

Two New Micropepline Beetles (Coleoptera, Staphylinidae) from Sichuan Province, Southwest China

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Abstract Two new micropepline beetles are described and illustrated under the names *M. uenoi* and *M. nomurai*. They were obtained by sifting dead leaves or the litter accumulated in warm temperate forests on the mountains in Sichuan Province, Southwest China.

The genus *Micropeplus* is a peculiar group among staphylinid beetles for the reason that the nine-segmented antennae with the apicalmost segment enlarged into an oval club and the deep recesses on the under surface of lateral areas of pronotum for their reception, and the elytra and abdomen provided with strongly raised carinae on the surface.

Up to the present, five species of the genus *Micropeplus* have been known from the Continental China. Three of them were reported by WATANABE and LUO (1991, pp. 93, 94), and YANG (1995, p. 218) from Zhejiang Province in East China, and the remaining two by WATANABE (1995, p. 245) and WATANABE and XIAO (1996, p. 1) from Yunnan Province in Southwest China.

During the investigation of soil-living beetles of Sichuan Province made in 1996, two species of the genus *Micropeplus* were obtained by sifting dead leaves or the litter on Mt. Erlang Shan of the Jiajin Shan Mountains and Mt. Jiuding Shan of the Chaping Shan Mountains in Sichuan Province by Dr. S. NOMURA and Mr. L. ZHAO. They seem to belong to the group of *Micropeplus fulvus* for reason of the medially mucronate head. After a careful examination, it becomes clear that these species are new to science because of different configuration of male genital organ from those of the known members of the species-group. They will be described in the present paper.

Before going further, I would like to express my sincere gratitude to Dr. Shun-Ichi UÉNO, Visiting Professor at Tokyo University of Agriculture, for his kind advice on the present study. My thanks are also due to Dr. Shûhei NOMURA, National Science Museum (Nat. Hist.), Tokyo, and Mr. ZHAO Lijun, an ex-member of the Shanghai Institute of Entomology, Academia Sinica, for their kindness in giving me the valuable materials used in the study and information on the bionomical data.

Micropeplus uenoi Y. WATANABE, sp. nov.

(Figs. 1–6)

Body length: 2.2–2.3 mm (from front margin of head to anal end); 1.4–1.5 mm (from front margin of head to elytral apices).

Body elliptical and convex. Colour blackish brown to brownish red, subopaque except for shining abdomen, with antennae, both sides of pronotum and legs brownish yellow.

Male. Head subtriangular, distinctly broader across compound eyes than length (width/length=1.17); clypeo-frontal area strongly narrowed anteriorly and mucronate medially, strongly depressed above, surface of the depression nearly flattened and impunctate though covered with distinct coriaceous ground sculpture; disc provided with a pair of weak sinuate carinae, surface similar to clypeo-frontal area; each side of the middle just before base provided with a small fovea; lateral sides sinuate and finely elevated; compound eyes prominent and coarsely faceted. Antennae relatively short, not reaching the middle of pronotum, usually receding onto the underside of pronotum for their reception, all the segments polished except for 1st and 9th segments; 1st segment stout and subopaque, widest at the middle and narrowed towards both anteriorly and posteriorly, distinctly longer than broad (length/width=1.17), 2nd abruptly narrowed in

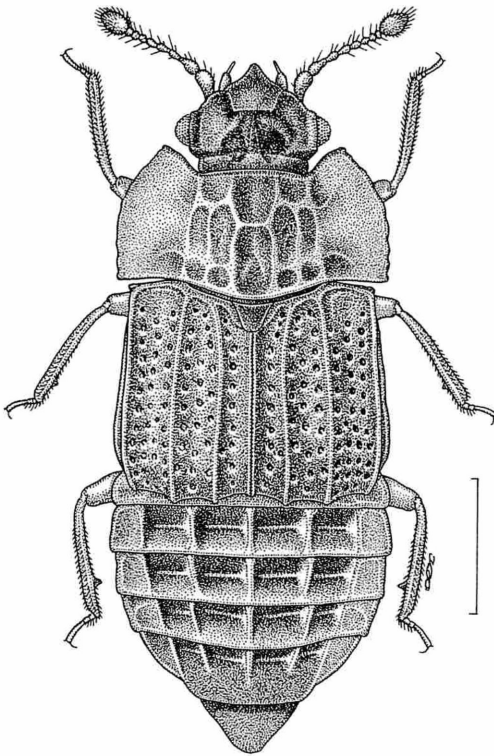


Fig. 1. *Micropeplus uenoi* Y. WATANABE, sp. nov., ♂, from Mt. Erlang Shan of the Jiajin Shan Mts., in Luding Xian of Sichuan Prov., SW China. Scale: 0.5 mm.

