



Taxonomic review of the *Grammia nevadensis* species group (Lepidoptera: Arctiidae) with descriptions of two new species

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Abstract

Grammia nevadensis (Grote & Robinson) is revised to consist of four subspecies: *nevadensis*, *geneura* (Strecker) **revised status**, *gibsoni* (McDunnough) **revised status** and *superba* (Stretch). *Grammia behrii* (Stretch) **revised status** is raised from synonymy with *G. nevadensis* and re-described, and a neotype is designated. Two new species of *Grammia* in the *nevadensis* species group are described from the western United States: *Grammia eureka* **new species** is described from three specimens collected nearly a century ago in central Utah and one specimen ostensibly from southern Idaho. *Grammia bowmani* **new species** is a locally common species occurring in southwestern Colorado and southeastern Utah. The adults and male genitalic structures of *G. nevadensis*, *G. behrii*, *G. incorrupta*, *G. williamsii*, *G. eureka* and *G. bowmani* are illustrated.

Key words: *Grammia*, *eureka*, *behrii*, *bowmani*, *nevadensis*, *superba*, *gibsoni*, *williamsii*, *incorrupta*, Colorado, Utah, taxonomy, Arctiini

Introduction

The genus *Grammia* Rambur currently includes 29 species (Ferguson & Opler 2006; Dubatolov & Schmidt 2005), nearly all of which are restricted to the New World. The *Grammia nevadensis* (Grote & Robinson) species group represents a large species radiation of the genus in western North America, with the exception of *G. williamsii* (Dodge) which occurs east to the Atlantic seaboard across the boreal forest. In the past the genus has proven particularly challenging for taxonomists, due in large part to the dearth of obvious differences in male genitalic morphology, the subtle phenotypic differences between species, and the often considerable variation within species. Ferguson (1985) revised the generic concepts of *Apantesis* Walker and *Grammia*, and Ferguson & Opler (2006) provide an updated checklist for the continental United States and Canada, including several taxonomic changes since Franclemont (1983). The *nevadensis* group is here defined to include *G. nevadensis*, *G. blakei* (Grote), *G. bolanderi* (Stretch), *G. cervinoides* (Strecker), *G. elongata* (Stretch), *G. favorita* (Neumoegen), and *G. williamsii*. The taxa *superba* (Stretch), *gibsoni* (McDunnough), and *geneura* (Strecker) are revised to subspecies of *G. nevadensis*. *G. behrii* (Stretch) is re-described and elevated to species status, and *G. eureka* and *G. bowmani* are described as new.

Methods and Materials

Specimens were examined from the following collections: