

## Study of the genus *Orphinus* Motschulsky, 1858. Part 3 - species from the Australian Region (Coleoptera: Dermestidae: Megatominae)

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### Taxonomy, new species, Coleoptera, Dermestidae, Megatominae, *Orphinus*, Australian Region

**Abstract.** Two new species, *Orphinus* (*Orphinus*) *wilhelmi* sp. nov. (Papua New Guinea) and *O.* (*O.*) *kakadu* sp. nov. (Australia: Northern Territory) are described, illustrated and compared with similar species. A list of known Australian species is provided.

### INTRODUCTION

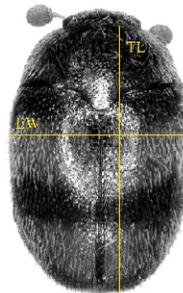
The dermestid genus *Orphinus* Motschulsky, 1858 was divided into four subgenera and currently contains 140 species worldwide (Háva 2015, 2020, 2021a). In the present article, 2 new species collected in Indonesian Papua and Australia are described. The article is a continuation of a series of previous articles about *Orphinus* species from the Australian Region (Háva 2014, 2016, 2021b-c, Háva & Kadej 2013, 2014) and two preceding parts of the study concerning the Afrotropical and Palaearctic Regions (Háva 2020b, 2021a).

### MATERIAL AND METHODS

The size of the beetles or of their body parts can be useful in species recognition and thus, the following measurements were made:

TL total length - linear distance from anterior margin of pronotum to apex of elytra.

EW elytral width - maximum linear transverse distance.

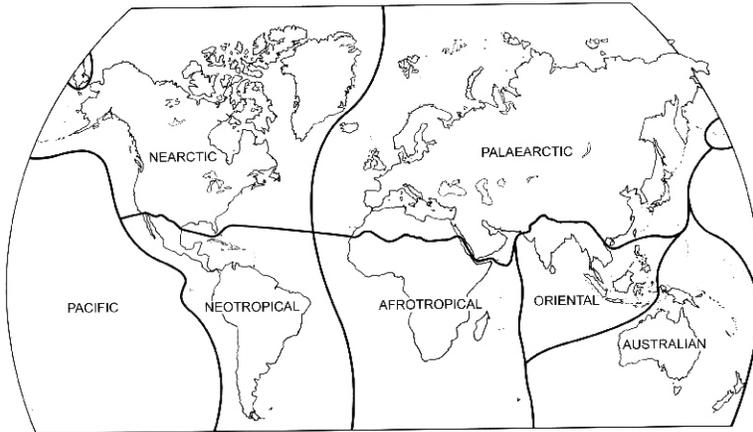


The type material is deposited in (JHAC) - Jiří Háva, Private Entomological Laboratory & Collection, Únětice u Prahy, Prague-West, Czech Republic.

Specimens of the presently described species are provided with red, printed labels with the text as follows: "HOLOTYPE *name of taxon* sp. nov. Jiří Háva det. 2021".

Nomenclature and systematic in this paper follow Háva (2015).

Geographic Regions follow the Palaearctic Catalogue (Map. 1).



Map. 1. The limits of geographic Regions.

## RESULTS

### Genus *Orphinus* Motschulsky, 1858

Subgenus/region	AF	AU	NE	NT	OR	PA
<i>Curtorphinus</i>					2	1
<i>Falsoorphinus</i>					6	13
<i>Orphinus</i>	26	20	2	1	48	29
<i>Picorphinus</i>					1	

Distribution of species in Regions (not included here described new taxa): AF - Afrotropical, AU - Australian, NE - Nearctic, NT - Neotropical, OR - Oriental, PA - Palaearctic (according to Háva 2021a).

## DESCRIPTIONS

### *Orphinus (Orphinus) wilhelmi* sp. nov.

(Figs. 1-3)

**Type material.** Holotype (♀): „New Guinea /NE/, Mt. Wilhelm, Keglsugl, 10-14.viii.1969“ / „/No.NGM-U.6./, leg. Dr. J. Balogh“, (JHAC).

**Description.** Female. Body parallel and oval, TL 2.5 mm, EW 1.4 mm. Head, pronotum, scutellum and elytra brown, shiny, each elytron brown with brown-orange fasciae (Fig. 1), brown on venter. Head finely punctate with long, recumbent, white setation. Palpi brown; setation on mentum denser. Eyes large, with short microsetae. Ocellus on frons present. Antennae brown with black setae, with 11 antennomeres, terminal antennal segment slightly circular (Fig. 3). Pronotum brown, disc finely punctate, densely foveolate posteriorly, with long, recumbent, white setae. Scutellum black, triangular, without setation. Elytra finely punctate; humerus with a small bump; elytral cuticle brown, covered by short brown setation, with brown-orange cuticular fasciae covered by intermixed white and yellow setation (Figs. 1-2). Epipleuron brown, anteriorly broad, coarsely punctate, with short, white setation. Legs brown with white, short setation. Mesosternum

coarsely punctate laterally, otherwise finely punctate, covered by long, recumbent, white setation. Pygidium dark brown, with black setation. Abdominal visible ventrites brown, with short, recumbent, white setation.

Male. Unknown.