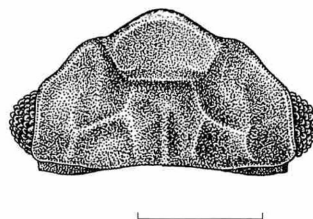


Fig. 2. Head of *Micropeplus uenoi* Y.
WATANABE, sp. nov., ♀. Scale: 0.25
mm.

apical third, about 1.4 times as long as broad, but much shorter ($2nd/1st=0.80$) and distinctly narrower ($2nd/1st=0.67$) than 1st, 3rd to 5th equal in width to one another, 3rd about 1.5 times as long as broad but considerably shorter ($3rd/2nd=0.71$) and narrower ($3rd/2nd=0.65$) than 2nd, 4th a little longer than broad ($length/width=1.38$) though somewhat shorter than 3rd ($4th/3rd=0.90$), 5th somewhat longer than broad ($length/width=1.15$) though slightly shorter than 4th ($5th/4th=0.83$), 6th to 8th equal in width to one another, 6th as long as broad though distinctly shorter ($6th/5th=0.80$) and slightly narrower ($6th/5th=0.92$) than 5th, 7th and 8th almost equal in both length and width, each a little transverse ($width/length=1.20$) and a little shorter than 6th (each of 7th and 8th/ $6th=0.83$), 9th the largest and more or less globular, setose in apical third, distinctly longer than broad ($length/width=1.32$), 5 times as long as and remarkably broader than ($9th/8th=3.17$) 8th, narrowly rounded at the apex.

Pronotum subtrapezoidal and strongly convex in the median part, about twice as broad as long, and distinctly longer ($pronotum/head=1.36$) and much broader ($pronotum/head=1.70$) than head, widest at base, more strongly narrowed anteriorly in anterior half than in posterior half, lateral margins each feebly arcuate in posterior half and straight in anterior half, anterior margin broadly emarginate at the middle though almost straight in the middle, posterior margin bisinuate, evidently and broadly produced posteriorly at the middle, anterior angles moderately produced anteriorly and bluntly rounded at the corners, posterior ones nearly rectangular and clearly angulate at the corners; lateral areas each broadly explanate and provided with a shallow depression both before and behind the middle; surface impunctate, though covered with finer ground sculpture than that on head; median area provided with eight cells enclosed by costae, four in median area and two at each lateral side, though the latter are sometimes obscure, surface of each cell distinctly depressed, and covered with ground sculpture as in lateral areas. Scutellum lingulate, somewhat broader than long ($width/length=1.29$), with apparently coriaceous ground sculpture on the surface. Elytra subquadrate and a little dilated posteriorly, convex medially and distinctly transverse ($width/length=1.36$), considerably longer ($elytra/pronotum=1.47$) but slightly narrower ($elytra/pronotum=0.97$) than pronotum, more or less transversely depressed in apical sixth along posterior margin except near the median part, each elytron provided with four longitudinal costae throughout the length, one sutural, two discal and one humeral, of which a pair of sutural ones are less strong than the other costae, surface

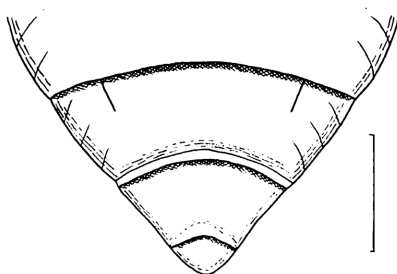


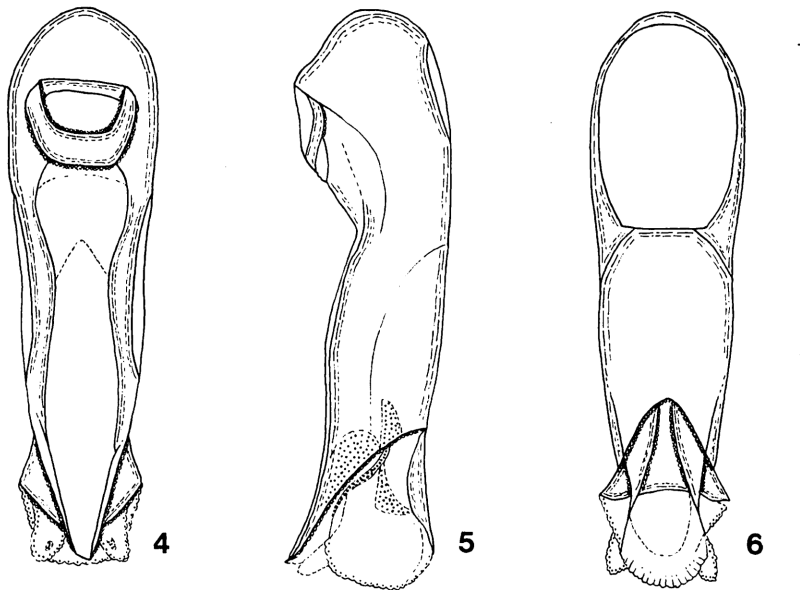
Fig. 3. Last four abdominal sternites in male of *Micropeplus uenoi* Y. WATANABE, sp. nov. Scale: 0.25 mm.

