

A new species of *Ceraticelus* Simon from southern California and a redescription of *Ceraticelus phylax* Ivie & Barrows, its probable sister species (Araneae: Linyphiidae)

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Abstract

A new species of *Ceraticelus* Simon, 1884 from southern California is described, *Ceraticelus artemisiae* sp. nov. Its probable sister species, *Ceraticelus phylax* Ivie & Barrows, 1935, a potential adventive species with which it now often co-occurs in southern California, is redescribed for the first time. We provide detailed descriptions of both species because an adequate definition of the genus is lacking and the conformation of the male *Ceraticelus* palpal bulb has been only superficially treated. We also provide a definition of *Ceraticelus* based on examination of specimens of the type species, *Ceraticelus fissiceps* (O. P.-Cambridge). Problems associated with both the conformation of the male bulb and the paracymbium morphology are discussed. Despite the lack of a phylogenetic analysis of *Ceraticelus*, we propose that *Ceraticelus phylax* and *Ceraticelus artemisiae* sp. nov. are sister species based on shared characters that distinguish them from all other congeners. We suggest that the presence of *Ceraticelus phylax* in California is the result of incidental introduction rather than natural dispersal. Habitat, distribution, and phenology data are presented in the text. Illustrations and a distribution map are also furnished for both species.

Key words: coastal sage scrub, sympatric species, oak woodlands, California spiders, *Idionella*, *Ceratinella*

Introduction

During arthropod surveys conducted in San Diego County, California at Marine Corps Air Station Miramar (MCASM) (formerly Miramar Naval Air Station) and Marine Corps Base Camp Pendleton (MCBCP) between 1994 and 1996, an extraordinarily large number (1617) of an undescribed *Ceraticelus* species were collected in vacuum samples from various coastal sage scrub plots (Prentice *et al.* 1998: 188, 194, *Ceraticelus* sp. #1). The number of specimens almost doubled that of the second most frequently collected species (*Oecobius navus* Blackwall) and more than quadrupled the third (*Drassyllus insularis* (Banks)). Thirty specimens of a second member of the genus, *Ceraticelus phylax* Ivie & Barrows (previously known only from Chickasha, Oklahoma and Lincoln, Nebraska) were also present in several vacuum samples from MCBCP and were occasionally collected together with *Ceraticelus artemisiae* sp. nov., described here. Both species were also collected together in vacuum samples from coastal sage scrub at MCASM in 1998 and in sweepnet samples from perennial grasslands/Engleman oak savanna terrain at Santa Rosa Plateau Ecological Reserve in Riverside County in 1999.

California coastal sage scrub is believed to be one of the most rapidly disappearing biomes in the country (Davis *et al.* 1994, Kirkpatrick & Hutchinson 1977, Minnick 1983). It is estimated that more than 90% of southern California's coastal sage scrub has already been lost to urbanization (McCaull 1994; Vandergast *et al.* 2007). California oak woodlands are also rapidly disappearing from the impact of urbanization (Gaman &