

Hybosorine Scarabaeid Beetles from Northwest Thailand

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Abstract Four species of hybosorine scarabaeid beetles are recorded from Northwest Thailand, with description of a new species belonging to the genus *Phaeochroops*. The new species is similar to *P. laotianus* PAULIAN, but can be distinguished from the latter mainly by the configuration of male genitalia.

Recently, Dr. Kimio MASUMOTO kindly lent me for taxonomic study many specimens of hybosorine scarabaeid beetles from his collection made in Northwest Thailand. On the other hand, I also made a small collection of hybosorines some years ago in the vicinities of Chiang Mai, Northwest Thailand. The collections consist of four species, which apparently include a new species of the genus *Phaeochroops*. In the present paper, I am going to record them, with description of the new species. The abbreviations used herein are already explained in my previous paper (cf. NISHIKAWA, 1989).

Before going further, I wish to express my deep gratitude to Dr. Shun-Ichi UENO of the National Science Museum (Nat. Hist.), Tokyo, for his kindness in critically reading the original manuscript of this paper. I am also grateful to Dr. Kimio MASUMOTO, Institute of Human Living Sciences, Otsuma Women's University, Tokyo, for giving me the opportunity to examine many hybosorines. My thanks are due to Messrs. MANIT Yimyaem of Chiang Mai, Thailand, Yoshikazu MIYAKE of Tama City, Terutsune ABE, Tokyo, Yuzuru NAKAMURA of Japan Teachers Union, Tokyo, and Koichi KAWASAKI of Higashi Chūgakkō Junior High School, Zama, for their kind help.

Phaeochroops lakhonicus KUIJTEN, 1981

Phaeochroops lakhonicus KUIJTEN, 1981, Zool. Verh., Leiden, (183), pp. 35-36, figs. 42-44; type locality: Lakhon.

Specimens examined. 48 exs., Mt. Doi Inthanon, NW Thailand, 24-III-1988, K. MASUMOTO & Y. MANIT leg.; 46 exs., same locality, 1,700-1,750 m in alt., 31-III-1989, M. NISHIKAWA leg. (carrion traps); 11 exs., Mt. Doi Pui and Mt. Doi Suthep, Chiang Mai, NW Thailand, 22-III-1988, 30-VII-5-VIII-1988, 24-V-1989, and 17-VI-1989, K. MASUMOTO & Y. MANIT leg.; 184 exs., Mt. Doi Suthep, 1,100 m in alt., 1-6-IV-1989 and 21-IX-1993, M. NISHIKAWA leg. (carrion traps); 2 exs., Mt. Doi Angkhang, 1,750 m in alt., Amphoe Fang, Chiang Mai, NW Thailand, 23-V and 19-

VI-1989, K. MASUMOTO & Y. MANIT leg.; 1 ex., Maesa Villege, Chiang Mai, NW Thailand, 4-VII-1990, Y. MANIT leg.; 1 ex., Mt. Doi Mon Unggate, Samoeng, Chiang Mai, NW Thailand, 11-VIII-1989, Y. MANIT leg.

Phaeochroops masumotoi M. NISHIKAWA, sp. nov.

(Figs. 1-3)

Male and female. Length 8.55-8.92 mm in male, 8.01-9.10 mm in female; width 4.75-5.00 mm in male, 4.50-5.15 mm in female.

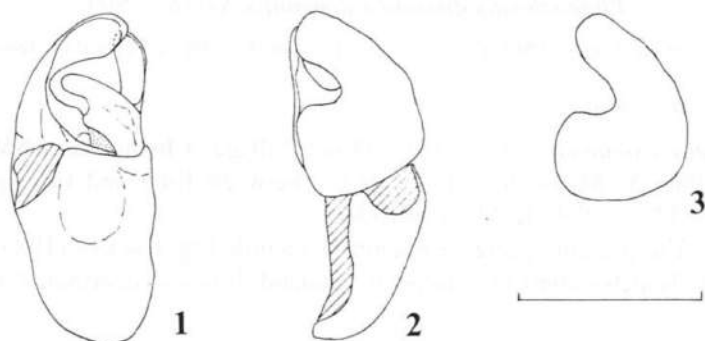
Body small in size, elongate-pyriform, blackish brown except for mouth-parts, labrum, head, antennae, epipleura and appendages reddish brown; pronotum also reddish brown, though the middle part is blackish brown; surface clothed with suberect yellowish setae; ventral surface almost reddish brown.

