

## Record of *Phrynichus orientalis* (Arachnida: Amblypygi) from Khao Chamao–Khao Wong National Park, Southeast Thailand

*Apisit Thipaksorn*<sup>1</sup> and *Sataporn Wanthanawijarn*<sup>2</sup>

Whip spiders (Arachnida: Amblypygi) are arachnids that occur in rock crevices of caves and under the bark of trees. They feed on small animals such as crickets and small lizards. They have a dorsoventrally flattened body with spinous raptorial pedipalps and the first pair of legs are long multi-segmented, whip-like feelers. They are widely distributed in tropical and subtropical regions of both Old and New Worlds (HARVEY, 2003), but most genera have a localized distribution (EL-HENNAWY, 2002). There 6 genera in 3 families in Southeast Asia (HARVEY, 2002; WEYGOLDT, 2000). Two families comprising four species have been reported in Thailand, namely the family Phrynichidae represented by *Phrynichus orientalis* WEYGOLDT 1998, from Kanchanaburi (HARVEY, 2003; WEYGOLDT, 1998) and the family Charontidae including *Stygophrynus* (*Stygophrynus*) *cavernicola* (THORELL 1889), from Kanchanaburi (DEHARVENG & LECLERC, 1989), *Stygophrynus* (*Stygophrynus*) *cerberus* Simon 1901, from Pattani (HARVEY, 2003), and *Stygophrynus brevispina* Weygoldt 2002, from Phuket (WEYGOLDT, 2002).

In December 2004, we went to Khao Chamao-Khao Wong National Park, Rayong Province, Thailand, and discovered one adult male of *Phrynichus orientalis* displayed in a collection in a glass cabinet at the Tourist Service Center. The officers reported the site at which the specimen was collected as Sammitr Limestone Cave in the national park. We surveyed the cave and found more specimens on the walls, but could not collect them because they climbed beyond our reach up to a height of 4 m and escaped into a crevice after we shone a light on the cave wall. We borrowed the specimen of the Tourist Service Center for identification and later returned it to the national park. The identity of the species was kindly confirmed by Professor Peter Weygoldt who had last revised the genus *Phrynichus* (WEYGOLDT, 1998).

**Material examined.**—THAILAND: 1 adult male from Sammitr Limestone Cave (101° 49' 7" E 12° 53' 41" N), Khao Chamao – Khao Wong National Park, Rayong Province, December 2000. Specimen deposited at the Tourist Service Center of the national park.

The specimen fits a previous description of *Phrynichus orientalis* (WEYGOLDT, 1998) and had the following measurements (in mm): total length 26.4; prosoma length 11.1; prosoma width 18.2; width/length of prosoma 1.64; opisthosoma length 15.3 (Fig. 1).

WEYGOLDT (1998) revised the genus *Phrynichus* and placed species into two species complexes, the *P. deflersi* and *P. ceylonicus* species groups. The *P. ceylonicus* species group differs from the other group in lacking 2 small lateral spines on the frontal process of the carapace. *P. orientalis* lacks these carapacial spines and so was included in the *P. ceylonicus* species group. It is the only member of the family Phrynichidae reported from Southeast Asia. From details of the type specimens, this species was collected around

<sup>1</sup>Department of Zoology, Faculty of Science, Kasetsart University, Chatuchak, Bangkok 10900, Thailand

<sup>2</sup>Department of Biology, Mahidol Wittayanusorn School, Buddhdamondhon, Nakhon Pathom 73170, Thailand  
Received 5 October 2005; accepted 8 November 2006.

