



## On the spider genus *Weintrauboa* (Araneae, Pimoidae), with a description of a new species from China and comments on its phylogenetic relationships

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### Abstract

*Weintrauboa yele* new species (Pimoidae) is described and illustrated based on specimens collected in China. The taxonomic status and distribution of *Weintrauboa insularis* (Saito, 1935) new combination and of *W. chikunii* (Oi, 1979) are discussed and the former species is illustrated based on specimens from the Sakhalin islands. Parsimony analysis of morphological characters provides support for the monophyly of *Weintrauboa* and for its sister group relationship to the genus *Putaoa* Hormiga and Tu, 2008. Some comments on the phylogenetic placement of the recently erected family “Sinopimoidae” are provided.

**Key words:** Phylogeny, Taxonomy, Morphology, Araneoidea, Linyphiidae

### Introduction

The spider family Pimoidae comprises four genera and thirty one extant species (Platnick, 2008; Hormiga & Tu, 2008). Pimoids are known from Western North America (14 species in two genera, from California through Alaska), Southern Europe (two species in one genus, from Spain, France and Italy) and Asia (15 species in three genera, from the Himalayas area, China, Japan and the Sakhalin islands). Several species of pimoids from China (Griswold and Hormiga, unpublished) and California (Hormiga and Lew, unpublished) remain to be described. The diversity and distribution of pimoids suggests that this family is a relictual group which had a broader Holarctic distribution in the past (Hormiga, 1994a, 2003; Wang et al. 2008). So far six fossil species of pimoids, all of them in the genus *Pimoida*, have been described from Baltic amber (Wunderlich, 2004).

The genus *Weintrauboa* was originally described to include two species from Japan and the Sakhalin islands (Hormiga, 2003): *W. contortipes* (Karsch, 1881), the type species, and *W. chikunii* (Oi, 1979). A new species from the Yunnan province of China was recently added by Yang, Zhu and Song (2006). More recently, Xu and Li (2007) have described another new species from China, *W. megacanthus* and have reported the occurrence of *W. chikunii* in the Chinese province of Sichuan. Hormiga and Tu (2008) transferred *megacanthus* to a new genus, *Putaoa*, which also includes a second Chinese species, *P. huaping* Hormiga and Tu, 2008 (the type species). On the other hand, *Weintrauboa chikunii* had been previously known to occur in Japan and the Sakhalin islands (Hormiga, 2003) and therefore the Chinese records reported by Xu and Li (2007) would represent a significant extension of the distribution range of this species (Sichuan is more than 3,000 km away from the type locality of *W. chikunii* in Japan; see map in Fig. 10). Examination of the Chinese specimens described by Xu and Li (2007) suggests that they are not conspecific with *W. chikunii* and that they belong to a new species. In this paper I describe this new species of *Weintrauboa* from China and, in light of newly studied specimens the Sakhalin islands, I clarify the status of the species of *Weintrauboa* in Japan and adjacent islands.