

Revalidation of the milliped genus *Amplaria* Chamberlin 1941 (Diplopoda, Chordeumatida, Striariidae), and description of two new species from caves in Sequoia and Kings Canyon National Parks, California

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Abstract

The milliped genus *Amplaria* Chamberlin 1941 was synonymized with *Striaria* Bollman 1888 by Hoffman (1980). Examination of a much wider range of materials of nominal *Striaria* species both from eastern North America and the Pacific coastal states shows that some species occurring from California to Washington (state) represent a distinct phyletic line, for which *Amplaria* Chamberlin 1941 is the oldest available generic name. *Speostriaria* Causey 1960 is a synonym of *Amplaria*. *Amplaria muiri n. sp.* and *A. adamsi n. sp.* are two new, recently discovered species from caves in Sequoia and Kings Canyon National Parks, California. Illustrations are provided of a specimen that may represent the type species, *Amplaria eutypa* (Chamberlin) 1953.

Key words: caves, U. S. A. National Parks, troglobionts, troglophiles, Sierra Nevada Mountains, *Speostriaria*, *Striaria*, *Vaferia*

Introduction

The milliped family Striariidae, endemic to the United States and the southwestern corner of Canada, has remained somewhat enigmatic since Bollman established it as a subfamily in 1893, for his species *Striaria granulosa*, described from Jefferson Co., Tennessee (Bollman 1888). The striariids are perhaps the most unusual and deviating members of the entire order Chordeumatida (Figs. 24–27). They are very heavily sclerotized, with thick cuticle often covered by a waxy secretion, and have a hood-like collum, which partially conceals the head. The metazonites of the trunk diplosegments each bear 12 longitudinal crests, and the epiproct is distinctly trilobed. The typical segmental setae of the Chordeumatida are strongly reduced and, it would seem, entirely absent in some species. The gonopods of males are often inordinately complex, even for chordeumatids, and the pregonopodal legs of males may have an extensive suite of secondary sexual modifications.

Striariids are not common in collections. In eastern North America, species seem more likely to be associated with drier habitats than other millipedes, occupying places where millipedes are not generally searched for, and this may in part account for the low numbers of specimens in collections. However, recent intensive collecting (see below) reveals that striariids are an important and abundant part of the milliped fauna of western North America and are found there in both dry and moist habitats.

In 1895, Cook raised Striariinae to full family status, and later (Cook 1899) published a more detailed account, in which he added two additional species: *S. columbiana* from the Washington, DC, area, and *S. californica* from Marin Co., California, establishing the presence of the family in western North America. Over