

DESCRIPTION OF *PHAEOCHROUS DAVAONIS* SPEC. NOV., WITH NOTES ON THE OTHER PHILIPPINE SPECIES OF *PHAEOCHROUS* (COLEOPTERA: SCARABAEIDAE, HYBOSORINAE)

by

P. J. KUIJTEN

(Department of Systematics and Evolutionary Biology, University of Leiden, The Netherlands)

SUMMARY

Phaeochrous davaonis, a new species of Hybosorinae from the Philippines, is described. Notes on the further Philippine species of this genus are given and the genitalia of the males are figured.

INTRODUCTION

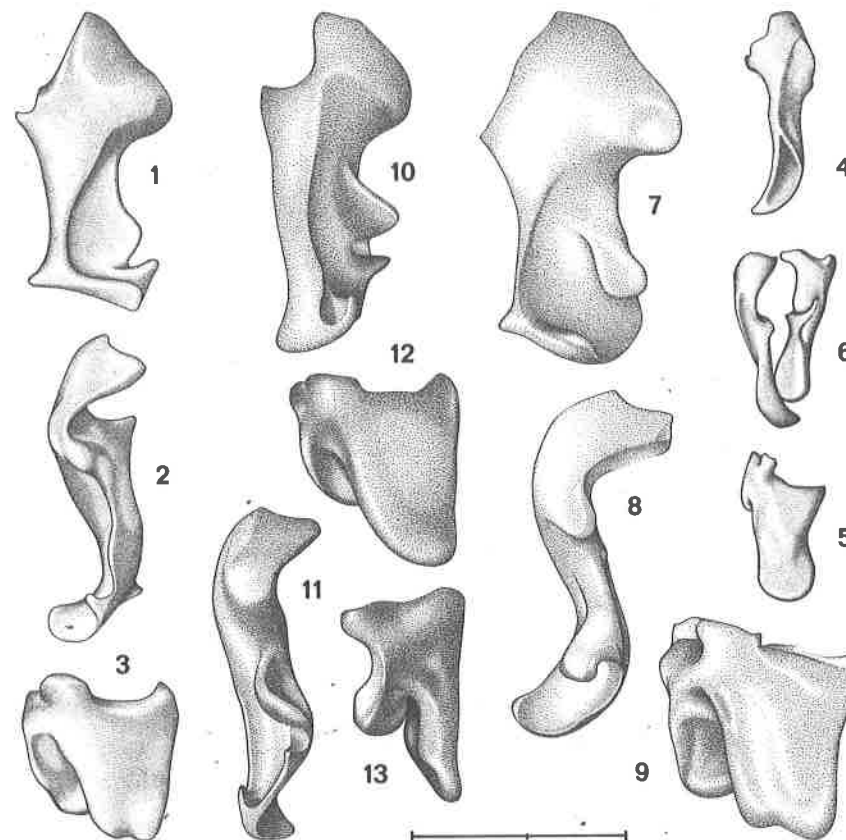
In his revision of the Indo-Australian *Phaeochrous* (1978) the author emphasized his resultless efforts to get sufficient, well documented material from the Philippines. As an answer to this regretful cri de coeur the entomologists of the Field Museum, Chicago, helpfully put their material at his disposal, mostly collected during the Museum's Zoological Expedition to the Philippines in 1946-47. This collection included *P. davaonis* spec. nov., *P. lobatus* Kuijten and *P. emarginatus* subsp. *emarginatus* Castelnau. For completeness' sake and to facilitate identification, notes on further Philippine specimens, and figures of the male genitalia of the four known species of the Archipelago are added.

DESCRIPTION

Phaeochrous davaonis spec. nov. (figs. 1-3)

In many cases the species of *Phaeochrous* are hardly or not distinguishable by external characters, and this holds specially for the females. Therefore the description is restricted to the characters as used in the revision (KUIJTEN, 1978), including figures of the male genitalia. For a detailed diagnosis of the genus see also this revision.

Longer, left, paramere: distal half of external surface with a deep excavation, apex with an upward lamina. Shorter, right, paramere:



Figs. 1-13. Parameres of Philippine species of *Phaeochrous*. Scale line represents approximately 1 mm. Base of parameres above, apex below.
 1-3 *Phaeochrous davaonis*, holotype: 1. left paramere, external, lateral aspect; 2. left paramere, dorsal aspect; 3. right paramere, external, lateral aspect.
 4-6 *Phaeochrous emarginatus* subsp. *emarginatus*, Lawa: 4. left paramere, external, lateral aspect; 5. right paramere, external, lateral aspect; 6. left and right parameres, dorsal aspect.
 7-9 *Phaeochrous lobatus*, holotype: 7. left paramere, external, lateral aspect; 8. left paramere, dorsal aspect; 9. right paramere, external, lateral aspect.
 10-13 *Phaeochrous philippinensis*, holotype: 10. left paramere, external, lateral aspect; 11. left paramere, dorsal aspect; 12. right paramere, external, lateral aspect; 13. right paramere, dorsal aspect.

inner and outer lobe strongly developed. Length: holotype 11.6 mm, paratype 11.9 mm (length = distance from anterior margin of labrum to middle of a line connecting the eyes at their shortest distance + length of pronotum + shortest distance between apex of scutellum and apex of elytra). Fore tibia: nine accessory denticles basally of small

lateral tooth, two denticles between the large teeth. Interstriae: fifth, ninth and thirteenth interstriae weakly more elevated than the other ones. Derm: dorsally slightly dull by microreticulation. Punctuation: punctures of striae bordering interstriae 5, 9 and 13 rather linearly arranged, those of other striae, specially on disc, mostly irregularly distributed. Variation: besides a slight variation in density, diameter and regularity of the punctuation hardly any differences between the specimens discernible.

