

The chaerilid scorpions of China (Scorpiones: Chaerilidae)

MING-SHENG ZHU¹, GUANG-XIN HAN¹ AND WILSON R. LOURENÇO²

¹College of life science Hebei University, Baoding Hebei Province, 071002, China. E-mail: mingshengzhu@263.net

²Muséum national d'Histoire naturelle, Département de Systématique et Evolution, USM 0602, Section Arthropodes (Arachnologie), CP 053, 57 rue Cuvier 75005 Paris, France. E-mail: arachne@mnhn.fr

Abstract

Four species of scorpions belonging to the genus *Chaerilus* Simon, 1877 are registered from the Xizang (Tibet) Region of China. We provide redescriptions for *C. tessellatus* Qi, Zhu & Lourenço, 2005 and *C. triznai* Kovařík, 2000. We also point out that *C. pictus* (Pocock, 1890) which was described by Qi, Zhu & Lourenço, 2005 was misidentified by those authors. *C. pictus* (Pocock, 1890) is of doubtful distribution in China. In this paper we describe one new species to science: *Chaerilus conchiformus* sp. nov. and provide an identification key to the Chinese species of *Chaerilus*.

Key words: *Chaerilus*, new species, Xizang (Tibet) identification key

Introduction

According to the Fet et al.(2000), Kovařík (2000, 2005) and Qi, Zhu & Lourenço (2005), the monotypic family Chaerilidae Pocock 1893 includes 21 species belonging to the genus *Chaerilus* Simon, 1877 (Fet, 2000; Kovařík 2000, 2005; Qi et al., 2005). This genus was originally described in the family Chactidae; subsequently it was separated into a subfamily Chaerilinae within the family Iuridae by Pocock (1893). Laurie (1896) transferred the subfamily Chaerilinae to the family Buthidae. Finally, Kraepelin (1899) raised the Chaerilinae to the rank of family. Vachon (1963, 1974) recognized that *Chaerilus* possesses unique cheliceral dentition and trichobothrial patterns. For the family Chaerilidae, Vachon defined a Type B trichobothrial arrangement, which differs from both the Buthidae which have a Type A and from all the other families which present a Type C. Subsequent to all these decisions, both the family and the genus have occupied their present taxonomic position (Fet & Soleglad, 2005; Prendini & Wheeler, 2005).

Until recently, Chinese species of this family have been poorly known. Up to now only three species have been recorded: *Chaerilus pictus* Pocock, 1890, *C. triznai* Kovařík, 2000 and *C. tessellatus* Qi, Zhu & Lourenço, 2005, all of which are found exclusively in the Xizang (Tibet) region (Qi et al., 2005). We consider that *Chaerilus pictus* (Pocock, 1890) is of doubtful distribution in China.

In the present paper, these species are re-described and illustrated on the basis of the type material, when possible, or on new specimens collected in Xizang, China. Furthermore, the recent study of several scorpion specimens also collected in Xizang, revealed a new species, *Chaerilus conchiformus* sp. nov. This is the fourth species of the genus *Chaerilus* to be recorded from China.