



The discovery of genus *Fredegunda* Fitton, Shaw & Gauld in China, with description of a new species (Hymenoptera, Ichneumonidae, Pimplinae)

JING-XIAN LIU¹, JUN-HUA HE² & XUE-XIN CHEN^{2,3}

¹Department of Entomology, South China Agricultural University, Guangzhou 510640 P. R. China

²State Key Laboratory of Rice Biology and Ministry of Agriculture Key Lab of Agricultural Entomology, Institute of Insect Sciences, Zhejiang University, 866 Yuhangtang Road, Hangzhou, Zhejiang Province, 310058, P. R. China

³Corresponding author. E-mail: xxchen@zju.edu.cn

Abstract

The genus *Fredegunda* Fitton, Shaw & Gauld (Ichneumonidae, Pimplinae) is newly reported both from China and the Oriental region. A new species, *Fredegunda sinica* sp. nov. from Fujian, China is described and illustrated. A key to the known species of *Fredegunda* is provided.

Key words: Parasitoid, Ephialtini, Oriental region, new species

Introduction

Fredegunda is a small genus belonging to the tribe Ephialtini of subfamily Pimplinae (Hymenoptera, Ichneumonidae), and includes only the type species *Fredegunda diluta* (Ratzeburg 1852) which is widely distributed in Western Europe (Fitton *et al.* 1988; Yu and Horstmann 1997; Yu *et al.* 2012). *Fredegunda diluta* is parasitoid of the larvae of noctuids, such as *Archanara dissoluta* (Treitschke), *A. geminipuncta* (Haworth), *Arenostola semicana* (Esper), *Chilodes maritima* (Tauscher) and *Rhizedra lutosa* (Hübner) (Lepidoptera) (Fitton *et al.* 1988; Yu *et al.* 2012). In the present study, a new species from Mt. Wuyishan of Fujian Province, China is described, this being the first record of the genus from China and for the Oriental region.

Material and methods

Specimens were examined under an Olympus stereomicroscope. All figures were made by a digital camera (Q-Imaging RTV) mounted on a Zeiss stereomicroscope and with Image-Pro Plus software.

The morphological terminology is that of Gauld *et al.* (2002). Abbreviations are used in the text as follows: POL=posterior ocellular line, means the shortest distance between posterior ocelli; OOL=oculo-ocellar line, means the shortest distance between a posterior ocellus and compound eye; OD=longest diameter of posterior ocellus. T1, T2 etc. are used for the first metasomal tergite and following tergites.

Type specimens are deposited in the Parasitic Hymenoptera Collection of Zhejiang University, Hangzhou, China (ZJU).

Taxonomy

Genus *Fredegunda* Fitton, Shaw & Gauld, 1988

Fredegunda Fitton, Shaw & Gauld, 1988, 7: 45. Type species: *Pimpla diluta* Ratzeburg, 1852.