

## Discovery of Micropterigidae (jaw-moths) in Western Australia

George Gibbs \*<sup>1</sup>

<sup>1</sup> Victoria University

Thanks to a dedicated little band of sharp-eyed, highly skilled collectors, the discovery of isolated patches of relict archaic moths on the vast Australian continent continues with the addition of three new species of jaw-moth from Southwest Australia. One is a '*Sabatinca*-clade' species, a type previously thought confined to Zealandia, the other two turn out to be two western outliers of the Eastern Australian clade. At the other extreme of their range, both types are represented in New Zealand, together making up our entire fauna of jaw-moths. These discoveries provide interesting taxonomic and phylogenetic challenges. But these are nothing compared to sorting out an acceptable biogeographic explanation for their presence in the far west. It is easy to understand why they have not been found there before - the largest is 3.4mm forewing length. Their habitats, diagnosis and biogeography will be discussed. From what is known of their siblings, the two types will have contrasting larval forms, which should define their habitat requirements - the sabatinoid species will be a herbivore on liverworts; the 'Australian' ones probably detritivores in litter or soil under grasses. Larvae have yet to be found but will undoubtedly be very small and easily overlooked.

