

## A Revision of the Genus *Poltys* in Australasia (Araneae: Araneidae)

HELEN M. SMITH

The Australian Museum,  
6 College St, Sydney NSW 2010, Australia (address for correspondence)

and Faculty of Agriculture, Food and Natural Resources,  
University of Sydney NSW 2006, Australia  
hsmith@austmus.gov.au

**ABSTRACT.** The genus *Poltys* C.L. Koch is revised in Australia and partly examined in the wider Australasian region. *Poltys coronatus* Keyserling, *P. keyserlingi* Keyserling, *P. multituberculatus* Rainbow and *P. penicillatus* Rainbow are synonymized with *P. illepidus* C.L. Koch; *P. microtuberculatus* Rainbow is synonymized with *P. stygius* Thorell; *P. bimaculatus* Keyserling, *P. mammeatus* Keyserling and *P. salebrosus* Rainbow are synonymized with *P. lacinosus* Keyserling; *P. sigillatus* Chrysanthus is synonymized with *P. frenchi* Hogg. Five new species are described, four from Australia, *P. grayi*, *P. jujorum*, *P. milledgei* and *P. noblei*, and *P. timmeh* from New Caledonia. Notes on the biology of Australian species are given and a key is provided. DNA COI and ITS2 sequence data are used to test the species separations. A checklist of all *Poltys* types from the region, including illustrations, is provided.

SMITH, HELEN M., 2006. A revision of the genus *Poltys* in Australasia (Araneae: Araneidae). *Records of the Australian Museum* 58(1): 43–96.

*Poltys* C.L. Koch is a rather distinctive araneid genus that can be recognized by a combination of widely separated lateral eyes and a pear-shaped carapace, where the “stalk” of the pear is an eye tubercle. The Australian species for which some biological information is known are nocturnally active, building finely meshed orb webs at night and reingesting them around dawn. Adult males are small and do not make webs; females are medium to large spiders. Moths are the most frequent prey. The spiders are cryptically camouflaged and during the day they hide motionless on vegetation with the legs drawn tightly around the prosoma and just the median eyes, which are situated on the anterior of the eye tubercle, protruding between the legs. In this position they often resemble part of a dead twig, a gall or a broken piece of wood. Most Australian species are rather variable in abdominal shape and colouration. This has led to confusion in the identification of species and inconsistencies in taxonomic descriptions.

### Historical information

The original specimen described as *Poltys illepidus* C.L. Koch, came from “Bintang, Singapore” and was sent to Koch from the collection of Professor Reich of Berlin. The combination of carapace characters seemed so strange that Koch felt justified in making this a new genus, despite the fact that the specimen was incomplete, without an abdomen. Although this description was somewhat inadequate, at least at the specific level, the epithet soon became associated with a widely distributed and variable species with a rather tubercled, shield-shaped abdomen. The name “illepidus” means rude, rough or disagreeable and was probably thought to be appropriate to these rather lumpy and irregularly shaped specimens.

Some other species, which were subsequently described, had tall and sometimes bizarrely shaped abdomens. Others