of each interspace of costae with irregular rows of sparing and coarse punctures and covered with coriaceous ground sculpture, 1st interspace with a row in anterior half, sometimes two rows in posterior half, 2nd with two or so rows, 3rd with three or so rows; epipleural costa strongly and arcuately raised; pseudepipleural costa present between epipleural and humeral costae, almost straight though abbreviated in front, interspace between pseudepipleural and humeral costae provided with a row of coarse punctures, and also with two irregular rows of coarse punctures on interspace between epipleural and pseudepipleural costae; surface of these interspaces similarly coriaceous to the other interspace. Hind wings each degenerated to a minute lobe. Legs relatively short; mesotibia armed with a small subtriangular tooth at apical fourth on internal margin; metatibia also with a more developed tooth behind the middle on internal margin.

Abdomen relatively short, gradually narrowed towards 6th segment and abruptly narrowed from 7th segment to apical end; surface of each tergite impunctate, though covered with much finer coriaceous ground sculpture than on elytra, 4th to 7th tergites each transversely depressed in basal half and provided with three equidistant longitudinal costae, which are abbreviated in front of posterior margin except for those of 7th tergite which are abbreviated in basal third, 8th tergite lingulate though subtruncate at the apex; 3rd to 6th sternites each provided with two longitudinal costae in each lateral area, the inner one abbreviated near the middle of sternite, the outer one somewhat arcuate and longer than the inner one and extending to near the posterior margin, 7th sternite also with two costae in each lateral area, inner one minute, sometimes obscure, outer one abbreviated in posterior three-fourths, broadly emarginate at the middle of posterior margin, 8th sternite somewhat emarginate at the middle of posterior margin and semicircularly flattened before the emargination.

Genital organ elongate and almost symmetrical, moderately sclerotized except for ventral side of median lobe which is membranous. Median lobe feebly constricted at the middle, abruptly narrowed apicad in apical third and subtruncate at the apex. Parameres each narrow and fused with median lobe, nearly as long as median lobe and tapered in apical third towards the pointed apex.

Female. Similar in general appearance to male, but different from it in the following points: head narrowly rounded off at the middle of anterior margin, 8th sternite



Figs. 4–6. Male genitalia of *Micropeplus uenoi* Y. WATANABE, sp. nov.; dorsal view (4), lateral view (5), and ventral view (6). Scale: 0.25 mm.

somewhat produced backwardly at the middle of posterior margin and broadly rounded at the apex; meso- and metatibiae each lacking the subtriangular tooth.

Type series. Holotype: ♂, allotype: ♀, Mt. Erlang Shan, Jiajin Shan Mts., Luding Xian, Sichuan Prov., SW China, 2–X–1996, S. NOMURA & L. ZHAO leg. Paratypes: 2♂♂, 14♀♀, same data as for the holotype; 2♂♂, 1♀, same locality and date, S. NOMURA leg. The type series is deposited at present in the collection of the National Science Museum (Nat. Hist.), Tokyo, except for three pairs of the paratypes which are preserved in the collection of the Laboratory of Insect Resources, Tokyo University of Agriculture.

Distribution. Southwest China (Sichuan Prov.).

Bionomics. The type specimens were obtained by sifting dead leaves or the litter in a mixed forest of persistent deciduous broadleaved trees, with addition of a small number of coniferous trees on the western side of Mt. Erlang Shan at an altitude of 2,860 m.

Remarks. The present new species is similar to *M. unicornis* YANG (1995, p. 218) from Zhejiang Province in general appearance but is different from it in the following points: elytra shorter, the inner costa incurved before the middle, 1st interspace with a row of punctures in anterior half, and the median lobe of male genital organ gently constricted at the middle. Also similar to *M. clypeatus* CAMBELL (1992, p. 212) from Taiwan in facies and body size, but can be distinguished from it by the following points: elytra less coarsely and more shallowly punctured on the surface, protibia in

male lacking tooth, male genital organ with median lobe nearly obliquely truncated at the apex, parameres somewhat shorter than median lobe.

