



## Phylogeny and reclassification of *Distictus* Townes (Hymenoptera, Ichneumonidae, Cryptinae), with description of a new species

BERNARDO F. SANTOS<sup>1</sup> & ALEXANDRE P. AGUIAR<sup>1,2</sup>

<sup>1,2</sup>Universidade Federal do Espírito Santo, Avenida Marechal Campos 1468, Eucalipto, Vitória, ES, Brazil, 29043-900

<sup>2</sup>Corresponding author. E-mail: aguiar.2@osu.edu

### Abstract

*Distictus aurantium* **new species**, from the Brazilian Atlantic Forest, is described and illustrated. The validity of *Distictus* Townes was cladistically tested against 19 species and 60 informative characters, both with implied weighting and unweighted analyses. All cladograms recovered *Distictus* as monophyletic, while suggesting that it might be the sister group of the clade *Lagarosoma* Gupta + *Prosthopor* Porter + *Trypha* Townes. *Fenixia* Aguiar is proposed as a new junior synonym of *Distictus* Townes, and the valid genus is transferred from Cryptina (=Ischnina) to Gabuniina. New distribution records expand the known range of *D. tibialis* to 17°48' latitude degrees, from Rio Grande do Sul to Goiás (Brazil).

**Key words:** *Fenixia*, Ischnina, Gabuniina, Cryptini, Phygadeuontinae, Atlantic Forest

### Introduction

Townes (1966) proposed and described *Distictus* as a Neotropical genus, occurring from Panama to northern Argentina. The only named species, of five mentioned by Townes (*op. cit.*) was *D. tibialis*, a recombination of *Mesostenus tibialis* Brullé, recorded only from the Brazilian province of Guaratuba, presently State of Paraná. The genus was first placed in the Mesostenina (Townes 1966) and later transferred to Cryptina (=Ischnina) (Townes 1970). Interestingly, however, the possibility of a relationship with Gabuniina has never been proposed for the genus, even though it shows many typical features of that subtribe, such as a subcylindric body, swollen female fore tibia, spiracle of first metasomal segment at the middle, and a stout compressed ovipositor.

In a separate investigation, Aguiar (2005) described *Fenixia* as a new gabuniine genus from the Brazilian Atlantic Forest, providing, as main diagnostic features, the teeth of mandible of equal size, epomia short and weak, and cell 1+2Rs (areolet) pentagonal, distinctly higher than wide, with crossveins 2r-m and 3r-m convergent. A single species was described, *F. curta*, from southern and southeastern Brazil. A cladistic analysis, in the same work, pointed *Fenixia* as closest related to *Lagarosoma* Gupta.

Morphological (Aguiar 2005) and molecular (Laurenne *et al.* 2003, 2006) cladistic analyses have recovered most of the gabuniine genera as a monophyletic group, and suggest that other genera with related features should also be incorporated into the subtribe. In fact, the subtribal arrangement of cryptine genera proposed by Townes is highly subjective, and underwent many changes (Townes 1962, 1966, 1970). Gabuniina was first called Echthrina (Townes 1962), and included some genera placed in other groups in later classifications (Townes 1966, 1970), such as *Xylophrurus* Förster and *Echthrus* Gravenhorst.

Aguiar (*op. cit.*) did not include a representative of *Distictus* among the 78 species of the analysis used to