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Article



A new species of *Pseudatrichia* Osten Sacken (Diptera: Scenopinidae) from North America

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Abstract

A new species of the North American genus *Pseudatrichia* Osten Sacken is described. *Pseudatrichia bezarki* **sp. nov.** is described based on a male and female reared from wood-boring beetle galleries in *Pinus* sp. from Arizona (United States).

Key words: Pseudatrichia, Asiloidea, Therevoid clade, Scenopinidae

Introduction

Window flies (Diptera: Scenopinidae) are a small family (*ca.* 420 species) of cosmopolitan asiloid flies with an adult body size rarely greater than 5.0 mm. Scenopinids are distributed throughout all major biogeographical regions, but with significant continental endemism at the genus level with very few genera found in more than one biogeographical region (Kelsey 1973).

Pseudatrichia contains 39 species endemic to the New World although the greatest number of species are found in North America where it appears restricted to west of the Rocky Mountain Range (Kelsey 1969, 1973, 1974). The genus is characterised by a head longer than high, wing cell R_5 closed and elongate glossy body. *Pseudatrichia* is closely related to *Neopseudatrichia* Kelsey (Australia), *Prepseudatrichia* Kelsey (Afrotropical, Oriental) and *Belosta* Hardy (Nearctic), although it appears mostly closely related to the latter based on the shared presence of a pair of large setal brushes on the venter of the male genitalia. As larvae, scenopinids are fossorial predators in friable soils, but larvae of these four genera live as predators in the feeding galleries of larvae of wood boring beetles. The greatly elongate, shiny bodies largely lacking setae are presumed to aid adults in exiting these galleries. Species of *Pseudatrichia* have also been reared from the nests of birds and of communal burrows of wood rats (Muridae: *Neotoma* spp.) (Kelsey 1969).

A new species of *Pseudatrichia*, *P. bezarki* **sp. nov.**, is described herein from a male and female collected in northern Arizona, bringing the total number of species to 40. Previous keys to species of *Pseudatrichia* have been published by Kelsey (1969) with supplements by Kelsey (1971, 1974). *Pseudatrichia bezarki* **sp. nov.** is diagnosed and a key supplement provided.

Materials and methods

Genitalia were macerated in 10% KOH at room temperature for one day to remove soft tissue, then rinsed in distilled water and dilute acetic acid, and dissected in 80% ethanol. Preparations were then placed into