

A contribution to the tribe Brachinini (Coleoptera: Carabidae) - V. Two new species of the genus *Pheropsophus* from the Australian Region

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Abstract. Two new species *Pheropsophus talaudensis* sp. nov. and *Pheropsophus obiensis* sp. nov. from Indonesia are described and illustrated. Male genitalia of holotypes are illustrated.

INTRODUCTION

The last complete revision of the tribe Brachinini was published by Chaudoir (1876). A checklist with the distribution of species from the Australian Region was published by Csiki (1932, 1933). Works aimed at the Australian Region were published later by Darlington (1968), Giachino (2003, 2005), Baehr (2012) and Hrdlička (2015). In the Australian Region, the genus *Pheropsophus* Solier, 1833 is represented by 24 species.

MATERIAL AND METHODS

The type material was taken from author's collection. Photos of specimens used for redescriptions were provided. Exact label data are cited for the type material, separate lines on labels are indicated by „/“, separate labels by „//“. Autor's remarks and comments are found in brackets. [p] - the preceding data were printed; [hw] - the same was hand-written.

Measurements of body parts and corresponding abbreviations used in the text are as follows:

- TL total length - measured from the apex of the left mandible (mandibles opened) to the apex of the left elytron;
- DVH dorso-ventral height - maximum dorso-ventral height of the body;
- HL length of head - measured from the clypeus apex to the neck constriction;
- HW width of head - maximum width of the head (including eyes);
- AL antennae length;
- MPL length of the last maxillary palpomere;
- MPW width of the last maxillary palpomere;
- PL pronotal length - length of the pronotum measured along the mid-line;
- PW1 pronotal width 1 - width of the anterior margin of pronotum;
- PW2 pronotal width 2 - maximum width of the pronotum;
- PW3 pronotal width 3 - minimum width of the pronotum;
- PW4 pronotal width 4 - width of the posterior margin of the pronotum;
- EL elytral length - measured from the anterior margin of the scutellum to the posterior margin of the elytra;
- EW elytral width - maximum width of both elytra combined.

TAXONOMY

***Pheropsophus talaudensis* sp. nov.**

(Figs. 1-3, 7)

Type material. Holotype (♂) labelled: „INDONESIA, TALAUD Isl.; / Mar. 2011 / Lgt. local collector / (imported by St. Jakl) [p, white label] // HOLOTYPE / *Pheropsophus* / *talaudensis* sp. n. / det. Jan Hrdlička, 2015 [p, red label]. The holotype is deposited in the author's collection.

Description of the male holotype. Habitus (Fig. 7). A medium-sized *Pheropsophus* (TL 14.40 mm); 2.69 times longer than wide (TL/EW). Body convex (TL/DVH 3.20). Body largely black. Head yellow-brown with two black frontal triangular spots connected in series. Mandibles, clypeus, temples and dorsal part of neck blackish. Pronotum (on the right and left edges) with small irregular longitudinal yellow-brown spots. Episterna of prothorax black with small irregular yellow-brown spot. Maxillary and labial palpi, antennae, legs, coxae, middle and hind trochanters, episterna of metathorax, posterior margin of elytra and epipleura yellow-brown. Knees blackish.

Head longer than wide (HL/HW 1.21), narrower than pronotum (HW/PW2 0.98). Eyes large. Head shiny with longitudinal furrows over each eye, front flat, neck wrinkled. Mandibles in sideview with unisetose scrobe. Antennae long, narrow (TL/AL 1.80). Last article of maxillary palpus short, truncate apically (MPL/MPW 2.17).

Pronotum transverse (PL/PW2 0.91). PL 2.70 mm, PW1 2.25 mm, PW2 (at the end of first third of pronotum) 2.95 mm, PW3 (in last sixth of pronotum) 2.45 mm, PW4 2.45 mm. Disc flat, dull, densely transversely ridged, covered with sparse impressed setiferous punctures. Lateral groove poorly obvious, with one setiferous puncture at about half. Posterior angles of pronotum rectangular. Episterna of prothorax smooth and shiny.

Elytra 1.53 times longer than wide (EL/EW), rectangular. Maximum width at the beginning of last third. Elytral disc convex, dull, with considerable microsculpture. Each elytron with 8 distinct, rounded and bare costae. Elytra sparsely pubescent with long and very long yellow setae (between costae). Humeri distinct. Posterior margin of elytra with very short setae (approximately 0.028-0.042 mm).

