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Two new species of the family Tetrablemmidae (Araneae) from Laos and Malaysia

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Abstract

Two new species of the spider family Tetrablemmidae are described: *Brignoliella besutensis* **sp. nov.** from Malaysia and *Tetrablemma namkhan* **sp. nov.** from Laos. The family Tetrablemmidae is reported from Laos for the first time.

Key words: taxonomy, armoured spider, description, Southeast Asia

Introduction

The family Tetrablemmidae O. Pickard-Cambridge 1873 comprises armoured spiders with a characteristic pattern of opisthosomal sclerites (Burger 2008a). Tetrablemmidae are mainly found in the tropical and subtropical regions of the world where they inhabit leaf litter and soil, and are very occasionally found in caves (Burger *et al.* 2010). Therefore, these interesting spiders have always been little-known arachnid taxa.

In recent years, several new species have been described from Southeast Asia (Dierkens 2011; Labarque & Grismado 2009; Lin *et al.* 2009; Burger 2008a, b; Burger 2005), China (Lin & Li 2010; Tong & Li 2008), Australia (Burger *et al.* 2010; Burger 2008a, b) and Brazil (Brescovit 2005). Particularly worth mentioning is that Burger *et al.* (2006) and Burger (2008b) have studied the functional morphology of the copulatory system by means of serial semi-thin sections and scanning electron microscopy. To date, 142 species and 30 genera have been described (Platnick 2012).

In this paper we describe two new species: *Brignoliella besutensis* from Malaysia and *Tetrablemma namkhan* from Laos.

Material and methods

Specimens were examined and measured with an Olympus SZX7 stereomicroscope. Further details were studied with an Olympus BX43 compound microscope. All drawings were made using a drawing tube attached to an Olympus BX43 compound microscope, and then inked on ink jet plotter paper. Male and female copulatory organs were examined and illustrated after they were dissected and detached from the spiders' bodies. Vulvae were removed and treated with lactic acid before illustration. To reveal the course of the ejaculatory duct, emboli were also treated with lactic acid and mounted in Hoyer's Solution. The left palp of male spiders was illustrated. All type specimens are preserved in 85% ethanol solution. Photos were taken with a Canon EOS 60D wide zoom digital camera (8.5 megapixels) mounted on an Olympus BX43 stereomicroscope. The images were montaged using Helicon Focus 3.10 (Khmelik *et al.* 2006) image stacking software.