New species of *Eibesfeldtphora* Disney (Diptera: Phoridae)
and a new key to the genus

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Abstract

Two new species of parasitoids, *Eibesfeldtphora trifurcata* and *Eibesfeldtphora inornata*, are described. Both species were collected in Brazil. A new key is provided and illustrated for the twenty one known species.

Key words: Atta, Formicidae, host-parasitoid, Neotrópico

Introduction

Species of *Eibesfeldtphora* Disney genre (Diptera: Phoridae) are parasitoids of leaf-cutting ants belonging to the genus *Atta* Fabricius. The presence of these parasitoids produces changes in the leaf-cutting ants behavior affecting nest performance (eg.: shifts on foraging rhythms, quickly return to the nest and abandonment of leaf fragments) (Bragança et al., 1998; Orr, 1992; Tonhasca Jr & Bragança, 2000). Ants also adopt defensive postures (Bragança et al., 2002; Tonhasca, 1996) and show hitchhiking behavior (Eibl-Eibesfeldt, 1967; Linksvayer et al., 2002; Vieira-Neto, Mundim, & Vasconcelos, 2006) in order to avoid oviposition by parasitoids. The literature on these phorid-ant interactions is now voluminous, and new species of flies continue to be found. We felt that a new identification key to females was necessary as the previous reference is over a decade old and does not include the newly described species. Additionally, we provide a listing of all papers published on this host-parasitoid system in recent years as a baseline for future research (Table 1.).

Systematics

*Eibesfeldtphora* Disney, in Disney et al., (2009)

*Neodohrniphora* Malloch (1914), in part.

*Eibesfeldtphora* Disney genus was originally part of *Neodohrniphora*, but recognized as a separate genus by Disney et al. (2009). Brown (2001) elaborated a key in which describes 15 species of *Eibesfeldtphora* Disney. Four new species belonging to this genus were reported by Disney et al. (2009) and Brown et al. (2012).

Generalized description of adult females. Frons narrow, brown, median furrow present. 4-4-4 frontal setae present; lower interfrontal setae much lower on frons than lower fronto-orbital setae; supra-antennal setae absent.

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