



## A new genus and species of Orphninae (Coleoptera: Scarabaeidae) associated with epiphytes in an Andean cloud forest in Ecuador

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Orphninae (Coleoptera: Scarabaeidae) are represented in the New World by the tribe Aegidiini, which is comprised of four genera (Paulian 1984). Examination of material collected in Ecuador revealed a series of the Aegidiini specimens from an undescribed species that cannot be classified as a member of one of the known genera. The new species is herein described and a new genus is established. Apart from the distinctive morphological characters, the new taxon shows an unusual, for the Orphninae, association with canopy epiphytes.

Photographs were taken with a Canon D100 camera equipped with a EF-S 60 macro lens. Partially focused serial images were combined in Helicon Focus software (Helicon Soft Ltd.) to produce completely focused images. Distribution map was generated with ArcGIS software (ESRI Ltd.). The material used for this study is housed in the following institutions: Museum of Zoology of the Catholic University of Ecuador, Quito (QCAZ), Entomology Section of the Zoological Collection, Federal University of Mato Grosso, Cuiabá (CEMT), and Zoological Institute, Saint-Petersburg (ZIN).

### *Onorius* Frolov & Vaz-de-Mello, new genus

**Type species.** *Onorius inexpectatus* new species, here designated.

**Description.** Medium-sized beetles with uniform black coloration. Dorsal surface shiny, punctate with rounded punctures. Clypeus symmetrical or subsymmetrical, slightly convex anteriorly. Mandibles of the same length, slightly visible in dorsal view. Labrum hidden under clypeus. Head without suture and medial tubercle.

Pronotum narrower than elytra in both sexes; lateral and basal margins bordered and widely rounded, posterior angles rounded, anterior margin not bordered. Disc of pronotum with a small fossa medioanteriorly in male, evenly convex in female. Elytra without distinct striae visible as either depressed lines or puncture rows, with well-developed humeral and apical humps. Scutellum triangular. Wings developed. Mesocoxal cavities connected by a hole. Protibiae with three outer teeth, somewhat serrate basad of the teeth; in males, anterior spur is absent as in all Orphninae genera, but with smaller tooth directed mediad, similar to the males of other South American genera. Tarsi relatively robust and densely punctate; tarsomere 5 wider in lateral view than other tarsomeres, especially in protarsi, subequal in length to tarsomere 1 in mesotarsi and metatarsi. Phallobase tube-shaped; parameres symmetrical, with apical processes.

The present diagnosis is based on a small series of one species so it may not be comprehensive regarding coloration, sculpture, sexual dimorphism, and allometric variability.

The new genus is placed in the tribe Aegidiini because it shares the following adult synapomorphies of the tribe: metepisterna widened posteriorly (forming additional “lock” for closed elytra), mesocoxal cavities connected by a hole, phallobase tube-shaped (evenly sclerotized on dorsal and ventral sides), and protibia with inner apical tooth in males (Frolov 2012; Paulian 1984).

**Diagnosis.** The new genus can be easily separated from the other members of the Aegidiini by its less prominent mandibles (weakly visible or not visible in dorsal view), labrum hidden under the clypeus, and by the more robust and densely punctate tarsi with tarsomere 1 being relatively short (subequal in length to tarsomere 5) and tarsomere 5 relatively robust, wider in lateral view than other tarsomeres.

**Etymology.** The new genus is named after Giovanni Onore (Quito, Ecuador), founder of the Otonga Foundation, who collected part of the type series of the new species in the Otonga Nature Reserve. The gender of the name is masculine.