

## **Eucoilinae species (Hymenoptera: Cynipoidea: Figitidae) parasitoids of fruit-infesting dipterous larvae in Brazil: identity, geographical distribution and host associations**

JORGE A. GUIMARÃES<sup>1</sup>, FABIANA E. GALLARDO<sup>2</sup>, NORMA BEATRIZ DIAZ<sup>2</sup> & ROBERTO A. ZUCCHI<sup>3</sup>

1. EMBRAPA-CNPAT. Rua Dra. Sara de Mesquita 2270, Bairro Pici, 60511-110, Fortaleza, CE, Brazil. (jorge@cnpat.embrapa.br)

2. División Entomología, Museo de La Plata, Paseo del Bosque, B1900DNG La Plata, Argentina. (E-mail: ndiaz@museo.fcnym.unlp.edu.ar)

3. ESALQ/USP. Departamento de Entomologia, Fitopatologia e Zoologia Agrícola. Piracicaba, SP, 13418-900, Brazil. (E-mail: razucchi@esalq.usp.br)

### **Abstract**

The Eucoilinae (Cynipoidea, Figitidae) are koinobiont endoparasitoids of dipterous larvae and along with the Opiinae (Braconidae) they are the most important natural enemies of the frugivorous flies (Tephritidae, Lonchaeidae and Drosophilidae). This paper deals with the identity, geographical distribution and host associations of eucoilinae species with these biological characteristics in Brazil and provides a key for their identification. Eight species are studied, namely: *Lopheucoila anastrephae* (Rohwer, 1919), *Odontosema anastrephae* Borgmeier, 1935; *Tropideucoila weldi* Costa Lima, 1940, *Aganaspis pelleranoi* (Brèthes, 1924), *A. nordlanderi* Wharton, 1998, *Trybliographa infuscata* Gallardo, Diaz & Uchôa, 2000, *Dicerataspis grenadensis* Ashmead, 1896 and *Leptopilina boulardi* (Barbotin, Carton & Kelner-Pillaut, 1979). New geographic records for Brazil are provided for *L. anastrephae*, *T. weldi*, *D. grenadensis*, *O. anastrephae*, *T. infuscata* and *L. boulardi*. Bionomic observations suggest that *A. pelleranoi* is the species most frequently associated with tephritid flies and probably, the most useful as a biological control agent. *Lopheucoila anastrephae* is an important parasitoid of lonchaeids and *D. grenadensis* and *L. boulardi* are natural enemies of drosophilids.

**Key words:** Insecta, *Aganaspis*, *Dicerataspis*, *Leptopilina*, *Lopheucoila*, *Odontosema*, *Tropideucoila*, *Trybliographa*, Tephritidae, Lonchaeidae, Drosophilidae