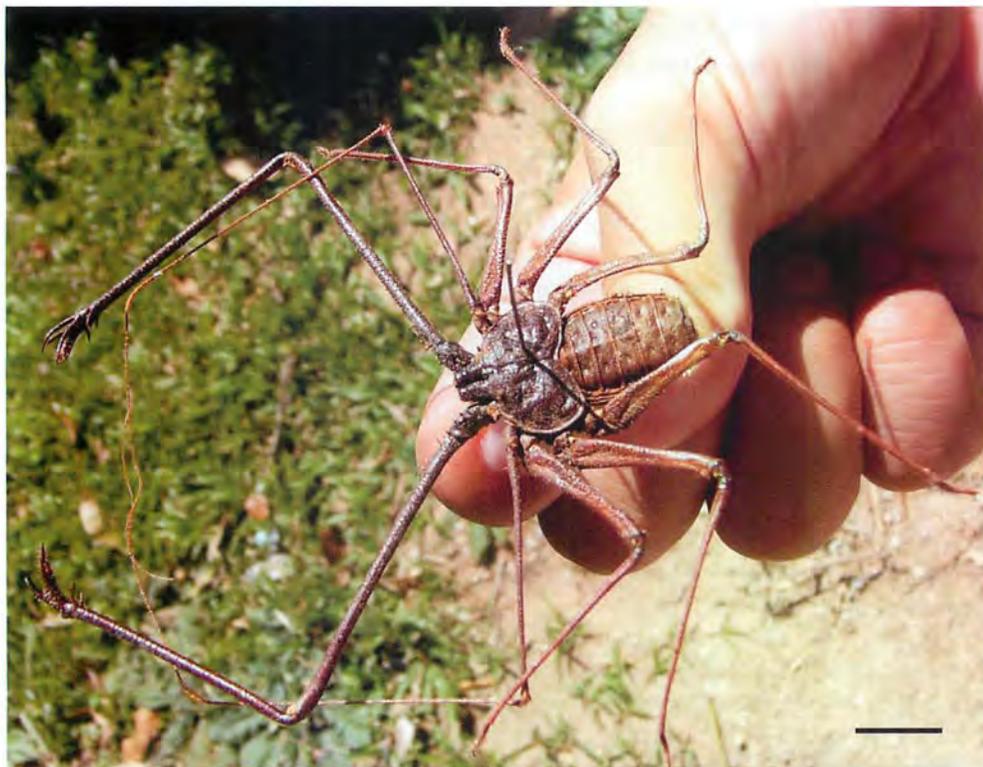


Figure 1. Dorsal view of the *Phrynichus orientalis* (Weygoldt) adult male found in Sammitr Limestone Cave, Khao Chamao–Khao Wong National Park, Thailand. Scale bar = 1 cm.

Indochina, including Vietnam, Cambodia and Thailand. In Thailand, one male paratype specimen was caught in an anonymous limestone cave in Kanchanaburi Province in 1978. This is the only specimen reported from Thailand and, like the specimens we observed, was found on the wall in the dark zone of the cave. The location of the specimen we identified represents a significant extension of the range of this species in Thailand. It is possible that *P. orientalis* occurs in limestone caves over most of Thailand, but this awaits further survey work. Further study should be done to investigate the biology of cave-dwelling whip spiders, because an understanding of their life cycle or other aspects of this group might be useful for understanding the food webs of caves.

**Acknowledgments.**—We would like to thank all Khao Chamao–Khao Wong National Park officers for the loan of the whip spider specimen. We are indebted to Dr. Thamasak Yeemin and Dr. Mark S. Harvey for providing references, Dr. John R. Milne for reading the manuscript and valuable comments and Prof. Peter Weygoldt for confirmation of the identification and valuable comments.

## REFERENCES

- DEHARVENG, L. AND P. LECLERC. 1989. Recherches sur les faunes cavernicoles d'Asie du sud-est. *Mém. Biospéol.* XVI(16) 43: 91–110.
- EL-HENNAWY, H. K. 2002. The first record of Amblypygi from Egypt. *J. Arachnol.* 30: 452–453.
- HARVEY, M. S. 2002. The first old World species of Phrynidae (Amblypygi): *Phrynus exsul* from Indonesia. *J. Arachnol.* 30: 470–474.
- HARVEY, M. S. 2003. Catalogue of the Smaller Arachnid Orders of the World. CSIRO Publishing, Collingwood, Victoria, Australia. 385 pp.
- WEYGOLDT, P. 1998. Revision of the species of *Phrynichus* Karsch, 1879 and *Euphrynichus* Weygoldt, 1995 (Chelicerata, Amblypygi). *Zoologica, Stuttgart* 147: 1–65.
- WEYGOLDT, P. 2000. Whip Spiders (Chelicerata: Amblypygi): Their Biology, Morphology and Systematics. Apollo Books, Stenstrup, Denmark. 163 pp.
- WEYGOLDT, P. 2002. Sperm transfer and spermatophore morphology of the whip spiders *Sarax buxtoni*, *S. brachydactylus* (Charinidae), *Charon* cf. *grayi*, and *Stygophrynus brevispina* nov. spec. (Charontidae) (Chelicerata, Amblypygi). *Zool. Anz.* 241: 131–148.

