



<http://dx.doi.org/10.11646/zootaxa.3694.6.7>

<http://zoobank.org/urn:lsid:zoobank.org:pub:FD7F785A-64D0-466E-8B7F-5C3342C91FEC>

Neotype designation for *Sinonamuropteris ningxiaensis* Peng, Hong et Zhang, 2005 (Grylloblattida: Sinonamuropteridae)

YINGYING CUI^{1,2} & DONG REN^{1,3}

¹Capital Normal University, College of Life Science, 10048 Beijing, China.

²Freiberg University of Mining and Technology, Institute of Geology, Department of Palaeontology, D-09599 Freiberg, Germany.
E-mail: cuiying19860105@gmail.com

³Corresponding author. E-mail: rendong@mail.cnu.edu.cn

Key words: China, Insecta, Grylloblattida, Late Carboniferous, Sinonamuropteridae, taxonomy

Introduction

In contrast to the Permian period, grylloblattidan insects represent a small portion of the Carboniferous entomofaunas (Cui *et al.* 2011; Béthoux *et al.* 2010; Storozhenko 2002). The Xiaheyan locality (Tupo Formation; Ningxia, China) is no exception. The nine species of the family Sinonamuropteridae described by Peng *et al.* (2005) based on material from this locality, and each represented by a single isolated forewing, actually belong to a single species, namely *Sinonamuropteris ningxiaensis* Peng, Hong et Zhang, 2005 (Cui *et al.* 2011). To date, this is the only grylloblattidan species from the corresponding fauna, which is dominated by stem-Orthoptera (e.g., Prokop *et al.* 2007; Gu *et al.* 2011; Béthoux *et al.* 2012) and by a few other speciose groups, such as stem-Odonata (e.g., Li *et al.* 2013).

Unfortunately, based on the investigations of the curator for the corresponding collection in Geological Museum of China Zhijun Zhang, the holotype of *S. ningxiaensis* must be considered lost (pers. comm., 2012). Therefore we propose to designate a neotype for this important species. Recent collections have provided a suitable specimen.

Material and methods

The material was collected from the Late Carboniferous locality near the Xiaheyan village (Zhongwei City, Ningxia Hui Autonomous Region, China). The specimen was examined with a Leica M165C dissecting microscope and illustrated with the aid of a drawing tube. The drawing was processed by hand and scanned. The photograph was taken with a Canon EOS 550D digital camera coupled to a Canon MP-E 65-mm macro lens, and processed with Adobe Photoshop.

Systematic palaeontology

Order Grylloblattida Walker, 1914

Family Sinonamuropteridae Peng, Hong et Zhang, 2005

Genus *Sinonamuropteris* Peng, Hong et Zhang, 2005

Sinonamuropteris ningxiaensis Peng, Hong & Zhang, 2005

Fig. 1

Material. Neotype—Specimen CNU-NX1-161, positive and negative imprints of a nearly complete insect; here designated; deposited in the Key Lab of Insect Evolution and Environmental Changes, College of Life Science, Capital Normal University (CNU, Ren Dong, Curator; Beijing, China).

Type locality and horizon. The Late Carboniferous (Tupo Formation) locality near the Xiaheyan village (Zhongwei City, Ningxia Hui Autonomous Region, China).