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## A new species in the newly recorded genus *Trachyusa* (Hymenoptera: Braconidae: Alysini) from China

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### Abstract

*Trachyusa whartoni* Yao sp. nov. from Dalian, Liaoning, China is described and illustrated. *Trachyusa* is a newly recorded genus in China. A key to the species of *Trachyusa* is provided based on the keys of Belokobylskij (1998), Papp (1967), and van Achterberg and O'Connor (1990). Type specimens of the new species are deposited in the Beneficial Insects Institute, Fujian Agriculture and Forestry University, Fuzhou, China.

**Key words:** Asia, distribution, identification, key, parasitoid, taxonomy

### Introduction

The Alysini is a much more diverse assemblage of genera than the Dacnini, with a wide range of hosts among the families of Cyclorrhapha (Wharton 1984, 1997, 2002). There are 71 genera in Alysini compared to 33 genera in Dacnini (Yu *et al.* 2012). *Trachyusa* Ruthe, 1854, is monobasic and a small genus of Alysini with five species worldwide. Ruthe (1854) erected *Trachyusa* based on *Trachyusa nigriceps*. Förster (1862) used *Cosmiocarpa* to replace the genus *Trachyusa* based on *Alysia aurora* Haliday, 1838. Reinhard in Taschenberg (1866) noted that *Trachyusa nigriceps* Ruthe, 1854 is synonymous with *Alysia aurora* Haliday, 1838. Currently, the valid name of *Trachyusa nigriceps* Ruthe is *Trachyusa aurora* (Haliday), and the valid name of the genus is *Trachyusa* (Yu *et al.* 2012). Papp (1967) and Belokobylskij (1998) described two new species each. Tobias (1986) provided a key to species, as did Belokobylskij (1998). Van Achterberg and O'Connor (1990) described *Trachyusa nigrothoracica*, but Papp (2009) synonymized it with *T. aurora*.

Host use is unknown for species of *Trachyusa*. The non-dipteran hosts reported in Rudow (1918) are invalid as alysiines exclusively parasitize cyclorrhaphous flies, but van Achterberg and O'Connor (1990) indicated that those hosts might be in the microhabitat of the dipterous host. Specimens of the genus are easy to recognize based on the granular sculpture of the second and third metasomal terga and the absence of the dorsope.

In this paper *Trachyusa* is reported from China for the first time, and a new species is described and illustrated. The type specimens are deposited in the Beneficial Insects Institute, Fujian Agriculture & Forestry University, Fuzhou, China.

### Material and methods

Both specimens of the new species were collected using a sweep net. Specimens were preserved in ethyl alcohol and then dehydrated using Hexamethyldisilazane (HMDS) as in Heraty and Hawks (1998) and subsequently point-mounted. Only nontype specimens of *T. aurora* and *Trachyusa szepligetii* Papp were available for comparison with

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