A New Apterous *Ochthephilum* (Coleoptera, Staphylinidae) from Yunnan Province, Southwest China

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Abstract A new species of the genus *Ochthephilum* is described under the name of *O. yumnanense*, with illustrations of habitus, secondary sexual character of the abdominal sternites and the genital organ in the male. It was found from under dead leaves and in the litter zone of tropical rain forests in Xishuangbanna of Yunnan Province, Southwest China.

So far as has been known to the authors, five species of the genus *Ochthephilum* have hitherto been known from China. Three of them were reported from North China by BERNHAUER (1928, p. 38) and LI and CHEN (1990, p. 17), and the other two from South China by BERNHAUER (1941, p. 227) and SCHEERPELTZ (1933, p. 1297).

By the Sino-Japanese cooperative study on the soil fauna of tropical forests in Yunnan Province of Southwest China, made twice in the end of October, 1992, and the middle of September, 1993, an interesting species of the genus *Ochthephilum* was found from under dead leaves and in the litter zone of tropical rain forests in Xishuangbanna of Yunnan Province, Southwest China. After a careful examination, it has become clear that it is new to science for reason of disagreement with the known congeners in the shape of the head, antennal articulation and configuration of the secondary sexual character of the abdominal sternites. It will be described in the present paper. The holo- and allotypes of the new species to be described are deposited in the collection of the Shanghai Institute of Entomology, Academia Sinica, China, and the paratypes are distributed to the collection of the Kunming Institute of Zoology, Academia Sinica, China, National Science Museum (Nat. Hist.), Tokyo, and the Laboratory of Entomology, Tokyo University of Agriculture.

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Ochthephilum yunnanense sp. nov.

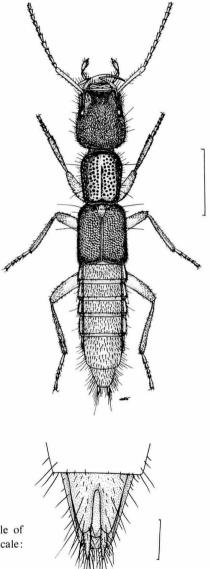
(Figs. 1-5)

Body elongate, parallel-sided and somewhat depressed above. Colour black and shining, with elytra narrowly and obscurely reddish along posterior margin, mouth parts, antennae and legs reddish brown, though the femora are yellowish.

Male. Head subtrapezoidal and somewhat depressed above, apparently longer than broad (length/width=1.17), widest at posterior fourth and more strongly narrowed anteriad than posteriad, with lateral sides gently arcuate in posterior third and nearly straight in anterior two-thirds; postocular part long, nearly three times as long as the longitudinal diameter of each eye; surface densely covered with rugose umbilicate punctures, which become finer and closer in latero-posterior parts, though smooth in frontal area between antennal tubercles which are well elevated and glabrous. Antennae geniculate, rather slender and not thickened apicad, three proximal segments polished, the remainings opaque, 1st segment the longest and dilated towards the apex, 7 times as long as broad, 2nd short, less than one-fifth as long as 1st and twice as long as broad, 3rd elongate, a little longer than 2nd (3rd/2nd=1.25) and twice as long as broad, 4th somewhat shorter than 3rd (4th/3rd=0.80) though more than 1.5 times as long as broad, 5th to 9th equal in both length and width to one another, each a little longer than broad (length/width=1.40), 10th slightly shorter than 9th (10th/9th=0.91) though somewhat longer than broad (length/width=1.28), apicalmost longer than 10th (apicalmost/10th=1.19) and more than 1.5 times as long as broad.

Pronotum subcylindrical and distinctly longer than broad (length/width=1.23), slightly shorter (pronotum/head=0.92) and a little narrower (pronotum/head=0.88) than head, widest between anterior angles and apparently narrowed posteriad; lateral sides almost straight, but slightly emarginate behind the middle; anterior margin gently rounded, posterior one almost straight though slightly emarginate at the middle, anterior angles bluntly angulate, posterior ones narrowly rounded; surface much more coarsely and less closely punctured than on head, bearing a longitudinal smooth area along the median line, the posterior half of which is a little elevated. Scutellum subtriangular, surface somewhat convex and provided with a few setiferous punctures. Elytra square and somewhat depressed above, evidently longer than broad (length/width=1.19), slightly broader than (elytra/pronotum=1.03) but equal in length to pronotum; lateral

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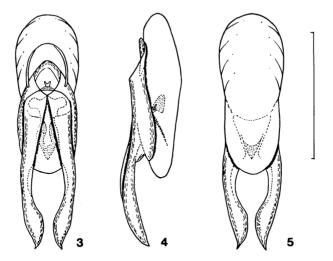
3. Scale: 2.0 mm.

Fig. 1. Ochthephilum yunnanense sp. nov.,

Fig. 2. Last abdominal sternite in male of *Ochthephilum yunnanense* sp. nov. Scale: 0.5 mm.

sides almost straight, posterior margin forming an obtuse re-entrant angle, posterior angles rounded; surface densely covered with coarse umbilicate punctures; each epipleuron provided with a fine longitudinal keel which is obscure behind humeral angle. Hind wings degenerated to minute lobes. Legs relatively elongate, anterior tarsi thin.

