Spiders of the genus *Phycosoma* O. P.-Cambridge, 1879 (Araneae: Theridiidae) from Hainan Island, China

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Abstract

Nine species of the theridiid spider genus *Phycosoma* are reported from Hainan Island, China, including two new species: *Phycosoma digitula* n. sp. (male, female) and *P. diaoluo* n. sp. (male). *P. stellaris* (Zhu, 1998) n. comb., *P. hana* (Zhu, 1998) n. comb., *P. hainanensis* (Zhu, 1998) n. comb., and *P. sinica* (Zhu, 1992) n. comb. are transferred from the genus *Dipoena* Thorell, 1869. The males of *P. stellaris*, *P. hana* and *P. labialis* are described and illustrated here for the first time. *P. amamiense* (Yoshida, 1985) is recorded from Hainan Island for the first time; *P. martinae* (Roberts, 1983) is also included in this paper.

Key words: *Phycosoma*, taxonomy, new species, new combination, China

Introduction

Members of the spider family Theridiidae are small to medium-size araneoids and in terms of the number currently described ranks fifth among the Araneae, containing 119 genera and 2324 species distributed worldwide (Platnick 2012). To date, 288 species among 51 genera have been recorded in China (Zhu 1998; Song, Zhu & Chen 1999; Li & Wang 2011; Platnick 2012).

The genus *Phycosoma* was erected by O. P.-Cambridge (1879). Levi & Levi (1962) considered this genus as a junior synonym of *Euryopis* Menge, 1868. Fitzgerald & Sirvid (2003) treated *Phycosoma* as a junior synonym of *Trigonobothrys* Simon, 1889. But later Fitzgerald & Sirvid (2004) considered *Phycosoma* to be the senior synonym of *Trigonobothrys* on the basis of ICZN’s priority. Some species belonging to *Dipoena* had been previously assigned to the genus *Phycosoma* (Fitzgerald & Sirvid 2004). Currently 14 *Phycosoma* species are described worldwide, among them, five species are known from China (Levi & Levi 1962; Levi 1953; Zhu 1998; Song, Zhu & Chen 1999; Yoshida 2002, 2009; Saaristo 2006; Platnick 2012).

During our examination of spider specimens recently collected from Hainan Island (China) two new species, *Phycosoma digitula* n. sp. and *P. diaoluo* n. sp., were recognized and are described here. Our study also revealed that *P. stellaris* (Zhu, 1998) n. comb., *P. hana* (Zhu, 1998) n. comb., *P. labialis* (Zhu, 1998) n. comb., *P. hainanensis* (Zhu, 1998) n. comb. and *P. sinica* (Zhu, 1992) n. comb., which were originally assigned to the genus *Dipoena* had been previously assigned to the genus *Phycosoma* (Fitzgerald & Sirvid 2004). In addition, the males of *P. stellaris*, *P. hana* and *P. labialis* are described and illustrated here for the first time. *P. amamiense* was recorded originally from Japan and China (Hunan and Fujian provinces), and it is reported here from Hainan Island for the first time. In addition, we also include known species *P. martinae* in this paper.

Material and methods

All specimens were kept in 75% ethanol and examined, drawn and measured under a Tech XTL-II stereomicroscope equipped with an Abbe drawing device. Carapace length was measured medially from the anterior margin to