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First description of comb-tailed spiders (Araneae: Hahniidae) from Vietnam

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Abstract

Spider family Hahniidae was firstly recorded from Vietnam in the present paper. In total, three genera and five species were recorded in three national parks of Northern Vietnam: *Alistra hamata* **sp. nov.** (male), *Hahnia himalayaensis* Hu & Zhang, 1990 (male, female), *H. rimiformis* **sp. nov.** (male, female), *H. zhejiangensis* Song & Zheng, 1982 (male, female) and *Scotospilus longus* **sp. nov.** (male, female). Morphological illustrations and photos of new species as well as descriptions and copulatory organs' photos of known species are given. The genus *Scotospilus* and the position of *S. longus* **sp. nov.** are discussed.

Key words: Southeast Asia, new species, taxonomy, biodiversity

Introduction

The spider family Hahniidae is known as comb-tailed spiders traditionally because of their transverse arrangement of three pairs of spinnerets. Additionally, they are characterized by a single broad spiracle much in front of the spinneret base (Opell & Beatty 1976; Ono 2009). Hahniidae is a relatively small group with three subfamilies, 27 genera and 247 species throughout the world (Platnick 2012). Most of the research on Hahniidae was done before dozens of years. The most important faunistic works of this group was published by Opell & Beatty (1976) for North America and Forster (1970) for New Zealand. As for the area of East and Southeast Asia, there are only a few recent studies (Chen *et al.* 2003; Zhang & Zhang 2003; Chen *et al.* 2009; Marusik 2011; Zhang *et al.* 2011). Presently, five genera and 38 species were recorded from this area, consisting of 6 countries (China, Japan, Far East of Russia, South Korea, Laos, Philippines and Indonesia). From others as Vietnam, Thailand, Malaysia, Brunei, Singapore, Burma, Cambodia, east Timor, etc. Hahniidae have not recorded so far.

An extensive faunal survey of spiders from three national parks (Cuc Phuong National Park, Cat Ba National Park and Tam Dao National Park) in Northern Vietnam over a period of one year (March 2007 to March 2008) was carried out. Five Hahniidae species were found and are described in the present paper, three of them are new to science. This is the first record of this family from Vietnam.

Material and methods

All specimens are preserved in 75% ethanol and were examined, illustrated, photographed and measured using a Leica M205C stereomicroscope equipped with a drawing tube, a Leica DFC420 Camera and LAS software (Ver. 3.3). Male palps and female epigynes were examined and illustrated after they were dissected. Female genitalia were cleared in 90% lactic acid. Eye sizes are measured as the maximum diameter from above. Leg measurements are shown as: total length (femur, patella and tibia, metatarsus, tarsus). All measurements are in millimetres. The distribution map of materials examined here refers to that of Liu *et al.* (2010). All specimens are deposited in the Institute of Zoology, Chinese Academy of Sciences (IZCAS) in Beijing and collected by Dr. Dinh-Sac Pham (IZCAS, now Vietnamese Academy of Science and Technology).