



Species of the family Nemouridae (Plecoptera) from Taihang Mountains of Northern China, with description of *Nemoura taihangshana* sp. n.

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Abstract

A distinctive new species of the genus *Nemoura* is described from the Taihang Mountains of northern China, *N. taihangshana*. The new species is compared with similar species. *Amphinemura sinensis* (Wu, 1926) is redescribed and the first record of *N. geei* Wu, 1929 from Henan Province is also given.

Key words: Plecoptera, Nemouridae, *Nemoura*, new species, *Amphinemura*, China

Introduction

The family Nemouridae presently includes >600 known species worldwide (DeWalt *et al.*, 2012). The genus *Nemoura* (Nemourinae) and the genus *Amphinemura* (Amphinemurinae) are species-rich in China with many new species being recently described. Yang and colleagues (Li and Yang 2006, 2007, 2008 a & b; Li *et al.* 2012; Zhu and Yang 2003) have described 17 new *Nemoura* species; Du and colleagues (Du *et al.* 2008, Wang and Du 2008, Wang *et al.* 2006) added six *Nemoura* species. However, many species proposed by Chu (1928) and Wu (1926, 1929, 1938, 1940, 1949, 1962, 1973) are unfortunately still known only from the original descriptions. In this paper the Nemouridae known from the Taihang Mountains in Henan Province are reviewed. *Nemoura taihangshana* sp. n. is described and *A. sinensis* (Wu, 1926), is redescribed. A widespread species, *N. geei* Wu, 1929 is recorded in Henan Province for the first time.

The Taihang Mountains that occur at the eastern edge of the Loess Plateau in Shanxi, Henan and Hebei provinces of northern China. These mountains extend for more than 400 km from north to south averaging 1,500–2,000 m a.s.l. The southern extension of these mountains lies in Henan Province. The local government has developed several scenic locations to promote tourism, and Mt. Wanxianshan and Bali Gully are well-known and frequented by tourists. In the last five years, we visited the two above-mentioned sites several times in throughout the year, but only the early spring visits yielded one new and two known species of nemourids as mentioned above.

Methods and material

The specimens were caught by hand, sometimes with aid of sweep net. Several specimens for SEM study were directly put in 95% ethanol in field, their terminalia were mounted on stubs using double sided tape. They were then photographed using a FEI Quanta 200 Field Emission Environmental Scanning Electron Microscope (ESEM-FEG). Types of the new species and other examined material were preserved in 75% ethanol and are deposited in the Henan Institute of Science and Technology (HIST, Xinxiang, Henan). The morphological terminology follows that of Baumann (1975).