

A New Species of the Genus *Parachorius* (Coleoptera, Scarabaeidae) from Vietnam

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Abstract A new species of *Parachorius* is described from Vietnam under the name of *Parachorius matsudai* sp. nov.

Parachorius HAROLD is a small genus of Scarabaeinae, and recently assigned to the tribe Deltochilini by TARASOV and KEITH (2011). Up to the present, eight species of this genus have been known from eastern Himalayas, Indochina and South China (BALTHASAR, 1963; KRZYZHANOVSKY & MEDVEDEV, 1966; HANBOONSONG & MASUMOTO, 2001; UTSUNOMIYA & MASUMOTO, 2001; TARASOV & KEITH, 2011; MASUMOTO *et al.*, 2012).

Recently, we had an opportunity to examine two specimens of a *Parachorius* species from Vietnam. This form appears related to *P. maruyamai* MASUMOTO *et al.*, 2012 from Thailand, but it is distinct from the latter in several external morphology and the male genitalia. Thus, we describe a new *Parachorius* species from Vietnam based on the present specimens.

Parachorius matsudai sp. nov.

(Figs. 1–9)

Description of holotype. Male. Length: 9.0 mm; width: 4.3 mm.

Body moderate-sized for this genus, strongly convex above; dorsal side shining and glabrous; ventral side also shining and almost glabrous. Color black, with anterior portion of head and legs somewhat reddish; mouth parts, palpi and antennae reddish brown.

Head fairly transverse, almost flattened dorsally and simply formed; clypeus with a slight vague swelling a little behind the middle; clypeal margin moderately produced forward with apex rather shallowly notched at the middle and forming a rounded lobe on either side of the notch, and the remaining portion slightly rounded and finely bordered; genal suture finely defined, frontoclypeal one completely effaced in the middle and finely defined on either side; genae strongly produced laterad as a distinctly rounded lobe, finely bordered; surface simply and strongly punctate, the punctures becoming finer and denser anteriorly and also becoming a little sparser and coarser posteriorly.

Pronotum almost simply formed, strongly and evenly convex above, without a median longitudinal groove, about 1.1 times as wide as long (PW : PL = 4.0 : 3.6); anterior margin weakly bisinuate, finely bordered on either side and rather thickly so in the middle; lateral margins almost straight or gently rounded behind and strongly so in front, and finely bordered, though the marginal border becoming slightly thicker and distinctly ended at the posterior angle; anterior angles noticeably and sharply produced into a short finger projection as well as *P. maruyamai*, which is directed diagonally in basal half

