

***Knoelle*, a new monotypic wolf spider genus from Australia (Araneae: Lycosidae)**

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Abstract

A new monotypic wolf spider genus, *Knoelle*, is described to accommodate the Australian member of the Lycosinae *Knoelle clara* (L. Koch, 1877) **comb. nov.** as type species. *Knoelle* **gen. nov.** differs from all other wolf spiders in the peculiar structure of the male pedipalp. The tip of the cymbium carries a unique, large patch of macrosetae and the tegular apophysis has a unique lamellar structure between two hook-shaped processes. The median septum of the female epigyne widens distinctly anteriorly. *Knoelle clara* **comb. nov.** is common in the northern parts of Australia (New South Wales, Northern Territory, Queensland, Western Australia) north of ca. 30°S latitude. The species appears to prefer sandy, open to partly shaded habitats near freshwater, such as creeks, springs and lakes, but can also be found in sand dunes near beaches. Adults show a peak of activity in October (males) and November (females) and records of mature spiders are rare between May and August.

Key words: Lycosinae, *Lycosa*, taxonomy, cymbium, macrosetae

Introduction

Male Lycosidae vary greatly in the presence and absence of specialised setae on the tip of the cymbium and their morphological structure. Single strong macrosetae or patches of these may be present and the tip of these setae may be straight, bent ventrad or dorsad. In some genera, such as *Venatrix* Roewer, 1960 or *Tuberculosa* Framenau & Yoo, 2006, males have single or pairs of claw-like macrosetae at the tip of the cymbium (Framenau & Vink 2001, Framenau & Yoo 2006, Framenau in press). The exact role of these structures in male courtship displays remains largely unknown. A percussive display using the pedipalps as drum sticks on the substrate has been reported for a large number of wolf spiders (Stratton 1985, Cutler 2002). However, pedipalp ‘drumming’ may not only