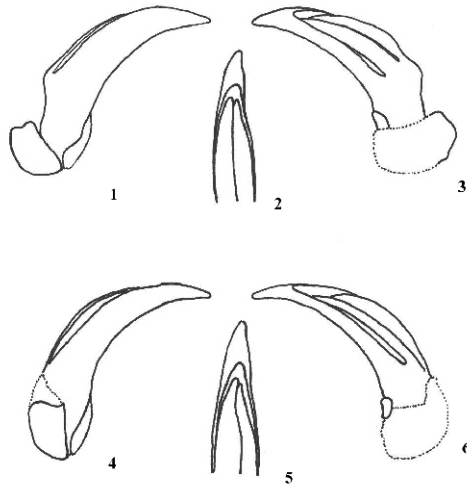
Male genitalia (Figs. 1-3). Aedeagus robust and conical, with a bun at the beginning of the last third. Apical half flattish dorso-ventrally. The tip is pointed.

Differential diagnosis. *Pheropsophus talaudensis* sp. nov. is similar to *Pheropsophus nigerrinus* Jedlička, 1935 from the Philippines (Mindanao). *P. nigerrimus* differs from the new species by a black frontal V-shaped spot. The clypeus is yellow. The head is shiny, without longitudinal furrows over each eye, the front is convex. The whole pronotum is black, convex and shiny.

Distribution. Indonesia, Talaud Is.

Biology. Unknown.

Name derivation. Patronymic, after the type locality Talaud Is. (Indonesia).



Figs. 1-6: Aedeagus: 1-3- *Pheropsophus talaudensis* sp. nov.; 4-6- *Pheropsophus obiensis* sp. nov. (1, 3, 4, 6 - lateral view, 2, 5 - dorsal view).



Figs. 7-8. Holotypes: 7- *Pheropsophus talaudensis* sp. nov.; 8- *Pheropsophus obiensis* sp. nov.

***Pheropsophus obiensis* sp. nov.**

(Figs. 4-6, 8)

Type material. Holotype (♂) labelled: „INDONESIA, Centr. / Moluccas; OBI Isl.; S. / coast; TAPAYA vill. env.; / 0-200 m; 20.xi.- / 10.xii.2008; St. Ják Igt. [p, white label] // HOLOTYPE / *Pheropsophus obiensis* / sp. n. / def. Jan Hrdlička, 2015 [p, red label]. The holotype is deposited in the author's collection.

Description of the male holotype. Habitus (Fig. 8). A medium-sized *Pheropsophus* (TL 16.00 mm); 2.73 times longer than wide (TL/EW). Body convex (TL/DVH 3.55). Body largely black. Head yellow-brown with two black frontal triangular spots connected in series. Mandibles, clypeus, temples and dorsal part of neck blackish. Pronotum (on the right and left edges) with greater irregular longitudinal yellow-brown spots. Episterna of prothorax yellow-brown with wide black borders. Maxillary and labial palpi, antennae, legs, coxae, middle and hind trochanters, episterna of metathorax, posterior margin of elytra and epipleura yellow-brown. Knees blackish.

Head longer than wide (HL/HW 1.36), narrower than pronotum (HW/PW2 0.95). Eyes large. Head shiny, without longitudinal furrows over each eye, front convex, neck wrinkled. Mandibles in sideview with unisetose scrobe. Antennae long, narrow (TL/AL 1.64). Last article of maxillary palpus long, truncate apically (MPL/MPW 2.50).

Pronotum slightly transverse (PL/PW2 0.97). PL 3.00 mm, PW1 2.40 mm, PW2 (at the end of first third of pronotum) 3.10 mm, PW3 (at the end of fifth sixth of pronotum) 2.35 mm, PW4 2.40 mm. Disc convex, shiny, slightly transversely ridged in central part, covered with sparse impressed setiferous punctures. Lateral groove poorly obvious, with a setiferous puncture at about half. Posterior angles of pronotum acute. Episterna of prothorax smooth and shiny.

Elytra 1.54 times longer than wide (EL/EW). Maximal width at the beginning of last third. Elytral disc convex, dull, with expressive microsculpture. Each elytron with 8 distinct, rounded and bare costae. Elytra sparsely pubescent by long and very long yellow setae (between costae). Humeri distinct. Posterior margin of elytra with very short setae (approximately 0.028-0.042 mm).

Male genitalia (Figs. 4-6). Aedeagus robust and conical. Apical half flattish dorsoventrally. The tip is pointed.

Differential diagnosis. *Pheropsophus obiensis* sp. nov. is similar to *Pheropsophus nigerrimus* Jedlička, 1935 from Philippines (Mindanao). *P. nigerrimus* differs from new species by a black frontal V-shaped spot. Clypeus yellow. The whole pronotum is black, convex and shiny. *Pheropsophus obiensis* sp. nov. differs from *Pheropsophus talaudensis* sp. nov. by shape and structure of pronotum and by shape of aedeagus.

Distribution. Indonesia, OBI Is.

Biology. Unknown.

Name derivation. Patronymic, after the type locality OBI Is. (Indonesia).

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