Head subtrapezoidal, slightly depressed, distinctly longer than width; labrum transverse, trapezoidal, foveate, the fovea with a thick, erect seta, which is shorter than those on head, pronotum and elytra; front margin weakly rounded and bordered; genae with a tuft of setae; eyes slightly prominent; surface setiferous, densely foveate, the foveae being smaller and sparser than those on labrum.

Pronotum trapezoidal, gently convex, distinctly depressed along lateral margins in basal halves, widest at base, PW/HW 1.86-1.97 (M 1.92) in male, 1.88-2.09 (M 2.00) in female, PW/PL 1.40-1.52 (M 1.46) in male, 1.40-1.49 (M 1.46) in female; front margin broadly emarginate and bordered, the border continuing to hind angles; front angles strongly projected forwards; lateral margins converging apicad, gently arcuate, weakly crenulate, with a low of erect setae, which are longer and thicker than those on surface, and become shorter posteriad; hind angles subrectangular, crenulate as on lateral margins; basal margin bisinuate; surface densely punctate, the punctures smaller than those on head. Scutellum tongue-shaped, sparsely punctate, the punctures setiferous.

Elytra convex, widest behind the middle, EW/PW 1.37-1.45 (M 1.39) in male, 1.38-1.45 (M 1.41) in female, EL/PL 2.43-2.59 (M 2.50) in male, 2.37-2.56 (M 2.47) in female, EL/EW 1.20-1.27 (M 1.23) in male, 1.18-1.22 (M 1.20) in female; lateral margins arcuate and carinate, entirely setiferous, the setae in basal 2/3 longer and thicker than those along the lateral margins of pronotum, becoming shorter apicad; apices with sutural angles minutely pointed; disc slightly depressed in mid-basal portion, suddenly descending towards apex at about apical 1/7, with a pair of three almost bifarious costae, the first costa disappearing at apical 1/7, with a low of punctures, the punctures equal in shape to those on intervals; the second one shorter than the first; the third one indistinct, the shortest; intervals weakly depressed, rather regularly punctate, the punctures small, horseshoe-shaped, umbilicate on apical portion, almost setiferous; the interspace among the punctures polished; epipleura entire, slightly concave, clothed with short setae.

Ventral surface almost entirely clothed with adpressed setae as long as those on



Figs. 1-3. *Phaeochroops masumotoi* M. NISHIKAWA, sp. nov., from Mt. Doi Suthep in Chiang Mai, Northwest Thailand. — 1, Male genitalia in dorsal view; 2, same in lateral view; 3, right paramere in oblique lateral view. (Scale: 1.0 mm.)

elytra. Mesosternum strongly punctate, the punctures sparse, the interspace among them polished. Metasternum longitudinally sulcate. Abdominal sternites with obliquely rugose punctuations.

Legs with profemur bearing several wavy lines near inner margin of under side, though the outer part is sparsely foveate, the fovea longitudinal and setiferous; protibia serrate and tridentate at outer margin; meso- and metatibiae with a transverse ridge behind the middle of outer side; meso- and metatarsi slightly longer than meso- and metatibiae in male, though they are distinctly shorter in female.

Male genitalia with parameres simple in shape, the right one broadly projected on dorsal side of apical edge, slightly twisted in the projection, which is hooked at the apex, the left one bilobate.

Type series. Holotype: ♂, Mt. Doi Suthep, ca. 1,100 m in alt., Chiang Mai, NW Thailand, 6-IV-1989, M. NISHIKAWA leg. Paratypes: 6 ♂♂, 4 ♀♀, same data as for the holotype; 1 ♂, Mt. Doi Pui, Chiang Mai, 22-III-1988, K. MASUMOTO leg.; 1 ♂, 1 ♀, same locality and collector as for the holotype, 1-IV-1989 and 21-IX-1993.