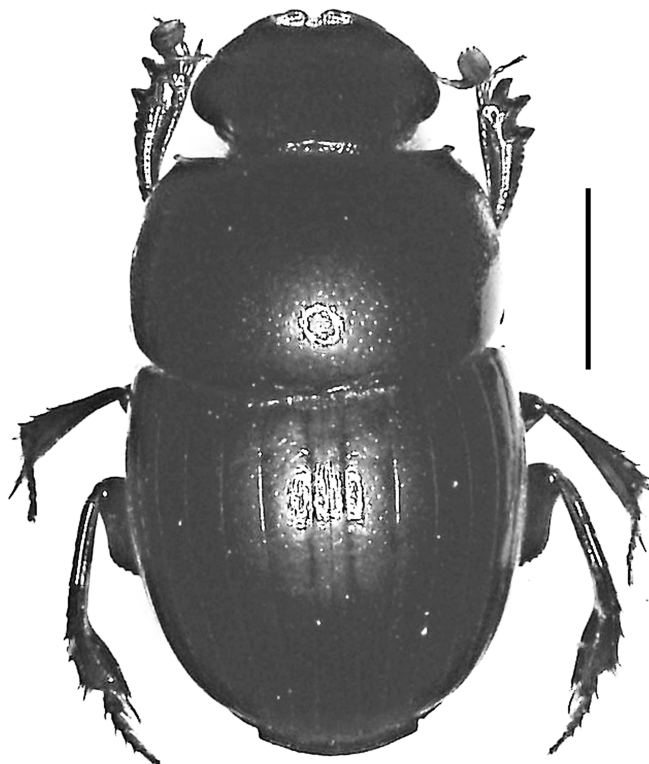
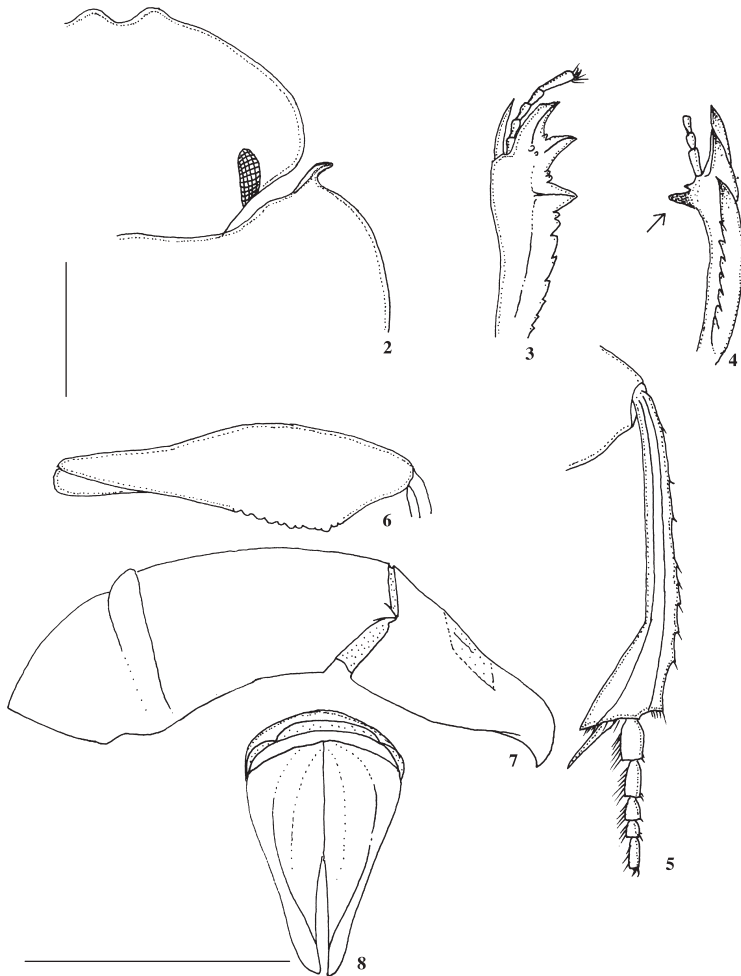


Fig. 1. Habitus of *Parachorius matsudai* sp. nov., male (holotype), scale 2 mm.

and curved laterally in apical half; posterior angles obtuse though distinctly defined; basal margin gently and evenly rounded, unbordered throughout; surface covered with small strong punctures which become slightly denser toward anterior angles and sparser toward median portion.

Elytra fairly strongly convex, about 1.1 times as wide as long ($EW : EL = 4.3 : 3.7$); disc each with eight striae including one along epipleural margin; striae finely but strongly grooved; striae punctures sparser and fairly fine, scarcely invading either margin of intervals; intervals broad and slightly convex, scattered with rather fine sparse punctures which become slightly coarser and denser toward outer intervals.

Pygidium weakly convex, densely and strongly punctate. Proventrite with anterior angles deeply and broadly excavated. Metaventricle broadly shining and sparsely punctate in basal 4/5 and slightly micro-granulose in apical 1/5, with a fine median longitudinal carina along midline in apical 1/5. Profemora with anterior edge simply formed. Metafemora with posterior portion strongly broadened and forming triangular lobe which is broadest at apical third and denticulate in the middle of posterior margin. Protibiae short and somewhat broad, each with three strong external teeth in anterior portion and roughly serrate in posterior portion, 1st tooth rather broad and diagonally truncate at apex; terminal spur long, evenly de-curved, and pointed apicad; ventral side with a short vertical spine near the basal portion of protarsal insertion. Mesotibiae short and strongly dilated toward apex; mesotarsi with 1st to 4th segment triangular in shape and diminishing in breadth and length toward apical segment;



