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Agrionympha, the long-known South African jaw moths: a revision with descriptions of new species (Lepidoptera, Micropterigidae)

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Abstract

The South African micropterigid genus *Agrionympha* Meyrick, 1921 has long been known from a single male specimen and very few females with three named species. This revision, based on more recent discoveries, brings the total named species to nine, by the addition of *A. fuscoapicella* **sp. nov.**, *A. jansella* **sp. nov**., *A. karoo* **sp. nov**., *A. kroonella* **sp. nov**., *A. pseudovari* **sp. nov**., *A. sagittella* **sp. nov**., and notes the presence of a tenth species, represented only by two males in alcohol. The South Afrrican micropterigid fauna is thus quite diverse although, apart from the presence of another as yet undescribed genus, turns out to be a phenetically tightly-knit assemblage of highly conservative species. This revision provides a morphological description of males and females and includes larval features and a key to species. The micropterigid fauna of South Africa together with recently discovered taxa from Madagascar comprise part of what is regarded as the 'southern sabatincoid' lineage within the family—a weakly supported clade also including representatives from Australia, Chile, Ecuador, and Costa Rica. The survival of these small archaic rainforest moths in the face of increasing aridity is discussed.

Key words: taxonomy, new species, mandibulate moths

Introduction

The non-glossatan or 'jaw moth' grade within the Lepidoptera is represented in the extant fauna by only three known families, of which the Micropterigidae is the largest and the only one occurring on all continents. So far only a single micropterigid genus has been described from the entire Afrotropical region (sub-Saharan Africa and Madagascar), namely the endemic South African *Agrionympha* Meyrick, 1921 with three named species. Today, however, an unexpectedly diverse micropterigid fauna is known to exist on Madagascar, and also a new and overall generalized genus from South Africa has been discovered. Treatments of these new taxa will be presented elsewhere (ongoing work by D. R. Davis, G. W. Gibbs, N. P. Kristensen & D. C. Lees).

The present revision, however, reveals that the long-known Afrotropical genus *Agrionympha* is also unexpectedly species-rich. While so far only a single male specimen and altogether very few specimens of *Agrionympha* have been recorded (Janse 1942, Whalley 1978), collecting activities in South Africa (mostly by GWG and D. M. Kroon and N. Duke) over the last few decades have found six additional species in the genus. Its members turn out to be a phenetically tightly-knit assemblage of nine morphologically conservative but clearly separable species; these are described/redescribed here. A tenth species, known from only two male specimens in alcohol, is included but not named. A description of the *Agrionympha* larval morphotype is included in this revision. Larvae of Micropterigidae are now known from virtually all continents and continental islands from which adults have been collected and their morphology can provide potentially useful characters for intergeneric phylogeny.

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