The holotype will be deposited in the collection of the Department of Zoology, National Science Museum (Nat. Hist.), Tokyo. The paratypes are preserved in my collection, except for one paratype specimen from Mt. Doi Pui which was returned to Dr. MASUMOTO.

Notes. The present new species is similar in general appearance to *Phaeochroops laotianus* PAULIAN (1945, pp. 36-37, fig. 22; KUIJTEN, 1981, pp. 40-42, figs. 51-55) originally described from Nam Tien of Laos, but can be clearly separable from the latter by the elytral costae bifarious at least in the first costae, the projection of the right paramere in the male genitalia broader, with the apex hooked, and the left paramere different in shape.

Phaeochrous dissimilis dissimilis ARROW, 1909

Phaeochrous dissimilis ARROW, 1909, Trans. ent. Soc. London, **4**, p. 496; type locality: Tenasserim, Moulmein.

Other references are omitted.

Specimens examined. 3 ♂♂, 5 ♀♀, Phrao Village, Chiang Mai, NW Thailand, 14~15-V-1988, Y. MANIT leg.; 6 ♂♂, 24 ♀♀, between Fang and Chiang Dao, NW Thailand, 22~23-V-1989, K. MASUMOTO leg.

Notes. The present species was already recorded by HIRANO (1985) from Amphoe Sai Yok, Kanchanaburi in Southwest Thailand. It is also distributed in Northwest Thailand.

Phaeochrous emarginatus emarginatus CASTELNAU, 1840

Phaeochrous emarginatus CASTELNAU, 1840, Hist. nat. Ins., Coléopt., Paris, **2**, p. 109; type locality: Java.

Other references are omitted.

Specimens examined. 3 exs., Chiang Dao, Chiang Mai, NW Thailand; 24 exs., Mesa Vill.; 124 exs., between Fang and Chiang Dao; 6 exs., Pao District; 41 exs., Phrao Vill.; 2 exs., Doi Angkhang, 1,750 m in alt.; 7 exs., Mon-Angget, nr. Chiang Mai; 1 ex., Mt. Doi Suthep; 1 ex., Ban Pang O Mai, Mt. Doi Mae Tho; 1 ex., Mt. Doi Mae Salong; 2 exs., Mae Suai, Chiang Rai. (Dates and collectors are omitted.)

要 約

西川正明：タイ国北西部産のアツバコガネ類。——タイ国北西部産のアツバコガネ類4種を報告した。このうちの1種は、ラオスから記載された *Phaeochroops laotianus* PAULIAN に似ているが、検討の結果、新種と認められたので、*Phaeochroops masumotoi* sp. nov. と命名・記載した。

References

- ARROW, G. J., 1909. On the characters and relationships of the less-known groups of lamellicorn Coleoptera, with descriptions of new species of Hybosorinae, etc. *Trans. ent. Soc. London*, **4**: 479-507.
- CASTELNAU, Comte de, 1840. Histoire Naturelle des Insectes. Coléoptères. **2**: i+563 pp., 38 pls. Paris.
- HIRANO, Y., 1985. Some Scarabaeoidea-species, collected from Kanchanaburi, Thailand. *Lamellicornia, Tokyo*, **1**: 37-40, pl. [3]. (In Japanese.)
- KUIJTEN, P. J., 1978. Revision of the Indo-Australian species of the genus *Phaeochrous* CASTELNAU, 1840 (Coleoptera: Scarabaeidae, Hybosorinae), with notes on the African species. *Zool. Verh., Leiden*, (165): 1-40, pls. 1-2.
- 1981. Revision of the genus *Phaeochroops* CANDÈZE (Coleoptera: Scarabaeidae, Hybosorinae). *Ibid.*, (183): 1-76, pls. 1-4.
- NISHIKAWA, M., 1989. The Hybosorinae (Coleoptera, Scarabaeidae) in Sabah, Borneo Island, I. *Kanagawa-Chūhō, Yokohama*, (90): 171-176.
- PAULIAN, R., 1945. Coléoptères Scarabéides de l'Indochine, I. *Fn. Emp. fr.*, **3**: i+1-228, 1 folder.