Abdomen elongate and almost parallel-sided; basal three visible tergites each transversely and shallowly depressed along basal margin and moderately closely cov-



Figs. 3-5. Male genital organ of *Ochthephilum yunnanense* sp. nov.; ventral view (3), lateral view (4), and dorsal view (5). Scale: 1.0 mm.

ered with coarse setiferous punctures, apical three visible tergites more sparingly and more finely punctured than on the preceding three tergites; preapical sternite provided with a deep V-shaped notch at the middle of posterior margin.

Genital organ sclerotized except for membraneous median lobe, elliptical, almost symmetrical. Median lobe relatively broad, gradually narrowed apicad and gently rounded at the apex. Parameres elongate, remarkably longer than median lobe, curved dorsad in posterior two-thirds in profile; each somewhat constricted behind the middle and widened before the apex, curved inwards in apical half and ending in a small acute denticle directed outwards as seen from ventral side.

Female. Similar to male in facies and size, though the preapical sternite is rounded at the middle of posterior margin.

Type series. Holotype: \mathcal{J} , allotype: \mathcal{Q} , tropical rain forest (Tropical Botanical Garden), Menglun, Mengla County, Xishuangbanna, Yunnan Province, Southwest China, 29–X–1992, Y. WATANABE leg. Paratypes: 1 \mathcal{Q} , same locality as for the holotype, 10–V–1992, XIAO N. leg.; 4 $\mathcal{J} \mathcal{J}$, 1 \mathcal{Q} , same data as for the holotype; 1 \mathcal{J} , 2 $\mathcal{Q} \mathcal{Q}$, same locality and collector as for the holotype, 28–X–1992; 3 $\mathcal{J} \mathcal{J}$, 2 $\mathcal{Q} \mathcal{Q}$, same locality and collector as for the holotype; 28–X–1992; 3 $\mathcal{J} \mathcal{J}$, 2 $\mathcal{Q} \mathcal{Q}$, same locality and collector as for the holotype, 28–X–1992; 3 $\mathcal{J} \mathcal{J}$, 2 $\mathcal{Q} \mathcal{Q}$, same locality as for the holotype, 29–X–1992, S. UÉNO leg; 4 $\mathcal{J} \mathcal{J}$, 9 $\mathcal{Q} \mathcal{Q}$, same locality and collector as for the holotype, 10–IX–1993, Y. WATANABE & XIAO N. leg.; 1 \mathcal{Q} , same locality and collector as for the above, 11–IX–1993; 1 \mathcal{J} , same locality and collector as for the above, 12–IX–1993; 1 \mathcal{Q} , tropical rain forest in a limestone area near Tropical Botanical Garden, Menglun, Mengla County, Xishuangbanna, Yunnan Province, Southwest China, 30–X–1992, Y. WATANABE leg.; 1 \mathcal{J} , same locality as for the above, 10–IX–1993, Y. WATANABE leg.; 1 \mathcal{J} , same locality as for the above, K. FUKUYAMA leg.; 6 $\mathcal{J} \mathcal{J}$, 1 \mathcal{Q} , Mengla Nature Protective Area, Mengla County, Xishuangbanna,

Yunnan Prov., Southwest China, 13-IX-1993, Y. WATANABE & XIAO N. leg.

Distribution. Southwest China (Yunnan Prov.).

Notes. The present new species is similar in general appearance to *O. semiopacum* (EPPELSHEIM) (1895, p. 402) from Pegu, but differs from it in the following points: head subtrapezoidal, 5th to 9th antennal segments almost equal in length to one another, legs reddish brown except for yellowish femora, 5th abdominal sternite in male nearly truncate or only feebly emarginate at the middle of posterior margin and lacking clearly impressed smooth space before the middle of posterior margin.

All the specimens of this new species were found from under dead leaves and in the litter zone of the tropical rain forest of Tropical Botanical Garden, Academia Sinica, and its vicinities.

要 約

渡辺泰明・蕭 宁年:中国云南省から採集された後翅の退化した Ochthephilum 属の1新種. — 1992 および 1993 年の両年にわたって実施された中日共同学術調査によって,中国云南省西双版納の熱帯植物園およびその近隣地域の,熱帯雨林の林床に堆積した腐葉層や落ち葉の下から, Ochthephilum 属の1種が採集された. この種は後翅が退化したきわめて興味深いもので,詳細に検討した結果,新種と判定されたので,下記のとおり命名記載した.

Ochthephilum yunnanense Y. WATANABE et XIAO, sp. nov.

本種は、体長および外部形態は EPPELSHEIM によって Pegu から記載された O. semiopacum に 類似しているが、 頭部は梯形を呈し、触角の第5から9節までの各節はほぼ同長で、肢は黄色い腿節 を除いては赤褐色を呈し、 雄の第5 腹板には明瞭な第二次性徴が表われないなどの特徴によって区別 される.

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