



New *Trilacuna* species from Thailand, Malaysia and Sumatra (Araneae, Oonopidae)

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Abstract

The genus *Trilacuna* (Araneae, Oonopidae), comprising only two species from China, is supplemented by seven new species collected in Thailand, Malaysia and Sumatra (*T. merapi*, *T. bilingua*, *T. clarissa*, *T. werni*, *T. alces*, *T. kropfi*, and *T. diabolica*). The new species exhibit an incised labium and a complicated set of membranes and/or filiform projections around the embolus, both diagnostic for the genus *Trilacuna*.

Key words: goblin spiders, PBI, taxonomy, Asia, diversity

Introduction

The Oonopidae are a diverse spider family with nearly 700 described species in 82 genera (Platnick 2011) and about 2500 expected species. They have a nearly worldwide distribution, occurring mainly in the tropics in leaf litter, under bark and in the tree canopy. Oonopidae, also known as ‘goblin spiders’, are tiny, haplogyne spiders varying from soft bodied to strongly sclerotized (Saaristo 2001).

In 2007 Tong & Li established the genus *Trilacuna* and described *T. angularis* and *T. rastrum* from China, the only two species known so far. Tong & Li (2007) reported the following diagnostic characters for *Trilacuna*: an incised labium, branched endites in males, an enlarged male palpal femur and a pear-shaped bulb ending in a complicated set of membranes with filiform projections around the embolus. In this paper seven new *Trilacuna* species, collected in Thailand, Malaysia and Sumatra, are described and illustrated.

Methods

The material was collected in Malaysia, Thailand and on Sumatra between 1985 and 2006 and deposited in the following collections: Muséum d’histoire naturelle de la Ville de Genève, Switzerland (MHNG, leg. P. Schwendinger), the Zoological Museum of the University of Turku, Turun Yliopisto, Finland (ZMUT, leg. P. Lehtinen) and in the Natural History Museum Bern, Switzerland (NMBE, C. Kropf). All non-type material is deposited in the MHNG.

Specimens were examined using a Leica MZ16 stereomicroscope. The genitalia were studied with a Zeiss Axioplan 2 compound microscope. For drawings and photographs, male palps and female genitalia were embedded in Hoyer’s mixture (Kraus 1984), slide-mounted, and allowed to dry for at least 12 hours under room conditions. Drawings were made on wrinkle paper using a technical pen for lines and eye liner for shading (Kraus 1968). Images of genitalia were taken with an Axio Cam Mrcs using Axion Vision Rel. 4.6 software. Pictures of somatic features were taken with a JVC digital camera KY-F70B and a Leica DFC 420, using automontage software. For scanning electron microscopy (SEM), specimens were air-dried, glued with transparent nail polish on object plates and coated with gold. Pictures were taken with a Philips XL30 SEM. Illustrations were shaped with Adobe Photoshop CS4.