

# A new species of *Hereditus* Marsh 2002 (Hymenoptera: Braconidae: Doryctinae) from Brazil

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(With 6 figures)

## Abstract

A new species of *Hereditus* Marsh, 2002 is described from Brazil. *H. flavus* n. sp. differs from the other known *Hereditus* species by its yellow mesosoma and metasoma, acinose-carinate face, acinose temple, malar space length about 0.56 times eye height, ocello-ocular distance about 4.0 times diameter of the lateral ocellus; acinose-rugose mesoscutal lobes, sternaulus finely scrobiculate and almost complete, and first metasomal tergum with apical width almost equal its length.

**Keywords:** Braconidae, Doryctinae, *Hereditus*, new species.

## Nova espécie de *Hereditus* Marsh 2002 (Hymenoptera: Braconidae: Doryctinae) do Brasil

## Resumo

Uma nova espécie de *Hereditus* Marsh, 2002 é descrita para o Brasil. *H. flavus* n. sp. difere da outra espécie conhecida do gênero pelo mesossoma e metassoma amarelos, face carenada-acinosa, tèmpera acinosa, comprimento do espaço malar 0,56 vezes à altura do olho, distância ocelo-ocular 4 vezes o diâmetro do ocelo lateral; mesoscuto acinoso-rugoso, esternaulo finamente escrobiculados e primeiro tergo metassomal com largura apical igual ao seu comprimento.

**Palavras-chave:** Braconidae, Doryctinae, *Hereditus*, nova espécie.

## 1. Introduction

Doryctinae is one of the most diverse subfamilies of Braconidae (Marsh, 1997, 2002; Belokobylskij et al., 2004) with almost 1000 described species and roughly 180 recognised genera of which two thirds are distributed in the Neotropical region (Zaldivar-Riverón et al., 2008). This subfamily is considered to be a monophyletic group distinguished by the presence of a row of anterodorsal spines on the fore tibia and a double node in the ovipositor apex (Hanson and Gauld, 2006). Despite its high diversity, the biology of the Doryctinae is scarcely known (Wharton et al., 1997). Most species with known biology are idiobionts ectoparasitoids of Coleoptera (Zaldivar-Riverón et al., 2008).

Among the Doryctinae, the genus *Hereditus* is distinguished by the coriaceous or acinose frons and vertex (Marsh, 2002). It includes one species described from Costa Rica, and the new species described in this present paper. Its known distribution is Costa Rica and Brazil. Recently (Loffredo and Pentead-Dias, 2008a,b; Onody and Pentead-Dias, 2006) other Ichneumonoidea species from the Neotropical region have been studied and figured.

## 2. Material and Methods

The specimen was collected from Savannah area at the Parque Estadual de Vassununga, Santa Rita do Passa Quatro, São Paulo state, Brazil. The genus was identified by using Marsh (2002). The material examined was compared with the original description of the other species. This study is part of a large project on the richness and diversity of Doryctinae from Savannah areas in São Paulo state, Brazil. The figures were made with Leica equipment.

The holotype is deposited at DCBU Collection (Departamento de Ecologia e Biologia Evolutiva da Universidade Federal de São Carlos, São Carlos, Brazil).