**Differential diagnosis.** The new species differs from all Papuan species by the long, parallel body, structure of antennae and arrangement of elytral spots; similar species *O. wau* Háva, 2014 differs by the black body.

**Etymology.** Toponymic, named after the type locality - Mount Wilhelm.



Figs. 1-3. *Orpinus (Orpinus) wilhelmi* sp. nov.: 1-habitus, dorsal aspect; 2-habitus, dorso-lateral aspect; 3-left antenna.

***Orpinus (Orpinus) kakadu* sp. nov.**

(Figs. 4-5)

**Type material.** Holotype (♂): „Australia: N.T., Kakadu NP, Ubirr Camp. Area, ca 30 m, 27-28.10.1976, blacklight”. (JHAC).

**Description.** Male. Body oval, TL 1.7 mm, EW 1.2 mm. Head, pronotum, scutellum and elytra black, shiny, with white setation (Fig. 4), black on venter. Head finely punctate with long, recumbent, white setation. Palpi dark brown; setation on mentum denser. Eyes large, with yellow microsetae. Ocellus on frons present. Antennae brown with yellow setae, with 11 antennomeres, terminal antennal segment large and circular (Fig. 5); right antenna missing. Pronotum black, disc finely punctate, densely foveolate posteriorly, with long, recumbent, white setation. Scutellum

black, triangular, without setation. Elytra finely punctate; humerus with one small bump; elytral surface with long, recumbent white setation; intermixed with black setation. Epipleuron black, anteriorly broad, coarsely punctate, with short, white setation. Legs brown with white setation. Mesosternum coarsely punctate laterally, otherwise finely punctate, covered by short, recumbent, white setation. Pygidium dark brown with black setation. Abdominal visible ventrites black, shiny, with white setation. Male genitalia is completely destroyed.

Female. Unknown.

**Differential diagnosis.** The new species is externally very similar to *O. (O.) minimus* Arrow, 1915, but differs from it by the large terminal antennomere (minimus - terminal antennomere of male is very small).

**Etymology.** Toponymic, named after the type locality - Kakadu National Park.



Figs. 4-5. *Orphinus (Orphinus) kakadu* sp. nov.: 4-habitus, dorsal aspect; 5-left antenna.

#### LIST OF ORPHINUS SPECIES KNOWN FROM AUSTRALIAN REGION

**Genus *Orphinus* Motschulsky, 1858**  
**Subgenus *Orphinus* s. str.**

*Orphinus (Orphinus) nesioticus* Beal, 1961  
*Orphinus (Orphinus) terminalis* (Sharp, 1885)

South Mariana Is.: Guam I.; Vanuatu Is.  
South Mariana Is.; Cook Is.; Gilbert Is.; Marshall Is.; New  
Caledonia; Samoa Is.; Solomon Is.; Upolu Is.; Vanuatu

Papuan species

*Orphinus (Orphinus) biroi* Pic, 1956  
*Orphinus (Orphinus) fasciatus* (Metsumura & Yokoyama, 1928)

*Orphinus* (*Orphinus*) *harveyi* Kadej & Háva, 2014  
*Orphinus* (*Orphinus*) *missae* Kadej & Háva, 2013  
*Orphinus* (*Orphinus*) *newirelandicus* Háva, 2014  
*Orphinus* (*Orphinus*) *wau* Háva, 2014  
*Orphinus* (*Orphinus*) *wilhelmi* sp. nov.

#### Australian species

<i>Orphinus</i> ( <i>Orphinus</i> ) <i>atrous</i> Armstrong, 1943	Queensland
<i>Orphinus</i> ( <i>Orphinus</i> ) <i>australicus</i> (Blackburn, 1891)	South Australia
<i>Orphinus</i> ( <i>Orphinus</i> ) <i>casuarinae</i> (Blackburn, 1903)	South Australia
<i>Orphinus</i> ( <i>Orphinus</i> ) <i>ceciliense</i> (Blackburn, 1903)	South Australia, Victoria
<i>Orphinus</i> ( <i>Orphinus</i> ) <i>fulvipes</i> (Guérin-Méneville, 1838)	New South Wales (introduced)
= <i>Orphinus</i> ( <i>Orphinus</i> ) <i>testaceipes</i> (Pic, 1915)	
<i>Orphinus</i> ( <i>Orphinus</i> ) <i>interioris</i> (Blackburn, 1891)	South Australia
<i>Orphinus</i> ( <i>Orphinus</i> ) <i>kakadu</i> sp. nov.	Northern Territory
<i>Orphinus</i> ( <i>Orphinus</i> ) <i>minimus</i> Arrow, 1915	Queensland, South Australia
<i>Orphinus</i> ( <i>Orphinus</i> ) <i>nealense</i> (Blackburn, 1903)	New South Wales, South Australia
<i>Orphinus</i> ( <i>Orphinus</i> ) <i>occidentalis</i> Armstrong, 1943	Western Australia, Northern Territory, Queensland; Timor Isl.
<i>Orphinus</i> ( <i>Orphinus</i> ) <i>quornensis</i> (Blackburn, 1895)	South Australia, Northern Territory
<i>Orphinus</i> ( <i>Orphinus</i> ) <i>woodvillensis</i> (Blackburn, 1891)	South Australia, New South Wales

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