Etymology. The present new species is dedicated to Dr. Shun-Ichi UENO, who was the leader of the investigation on the soil-living beetles of Sichuan Province in 1996.

Micropeplus nomurai Y. WATANABE, sp. nov.

(Figs. 7–12)

Body length: 2.3–2.4 mm (from front margin of head to anal end); 1.4–1.5 mm (from front margin of head to elytral apices).

Male and female. In facies and body size resembles the preceding species, but can be distinguished from it by the following points: head provided with a weak longitudinal carina at the middle in basal half and with less coarse coriaceous ground sculpture, pronotum more strongly narrowed anteriorly in anterior two-thirds, surface less coriaceous; elytra as broad as pronotum, less depressed in apical part along posterior margin, each elytron provided with four longitudinal costae throughout the length as in the preceding species, but the inner discal costa is almost straight and 1st interspace with irregular rows of punctures, surface of all the interspaces more strongly and deeply punctured though less coriaceous, pseudopleural costa somewhat shorter and abbreviated at anterior fourth; abdomen shining, not coriaceous on the surface, 8th

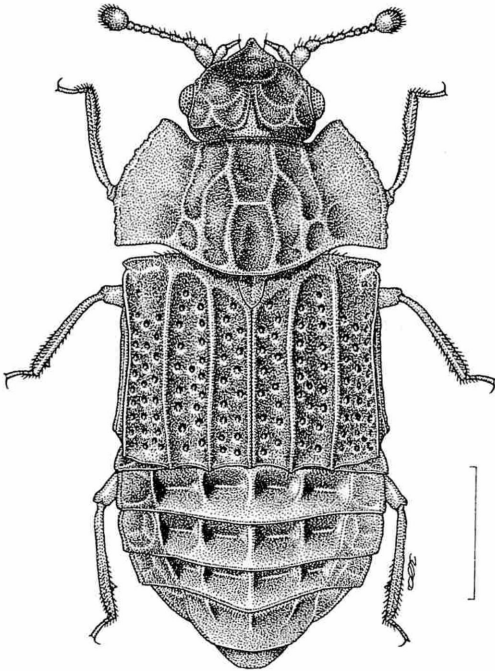


Fig. 7. *Micropeplus nomurai* Y. WATANABE, sp. nov., ♂, from Mt. Jiuding Shan of the Chaping Shan Mts., in Mao Xian of Sichuan Prov., SW China. Scale: 0.5 mm.

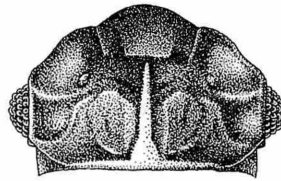


Fig. 8. Head of *Micropeplus nomurai* Y. WATANABE, sp. nov., ♀, Scale: 0.25 mm.

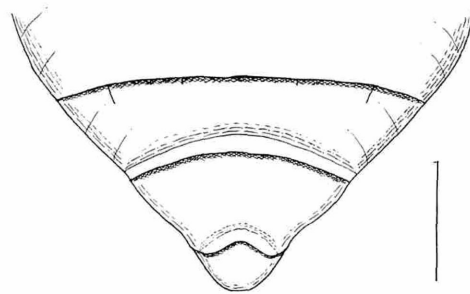
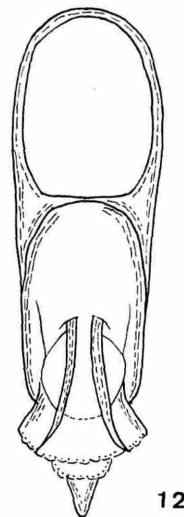
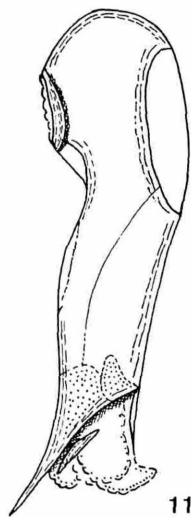
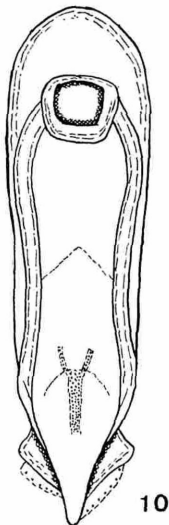


Fig. 9. Last four abdominal sternites in male of *Micropeplus nomurai* Y. WATANABE, sp. nov. Scale: 0.25 mm.



