



Three new species of the genus *Clubiona* from China (Araneae: Clubionidae)

PING LIU¹, HENG-MEI YAN^{1,3}, CHARLES GRISWOLD² & DARRELL UBICK²

¹College of Life Sciences, Hunan Normal University, Changsha, Hunan Province, 410081, P. R. China

²California Academy of Sciences, San Francisco, California 94118, USA.

³Corresponding author. E-mail: yanhm03@126.com

Abstract

The present paper deals with three new species of the genus *Clubiona* collected from the Gaoligong Mountains Region of Yunnan Province, China: *Clubiona applanata* **sp. nov.**, *Clubiona altissimoides* **sp. nov.**, *Clubiona cylindrata* **sp. nov.**

Key words: Gaoligong Mountains, *Paraclubiona*, sac spiders, species descriptions, taxonomy

Introduction

Clubiona was established by Latreille in 1804, it is the biggest genus of Clubionidae and the only genus existing in China. According to Platnick (2007), a total of 441 species have been described from all over the world, including 85 species from China.

Paraclubiona was established as a genus by Lohmander in 1945. Later, Mikhailov (1990) presented it as a subgenus. Based on the typological classification, Mikhailov (1995) divided the Holarctic *Clubiona* fauna into 4 subgenera: *Paraclubiona*, *Japonina*, *Bicluona*, *Clubiona* s. str., with the biggest subgenus *Clubiona* s. str. comprising 15 groups and 10 subgroups.

All new species described in this paper belong to the subgenus *Paraclubiona* and were collected from the Gaoligong Mountains by the Sino-American Expeditions (1998-2004). The type specimens are deposited in the College of Life Sciences, Hunan Normal University (HNU) and some paratypes will be deposited in the California Academy of Sciences (CAS).

Material and methods

Species were kept in 75% ethanol. Epigynes were cleared in lactic acid for examination and stored in microvials with the specimen. We used the Olympus Tokyo BH-2 stereo dissecting microscope for the examination. Leg and palpus lengths are given as: total length (Femur, patella + tibia, metatarsus, tarsus). All measurements are given in millimeters (mm).

Abbreviations used in this paper: AER, anterior eye row; ALE, anterior lateral eyes; AME, anterior median eyes; AME–AME, distance between AMEs; AME–ALE, distance between AME and ALE; PER, posterior eye row; PLE, posterior lateral eyes; PME, posterior median eyes; PME–PME, distance between PMEs; PME–PLE, distance between PME and PLE; MOQ, median ocular quadrangle; MOQL, length of MOQ; MOQA, MOQ anterior width; MOQP, MOQ posterior width. RTA, retrolateral tibial apophysis; VTA, ventral tibial apophysis.