Type material: 1 male holotype (Chicago) with labels "Caburan, Caburan, Davao Prov. Mindanao, sea level, 24.i. 1947"; "CNHM Philippine Zool. Exped. 1946-47, H. Hoogstraal leg."; "second growth coastal forest". 1 Male paratype (Leiden Museum of Natural History), same labels, but 20.i. 1947. Both with my name and type labels.

Material examined: Apart from the two type specimens, 4 females (Chicago) with the same data were examined. As *P. lobatus* is represented in the Caburan series as well, it remains uncertain to which of the two species these females belong.

Derivation of name: latinized genitive of Davao.

Annotated check list of the Philippine species of Phaeochrous (males only)
Phaeochrous davaonis spec. nov.; Davao Prov., Mindanao, two males seen, data see above. It is remarkable that this species again, like the two other Philippine endemics, has genitalia so much deviant from those of the other Indo-Australian *Phaeochrous* species. Genitalia figs. 1-3.

Phaeochrous emarginatus subsp. *emarginatus* Castelnau, 1840; full data of Field specimens: Lawa, Davao Prov., Mindanao, 18.iv.1930 (7 ×); Burungkot, Upi, Cotabato Prov., Mindanao, 1500 ft, 16.i.1946 (1 ×); Tigoplan, Brooke's Pt, Palawan, 29.iv.1947, collected at night, on tree trunk, second growth forest, at sea level (31 ×). Further males seen: Balabac, near Palawan (Paris, 1 ×); Palawan (Brussels, Budapest, 17 ×); Philippines (Brussels, Leiden, Paris, 7 ×). This species, as in its whole area of distribution, which extends from India to the Ryu Kyu Islands and northern Australia, in the Philippines too tends to slight variations in genital and external characters per population. However, these deviations are considered too weakly developed to create more subspecies, let alone more species. Genitalia figs. 4-6.

Phaeochrous lobatus Kuijten, 1978; the species was founded on a single male from Surigao, Mindanao (Paris). Full data of the Field male specimens: Todaya, E. slope Mt Apo, Davao Prov., Mindanao, 2800 ft, 16.xi.1946, flew to decaying skeleton after dusk (60 ×); Burungkot, Upi, Cotabato Prov., Mindanao, 1500 ft, 16.i.1946 and 6.i.1947 (4 ×);

Conel, Buyan, Cotabato Prov., Mindanao, 100 ft, 10.xii.1946, open forest (1 ×); Sibulan, E. of Mt Apo, Davao Prov., Mindanao, 1500 ft, 24.xi.1946 (2 ×); Caburan, Caburan, Davao Prov., Mindanao, 17.i.1947, sea level, second growth, coastal forest (1 ×). So much specimens having been studied now, some observations on the variability may be made. Length 11.0-12.3 mm (holotype 13.4 mm); fore tibia with in total 12-17 accessory denticles (holotype 18); basal one of the three external teeth in fore tibia often very small, but always more developed than adjacent accessory denticles; striae punctuation often rather regular, forming distinct striae (in holotype partly very irregular, in such a degree, that some striae and interstriae become unrecognizable); dorsal surface from nearly fully glossy to slightly dull. Genitalia figs. 7-9.

Phaeochrous philippinensis (Westwood, 1841); material seen: Manila, male holotype (Oxford); Manila (Paris, 1 ×); Mt Makiling, Luzon (Brussels, 1 ×); Philippines (Brussels, Leiden, 2 ×). The author tried to collect the species in pitfall traps, baited with decaying fish and chicken entrails, at Mt Makiling and other places near Manila, but failed, probably due to unfavourable climatic circumstances. A female in the Field material from Mt Data, Mountain Prov., Luzon, 7000 ft, 22.iv.1946, might belong to this species. Genitalia figs. 10-13.

The males of the four species are easily recognizable by genital characters. Insufficient knowledge of the variability of some poorly represented species prohibits the composition of a key, based on external characters.

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WESTWOOD, J. O., 1841. A memoir ... upon *Maechidius*, a genus of Lamellicorn Beetles, with descriptions and figures of some new genera belonging to the same tribe.—Proc. ent. Soc. London **1841**: 40-41 (the same memoir was published in Ann. Mag. nat. Hist. **8**: 457-458, in 1842!).
P. J. Kuijten, Department of Systematics and Evolutionary Biology, Kaiserstraat 63, 2300 RA, Leiden, The Netherlands.