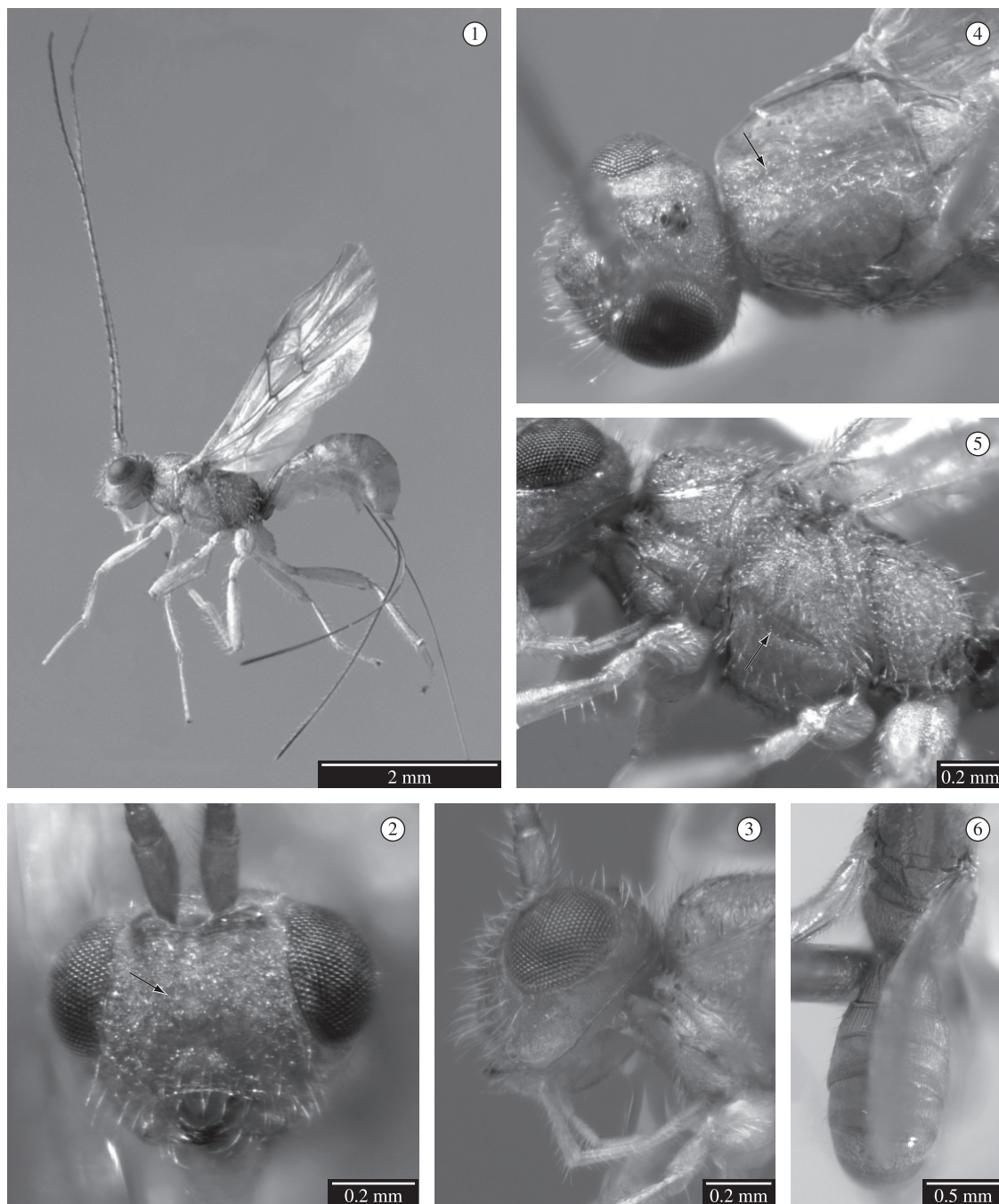
*Hereditus* Marsh 2002 *flavus* sp. nov.

Female, Body length 4.0mm.

**Colour:** body entirely yellow (Figure 1) except for apical flagellomere brown, veins and stigma of forewing light brown, ovipositor black at apex, light brown sheaths; yellow metasomal sternum, light brown flagellum; palpi, coxae, white trochanter and trochantellus; wings slightly dusky. **Head:** face mostly acinose with central area slightly swollen and rugose; frons acinose and carinate near toruli,

vertex and temple acinose (Figure 2); oral opening small, diameter about 0.7 times the malar space; malar space 0.56 times eye height (Figure 3); frons slightly excavated; occipital carina meeting hypostomal carina; ocello-ocular distance about 4.0 times diameter of the lateral ocellus (Figure 4); 32 antennomeres. *Mesosoma*: pronotum, propleuron and mesopleuron acinose, pronotal groove shallow and scrobiculate; mesoscutal lobes acinose-rugose

(Figure 4); notauli weakly impressed and scrobiculate, scutellum smooth; subalar groove scrobiculate, sternaulus finely scrobiculate and almost complete (Figure 5); propodeum mostly rugose, median carina diverging at extreme base and meeting lateral carinae, enclosing acinose-rugose basal median area, areola not defined apically. *Legs*: predominantly acinose, middle coxa weakly striate dorsally; fore tibia with a row of 11 stout spines



**Figures 1-6.** *Heredius flavus* spec. nov. female. 1, lateral aspect; 2, head (frontal aspect); 3, malar space; 4, head in dorsal view and mesoscutal lobes with arrow indicating acinose-rugose area; 5, mesopleuron with arrow indicating sternaulus; 6, first metasomal tergum.

along anterior edge. *Wings*: forewing r-m vein spectral but distinct, m-cu vein weakly distal with vein 2RS; 1cu-a vein distal to 1M vein; r vein 0.35 the 3RSa; hind wing M+CU vein 0.35 the 1M vein; r-m vein 0.23 the 1M; M+CU straight and perpendicular to 1M. *Metasoma*: first tergum with basal width 0.6 the apical width; apical width almost equal to the length, longitudinally rugose basally (Figure 6); second tergum rugose-costate, third tergum costate basally and coriaceous apically, remainder of terga weakly coriaceous; ovipositor as long as body.

*Material examined*: Holotype (DCBU); female, Brazil, SP, Santa Rita do Passa Quatro, Parque Estadual de Vassununga, 21° 40' 56" S and 47° 37' 13" W, savannah vegetation, 09.VI.2006; A.M.P.Dias col.

*Comments*: This species is distinguished from the other described species by its predominantly acinose-rugose sculpture and yellow colour; malar space 0.56 times the eye height, ocello-ocular distance about 4.0 times the diameter of the lateral ocellus, sternaulus finely scrobiculate and almost complete, first metasomal tergum with apical width about equal to the length.

*Etymology*: The name of the species refers to its predominant colour.

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