

Contribution to the knowledge of *Thaumaglossa* Redtenbacher, 1867 from Madagascar (Coleoptera: Dermestidae: Megatominae)

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Abstract. A new species, *Thaumaglossa ooparasitica* sp. nov. from Madagascar is described, illustrated and compared with related species. It belongs to the „*Thaumaglossa hilleri* species group” and differs by the structure of antennae and male genitalia. A key of known Madagascan species is also provided.

INTRODUCTION

The dermestid genus *Thaumaglossa* Redtenbacher, 1867 belongs to the subfamily Megatominae, the tribe Megatomini and the subtribe Cryptorhopalina. It contains 62 species and subspecies worldwide, according to a recent study (Háva 2015a). The genus *Thaumaglossa* has been recently studied and new species have been discovered as a result (Háva 2006, 2008, 2010, 2012, 2015b, 2017, Háva et al. 2006, Herrmann & Háva 2013, Kadej & Háva 2013, 2015). In the present article, a new species, recently collected from Madagascar, is described.

MATERIAL AND METHODS

The nomenclature and zoogeography follow Háva's reference guide (2015a).

The abbreviations and measurements used during the study are explained below:

Total length (TL) - linear distance from anterior margin of pronotum to apex of elytra.

Elytral width (EW) - maximum linear transverse distance.

The material has been deposited in the following collections:

BMPC Private collection of Bruno Mériguet, Vaux-le-Pénail, France;

JHAC Private Entomological Laboratory & Collection, Jiří Háva, Únětice u Prahy, Prague-west, Czech Republic;

MNHN Muséum National d'Histoire Naturelle, Paris, France.

The specimens of the presently described species are provided with a red, printed label with text as follow: „HOLOTYPE (or PARATYPE, respectively) *Thaumaglossa ooparasitica* sp. nov. J. Háva & B. Mériguet det. 2018”.

RESULTS

genus *Thaumaglossa* Redtenbacher, 1867

***T. hilleri* species group**

***Thaumaglossa ooparasitica* sp. nov.**

(Figs. 1-5)

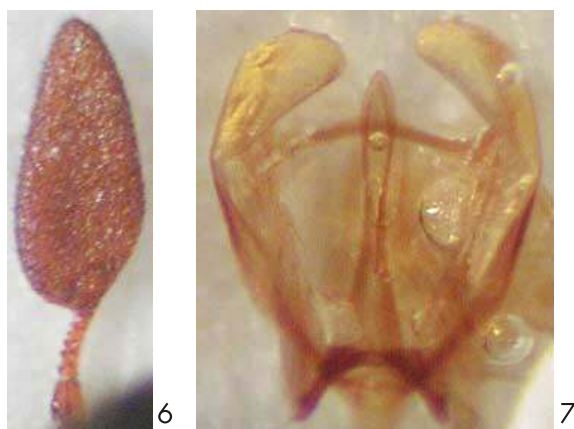
Type material. Holotype (♂): Madagascar, hotel at Mantasoa's lake riverside, west part of lake (-18.979 47.882 WGS84), district of Manjakandriana, Analamanga Region, 18.i.2007, B. Mériquet leg., (JHAC). Paratypes (3 ♀♀): the same data as holotype, (MNHN, BMPC, JHAC).

Description. Male (Fig. 1). Body (TL: 2.5 mm, EW: 2.2 mm), strongly convex, ovate, widest at humeri, black on dorsal surface; antennae brown, legs brown; body covered with black short setation. Antennae with 11 antennomeres with characteristic morphology: the terminal (11th) antennomere leaf-shaped, covered densely with brown, short, erect setation (Fig. 3). The remaining segments of antenna narrow and oblate. Antenna occupies the whole cavity of antennal fossa. Antennal fossa completely open along the whole length of lateral margin of the pronotum (hypomeron), occupying all of hypomeron, deeply excavated, floor of fossa microscopically punctate. Pronotum black, densely punctated, covered by short, black setation. Elytra black, coarsely punctated on humera and on first half, other parts densely punctated, covered with black, short setation. Epipleuron black. Scutellum triangular, visible. Prosternum intensely punctate on disc, without impunctate median line. Mesosternal disc with large punctation. Abdominal visible ventrites black with golden-yellow setation. Pygidium black, with golden-yellow setation. Male genitalia as in Fig. 5.

Female (Fig. 2). Body (TL: 2.7-2.75 mm, EW: 2.2-2.25 mm), externally similar to the male, but terminal antennomere is small (Fig. 4).



Figs. 1-5. *Thaumaglossa ooparasitica* sp. nov.: 1- habitus of male; 2- habitus of female; 3- antenna of male; 4- antenna of female; 5- male genitalia.



