



New Australasian Zalmoxidae (Opiliones: Laniatores) and a new case of male polymorphism in Opiliones

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Abstract

Six new species of litter-inhabiting harvestmen, four from New Caledonia and two from Australia, in the genus *Zalmoxis* Sørensen, 1886 (Opiliones: Laniatores: Zalmoxidae) are described and illustrated using light microscopy and SEM. A molecular phylogeny including these and related species indicates that the New Caledonian *Zalmoxis* are monophyletic, though the morphology of one species is consistent with the apomorphies of *Metazalmoxis* Roewer, 1912. Accordingly, *Zalmoxis* Sørensen, 1886 is considered the senior synonym of *Metazalmoxis* Roewer, 1912 **new synonymy**. *Zalmoxis* therefore remains the sole zalmoxid genus outside of the Neotropics. The new species add significantly to the known morphological diversity of Zalmoxidae, specifically in the case of one species from Queensland, Australia, with polymorphic males—the first such record for the superfamily Zalmoxoidea.

Key words: Grassatores, *Zalmoxis*, *Metazalmoxis*, Southwest Pacific, intrasexual polymorphism

Introduction

Since its original description 126 years ago, Zalmoxidae Sørensen, 1886 has undergone a turbulent taxonomic history, including a period of synonymy in the system Phalangodinae (Roewer 1912, 1923) and subsequent resurrection (Staręga 1989). The taxonomic history of Zalmoxidae and the nominal genus *Zalmoxis* Sørensen, 1886 is detailed in a recent catalogue of Palearctic Zalmoxidae (Sharma *et al.* 2011) and is not repeated here. Subsequent to multiple revisions, Zalmoxidae of the Palearctic are restricted to 50 described species of *Zalmoxis* (distributed throughout Southeast Asia and the Southwest Pacific) and the monotypic genus *Metazalmoxis* Roewer,