

## Two sympatric species of *Antrodiaetus* from southwestern North Carolina (Araneae, Mygalomorphae, Antrodiaetidae)

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### Abstract

Two sympatric species of *Antrodiaetus* (Araneae, Mygalomorphae, Antrodiaetidae) are recorded from southwestern North Carolina: *A. unicolor* (Hentz 1841) and *A. microunicolor* new species. A neotype for *A. unicolor* is designated from DeSoto State Park in Alabama and a description is provided. A new species of *Antrodiaetus* is described from the Coweeta Long Term Ecological Research station in southwestern North Carolina. This new species is sympatric (putatively syntopic) with the closely related *A. unicolor* and can be differentiated from that species on the basis of size, setal characters, coloration, selected morphometric ratios, and non-overlapping breeding seasons. A brief account on the natural history for both species at Coweeta is presented.

**Key words:** New species, spider taxonomy, temporal isolation, neotype designation

### Introduction

The mygalomorph spider genus *Antrodiaetus* Ausserer 1871 currently includes 13 species throughout the United States, western Canada, and Japan. These spiders (Fig. 1) build cryptic, silk-lined subterranean burrows that are concealed by a collapsible turret or collar during daylight hours (Figs. 12–14). After dusk, spiders prop open the collar and wait at the burrow entrance to seize passing insects and other prey items. The taxonomy of this group has not received formal attention since Coyle (1971), although the most recent treatment of the genus by Miller and Coyle (1996) proposed a species-level phylogeny for *Antrodiaetus* and *Atypoides* Pickard-Cambridge 1883. The highest nominal species-level diversity of this genus is in the Pacific Northwest and surrounding areas where at least six species are known (Coyle 1971). In addition, two species are recognized from Japan, another confined to the “mountain islands” of the American Southwest, and the remaining four from the eastern and Midwestern deciduous forests of the United States. Of the latter