Figs. 6-7. *T. conradti* Pic, 1927: 6- antenna of male; 7- male genitalia. (photo by A. Herrmann)

Differential diagnosis. This new species belongs to „*T.hillieri* species group“. It differs from the Afrotropical species *T. conradti* Pic, 1927 by the structure of antennae and male genitalia. Compared to *T. mroczkowskii* Háva & Kadej, 2005. The difference are the black abdominal ventrites, the structure of male antennae and genitalia; It differs from other Madagascan species by the character mentioned in the following key.

Etymology. Biology, compound name created with prefix oo- for ootheca and *parasitica* in reference of the way of developpemnt of the species.

Bionomy. The species has been caught from a ootheca of *Paramantis prasina* (Serville, 1839) (Mantodea) collected in January 2007 in a secundarised landscape near a riverside of Mantasoa's lake. The adults of *Thaumaglossa* emerged a few weeks later. The larvae of *Thaumaglossa* have not eaten the whole of the oothecae and some young *Paramantis* have hatched.

SUPPLEMENTED KEY OF *THAUMAGLOSSA* SPECIES RECORDED FROM MADAGASCAR (HÁVA 2012)

- 1(2) Elytra unicolorous
- A(B) Elytra orange-reddish with reddish setation *Thaumaglossa purpurea* (Pic, 1915)
- B(A) Elytra black with black setation *Thaumaglossa ooparasitica* sp. nov.
- 2(1) Elytra not unicolorous
- 3(4) Elytra dark brown or black with transverse fasciae from white setation; pronotum covered by yellow and white setation *Thaumaglossa rufocapillata* Redtenbacher, 1867
- 4(3) Elytra dark brown or black, with orange or yellow spots; pronotum with small circular spots from yellow or white setation
- 5(8) Elytra with spots; abdominal ventrites IV-V black
- 6(7) Each elytron with transverse, orange-reddish band or spots covered by yellow setation; pronotum with three, distinct spots from yellow or white setation (two on lateral parts, one near scutellum) *Thaumaglossa pauliani* Pic in Paulian, 1953
- 7(6) Each elytron without orange-reddish band or spots, only with two distinct, circular spots from yellow

- setation; pronotum with three, large, distinct spots from yellow setation (two on lateral parts, one near scutellum) *Thaumaglossa maculata* Háva, 2010
- 8(5) Each elytron with one large orange part from orange setation; pronotum with three distinct orange, circular spots; abdominal ventrites IV-V orange, covered by orange setation *Thaumaglossa baobab* Háva, 2012



Fig. 8. Female of *Paramantis prasina* (Serville, 1839).

Fig. 9. Ootheca of *Paramantis prasina* (Serville, 1839) after larvae of *Thaumaglossa*.

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REFERENCES

- HÁVA J. 2006: Redescription of *Thaumaglossa purpurea* (Pic), new combination, from Madagascar (Coleoptera: Dermestidae: Megatomini). *Genus* 17: 201-204.
- HÁVA J. 2010: A new species of *Thaumaglossa* (Coleoptera: Dermestidae: Megatomini) from Timor Island. *Latvijas Entomologs* 48: 50-51.
- HÁVA J. 2012: *Thaumaglossa baobab* sp. nov., new species from Madagascar (Coleoptera: Dermestidae: Megatomini). *Calodema* 199: 1-4.
- HÁVA J. 2015a: *World Catalogue of Insects. Volume 13. Dermestidae (Coleoptera)*. Leiden/Boston: Brill, xxvi + 419 pp.
- HÁVA J. 2015b: A contribution to knowledge of the genus *Thaumaglossa* species from Malaysia with description of two new species (Coleoptera: Dermestidae: Megatominae). *Folia Heyrovskyana, Series A* 23: 14-17.
- HÁVA J. 2017: *Thaumaglossa navratili* sp. nov. from French Guiana (Coleoptera: Dermestidae: Megatominae). *Arquivos Entomológicos* 18: 127-130.
- HÁVA J., KADEJ M. & CASARI S. A. 2006: Revision of the genera *Thaumaglossa* Redtenbacher, 1867 and *Pseudothaumaglossa* Pic, 1918 (Coleoptera: Dermestidae: Megatomini) from Neotropical region. *Polskie Pismo Entomologiczne* 75: 391-399.
- HERRMANN A. & HÁVA J. 2013: Description of a new species of *Thaumaglossa* Redtenbacher, 1867 (Coleoptera: Dermestidae) from the Republic of Equatorial Guinea (West Africa). *Arquivos Entomológicos* 8: 231-233.
- KADEJ M. & HÁVA J. 2013: A New *Thaumaglossa* Redtenbacher, 1867 species from Laos (Coleoptera: Dermestidae: Megatomini), with a key to the Laosan species. *Annals of the Entomological Society of America* 106: 555-561.
- KADEJ M. & HÁVA J. 2015: A Contribution to the Knowledge of Dermestidae (Insecta, Coleoptera) of Laos with Description of Four New Species. *Annals of the Entomological Society of America* 108(5): 912-921.