

## A review of the Japanese species of *Barycnemis* Förster (Hymenoptera: Ichneumonidae: Tersilochinae)

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### Abstract

Four species of the genus *Barycnemis* Förster are found to occur in Japan: *B. dissimilis* (Gravenhorst), *B. harpura* (Schrank), *B. naganoensis* sp. nov. and *B. tobiasi* Khalaim. These are the first records of *Barycnemis* from this country. All recognized Japanese species belong to the *harpura* species group. An identification key to four species of *Barycnemis* occurring in Japan is provided. *Barycnemis funiuensis* Sheng, 2002 from East China is synonymised with the widely distributed Holarctic species *Porizon dissimilis* Gravenhorst, 1829 (syn. nov.).

**Key words:** *Barycnemis*, Japan, new species, new synonymy, taxonomy, key, parasitoids

### Introduction

*Barycnemis* Förster is a moderately large, predominantly Holarctic genus comprising 35 described species. Twenty five species of *Barycnemis* occur in the Palaearctic region (Khalaim 2004, Khalaim & Sheng 2009) and 15 species, including two species from the Nearctic part of Mexico, in the Nearctic region (Khalaim 2002, Horstmann 2010); of them seven species are distributed across both the Palaearctic and Nearctic regions. Beyond the Holarctic, one species of *Barycnemis* is known from Costa Rica (Khalaim & Broad 2012) and another one from northeast India (Khalaim 2011). Also, I have seen one undescribed species belonging to this genus in material from Australia.

In Europe, species of *Barycnemis* have been recorded as parasitoids of the coleopteran genera *Byrrhus* L. (Byrrhidae) and *Bledius* Leach (Staphylinidae), and in the Nearctic region one species was reared from a *Pissodes* sp. (Curculionidae) (Khalaim 2011). Females of many species are highly specialized and possess a strongly elongate body, stout legs with thickened femora and tibiae, and a short and robust ovipositor. Males are usually not or weakly specialized and therefore are much more difficult to identify than females.

Nothing was known about Japanese species of *Barycnemis* hitherto, while the faunas of neighbouring countries and territories have been rather extensively studied in the past ten years. Nine species of *Barycnemis* were recorded from the Russian Far East (Khalaim 2007): *B. agilis* (Holmgren), *B. angustipennis* (Holmgren), *B. bellator* (Müller), *B. claviventris* (Gravenhorst), *B. confusa* Horstmann, *B. dissimilis* (Gravenhorst), *B. harpura* (Schrank), *B. punctifrons* Horstmann and *B. tobiasi* Khalaim. All Far Eastern species are more or less abundant and eight of them are transcontinental across the Palaearctic region. Only two species, *B. bellator* and *B. dissimilis*, were found to occur in South Korea, in spite of considerable tersilochine material examined from this country (Balueva *et al.* 2013). The fauna of China is very poorly studied, being represented by only two species, *B. funiuensis* Sheng from Henan province in East China and *B. tibetica* Khalaim from Eastern Tibet (Khalaim & Sheng 2009).

The aim of this work is to review the Japanese species of *Barycnemis*, describe one new species, and provide an identification key to species occurring in Japan. One previously known species of *Barycnemis* is synonymized.