Figs. 10–12. Male genitalia of *Micropeplus nomurai* Y. WATANABE, sp. nov.; dorsal view (10), lateral view (11), and ventral view (12). Scale: 0.25 mm.

sternite more deeply emarginate at the middle of posterior margin.

Male genital organ also closely similar in configuration to that of the preceding species, but slightly different from it in the following points: median lobe relatively

short though more or less broader than that of the preceding species and more strongly narrowed in apical third towards the apex.

Type series. Holotype: ♂, allotype: ♀, Mt. Jiuding Shan, Chaping Shan Mts., Mao Xian, Sichuan Prov., SW China, 22-IX-1996, S. NOMURA & L. ZHAO leg. Paratypes: 3♂♂, 3♀♀, same data as for the holotype. The type series is deposited at present in the collection of the National Science Museum (Nat. Hist.), Tokyo, except for 2 pairs of the paratypes which are preserved in the collection of the Laboratory of Insect Resources, Tokyo University of Agriculture.

Distribution. Southwest China (Sichuan Prov.)

Bionomics. The type specimens were obtained by sifting dead leaves or the litter in a deciduous broadleaved forest on Mt. Jiuding Shan at an altitude of 3,670m.

Etymology. The specific epithet is given after Dr. Shûhei NOMURA, National Science Museum (Nat. Hist.), Tokyo, who kindly supplied me with the specimens of the type series.

要 約

渡辺泰明：中国四川省から採集されたセスジチビハネカクシ属（甲虫目ハネカクシ科）の2新種。—— 中国からは、セスジチビハネカクシ属に含まれる種が、これまでに浙江省から3種、云南省から2種の合計5種が知られているにすぎなかった。1996年9月下旬から10月上旬にかけて、上野俊一博士の主宰による「四川省における土壌性甲虫類の調査」が実施された。この調査を通じて、野村周平博士および趙立軍氏によつて採集されたセスジチビハネカクシ属に含まれる種を検討した結果、2新種を見出すことができたので、下記のとおり命名・記載した。

1. *Micropeplus uenoi* Y. WATANABE

この種は、夾金山山地に位置する二郎山の標高2,860mの地点で、落葉および常緑の広葉樹林にわずかの針葉樹が散在する混交林に堆積した落葉層から採集された。雄の頭部前縁中央が鋭く突出していることから *M. fulvus* 群に所属する種で、概観は浙江省から発見された *M. unicornis*、および台湾からの *M. clypeatus* の両種に類似している。しかし前者とは、翅鞘がより短いこと、背面の縦隆条および間室の点刻などの状態、さらに雄交尾器の形状が異なることによつて区別され、後者からは翅鞘の点刻がより弱く、雄の前脚脛節内側の小突起を欠くこと、および交尾器の形状の違いによつて区別される。

2. *Micropeplus nomurai* Y. WATANABE

本種は茶坪山山地に位置する九頂山の標高3,670mの地点の、落葉広葉樹林の林床に堆積した落葉層から採集された。体長および外部形態は前種に類似しているが、頭部中央の基半に縦隆条をそなえ、表面の微細構造がより弱いこと、翅鞘は前胸背板と同幅で、背面の4縦隆条がいずれも直線的であり、間室はより強く点刻されることで異なる。雄交尾器の形状も前種のものによく似ているが、中葉はいくぶん太短く、末端の1/3が急激に細まることで区別される。

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New Records of *Lathrobium uenoi* Y. WATANABE (Coleoptera, Staphylinidae) from Western Honshu, Japan

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In the previous paper (WATANABE, 1980), *Lathrobium uenoi* was described based on a male specimen found in a limestone cave (Shizushi-dô) of Mizuho-chô in Kyoto Prefecture. Since then, this species has not yet been recorded from other localities of Japan. In the present short article, new localities of this species will be reported. They were obtained from upper hypogean habitats. I thank Dr. Shun-Ichi UÉNO and Prof. Yoshiaki NISHIKAWA for their kindness in providing me with the specimens.

2♂♂, Kojô (510 m alt.), Muraoka-chô, Mikata-gun, Hyôgo Pref., Japan, 9–X–1987, S. UÉNO leg., 1♂, same locality and date as above, Y. NISHIKAWA leg.; 1♂, Takara-dani (300 m alt.), Tsuzuraori, Higashibetsuin-chô, Kameoka-shi, Kyoto Pref., Japan, 14–IX–1992, Y. NISHIKAWA leg.

Reference

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