Figs. 2–8. *Parachorius matsudai* sp. nov., male, scale 1 mm. — 2, Part of head and anterior angle of pronotum (right side), male, dorsal view; 3, right protibia, dorsal view; 4, left protibia, lateral view (an arrow indicating short vertical spin); 5, metatibia, dorsal view; 6, metatibia, ventral view. — 7–8, Aedeagus: 7, phallobase and parameres, lateral view; 8, parameres, dorsal view.

upper terminal spur slightly shorter than two basal segments combined. Metatibiae prolonged and complicatedly modified, almost straight in basal 3/5, and then suddenly incurved and much widened toward apex in dorsal view; inner distal end produced as a short strong point; terminal spur slender sharply pointed. All the claws fairly small and reduced.

Aedeagus moderate-sized. Phallobase about 1.5 mm in length in lateral view and about 0.6 mm in apical width. Parameres relatively robust in lateral view, about 0.9 mm in lateral view, with ventral side distinctly narrowed toward apex at basal 1/2 in lateral view; apex slightly curved downward and pointed in lateral view. Internal sac with two copulatory lamellae, one of which is noticeably large and elongate, about 1.0 mm in maximum length, another is smaller, short and about half times as long as the larger lamella.

Variation. Length: 6.4–9.0 mm; width: 3.7–4.3 mm (n = 2). F e m a l e. Pronotum with anterior



Fig. 9. Internal sac of the male genitalia of *Parachorius matsudai* sp. nov., (holotype), scale 1 mm.

angles distinctly projected as well as in the male, but the projection is only slightly shorter; superficial punctation a little coarser. Protibiae with 1st tooth narrower and sharper than that of male; terminal spur slightly shorter. Mesotibiae almost the same as well as in the male. Metatibiae more simply formed than in the male, though weakly incurved in apical 2/5, and then distinctly widened toward apex.

Type series. Holotype: ♂, Vietnam, Lampong p., Loc Bao, V. 1990, K. MATSUDA coll. Allotype: ♀, the same data as the holotype.

Type depository. The holotype is deposited in the collection of Vietnam National Museum of Nature.

Etymology. The present species is dedicated to Dr. Kiyoshi MATSUDA, who has been giving the first author warm companionship and help.

Notes. The present new species is closely related to *P. maruyamai* MASUMOTO, OCHI et SAKCHOOWONG from Thailand in having some shared similarly common characteristics such as, the unique projection on anterior angle of pronotum and the strongly modified metatibia, but can be distinguished from the latter by the following characteristics: 1) the male metatibia almost straight in basal 3/5, with apical portion more strongly produced at inner distal end and scarcely produced at outer distal end, whereas in *P. maruyamai*, it is less strongly produced at inner distal end and strongly produced at outer distal end, and distinctly incurved at basal 2/5; 2) pronotum in male obviously longer and the value of pronotal measurements about 1.1 times as wide as long, whereas in *P. maruyamai*, it is distinctly transverse and the value about 1.5 times as wide as long; 3) anterior angle of pronotum noticeably produced into short finger projection which is curved laterally at apical half instead of being simply and straightly produced; 4) differently shaped aedeagus, especially with parameres distinctly larger comparing with phallobase and fairly robust in lateral view, whereas in *P. maruyamai*, the parameres are smaller comparing with phallobase and slender in lateral view.

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要 約

越智輝雄・ファンホントイ・近 雅博: ベトナムから発見された *Parachorius* 属 1 新種の記載 (鞘翅目コガネムシ科ダイコクコガネ亜科). ———— *Parachorius* 属は、小型で、少数の種がヒマラヤ東部から中国南部に広く分布する食糞コガネムシであり、本属のいくつかの種はキノコ類に來襲することが知られている。タイのカオヤイ国立公園から近年記載された *P. maruyami* に近縁であるが、♂交尾器形態の大きな差やいくつかの外部形態の違いがある種を見いだし、新種と認め *P. matsudai* sp. nov. として記載した。併せて♂交尾器内袋の骨片についても言及し、記載に反映させた。

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