
- 9p. *E.* (*Pseudocentrus*) *immaculatus* GRESSITT, ♀, prothorax.
- 10p. E. (Pseudocentrus?) rufithorax GRESSITT, \diamondsuit , prothorax.
- 11p. E. (Oligopsis) alboguttatus taiwanensis subsp. nov., ♀, prothorax.
- 12p. E. (Oligopsis) seriatomaculatus SCHWARZER, ♀, prothorax.
- 13p. E. (Pseudocentrus) guttulatus BATES, ♀, prothorax.
- 13. E. (Pseudocentrus) guttulatus BATES, 含, 29. W. 1977, Okuizumi, Shizuoka Pref. Japan.