© The Author, 2017. Journal compilation © Australian Museum, Sydney, 2017 *Records of the Australian Museum* (2017) Vol. 69, issue number 1, pp. 15–64. ISSN 0067-1975 (print), ISSN 2201-4349 (online) https://doi.org/10.3853/j.2201-4349.69.2017.1671

## A Revision and Cladistic Analysis of the Genus *Corasoides* Butler (Araneae: Desidae) with Descriptions of Nine New Species

## MARGARET HUMPHREY

Lot 6 Victor Place, Kuranda Queensland 4881, Australia

ABSTRACT. The spider genus *Corasoides* Butler, 1929 (Araneae:Desidae) is revised and nine new species described, four from Australia (*C. terania* sp. nov., *C. mouldsi* sp. nov., *C. motumae* sp. nov. and *C. occidentalis* sp. nov. and five from New Guinea (*C. angusi* sp. nov., *C. stellaris* sp. nov., *C. nimbus* sp. nov., *C. cowanae* sp. nov. and *C. nebula* sp. nov.). Keys to all species in the genus are provided. Phylogenetic relationships are constructed by means of cladistical analyses. Separate lineages of Australian and New Guinea species are revealed.

KEYWORDS. Arachnida; Araneae; Desidae; Corasoides; taxonomy; new species; phylogeny; spider.

HUMPHREY, MARGARET. 2017. A revision and cladistic analysis of the genus *Corasoides* Butler (Araneae: Desidae) with descriptions of nine new species. *Records of the Australian Museum* 69(1): 15–64. https://doi.org/10.3853/j.2201-4349.69.2017.1671

## Introduction

The genus Corasoides and its then only species, C. australis, was first described by Butler in 1929. It is a genus comprising small to large spiders which build horizontal sheet webs. The species inhabit a wide variety of habitats and are common over much of Australia and Papua New Guinea. The presence of more than one species of Corasoides has been suspected for some time in southern Western Australia (R. Raven, pers. comm.) and in New Guinea (Main, 1982). No specimens are known from West Papua but because suitable habitat extends across New Guinea it is anticipated that the genus occurs there. Analyses of data from allozyme electrophoresis showed that C. australis is a highly variable species distributed across much of the southern half of Australia and confirmed there are nine additional species found in Australia (some sympatric with *C. australis*) and in Papua New Guinea (Humphrey, 2015). This present paper formally describes those new species and redescribes C. australis. Phylogenetic analysis using morphology clarifies relationships of the ten Corasoides species and shows that the Australian and Papua New Guinean species are separate lineages.

## Methods

Specimen data from the following museums were compiled up to 2006: AM, Australian Museum, Sydney; BPBM, Bernice P. Bishop Museum, Honolulu; MV, Museum Victoria, Melbourne; QM, Queensland Museum, Brisbane; QVM, Queen Victoria Museum and Art Gallery, Launceston; SAM, South Australian Museum, Adelaide; TMAG, Tasmanian Museum and Art Gallery, Hobart; and WAM, Western Australian Museum, Perth.

**Type selection**. A male was chosen where possible as the holotype and preference was given to a larger specimen that displayed more complete secondary sexual development and would be less likely to show aberrations due to adverse environmental conditions.

Measurements. All measurements are in millimetres. Measurements follow Forster & Wilton (1968) unless stated otherwise. Taxonomic measurements are of the holotype and of a paratype of the opposite sex if available. The range is given in parentheses for measurements of the carapace, abdomen and chelicerae. Other measurements can be