

A new species of *Ophiomegistus* Banks (Acari: Paramegistidae) from Papua New Guinea

HANS KLOMPEN¹ & CHRISTOPHER C. AUSTIN²

¹Acarology Laboratory, Dept. of Entomology, Ohio State University, 1315 Kinnear Rd., Columbus, OH 43212.

E-mail: klompen.1@osu.edu

²Museum of Natural Science, Louisiana State University, 119 Foster Hall, Baton Rouge, LA 70803. E-mail: ccaustin@lsu.edu

Abstract

A new species of *Ophiomegistus*, *O. spectabilis*, is described from New Guinea. This represents the 13th species of this genus from New Guinea skinks. A re-evaluation of host and locality data for the genus shows a host range restricted to squamates, especially skinks, but no obvious specificity for individual skink species. Specificity for small geographical areas seems more likely.

Key words: reptile parasites, associations, Scincidae

Introduction

The island of New Guinea has been identified as a megadiverse region (Mittermeier and Mittermeier 1997) with an estimated 5–7% of the world's biodiversity in an area representing only 0.6% of the Earth's land area. Despite its importance as a biodiversity hotspot (Mittermeier *et al.* 1998), the parasites of New Guinea wildlife are poorly studied. One group that appears to have radiated in New Guinea is the mite genus *Ophiomegistus* (Mesostigmata: Paramegistidae). Species in this genus are unusual among basal Mesostigmata, and even within the family Paramegistidae, by their association with vertebrates rather than with arthropods. Very little is known about their biology. The adults are blood feeding parasites, that live partially lodged under the scales of their hosts, which can be skinks (17 spp. described so far) or snakes (3 spp.) (Domrow 1978, 1984; Goff 1979, 1980a, b; Womersley 1958). Immatures are unknown for the entire genus. Presumably, they live off the host. Biogeographically, the genus is restricted to the Australasian region, but the majority of species (12) has been reported from New Guinea.

A recent collection of skinks from Rambutyo Island (Papua New Guinea) turned up several specimens of a new *Ophiomegistus* species collected from several individuals of *Sphenomorphus pratti* (Scincidae). The purpose of this paper is to describe this species and to review existing records.

Material and methods

Lizards were captured by hand and inspected for parasites. Ectoparasites were placed into a 2.0 mL vial with 90% ethanol for later examination. Lizard specimens were vouchered and deposited at the Louisiana State University Museum of Zoology (LSUMZ).

Mite specimens were cleared and slide mounted. Pencil drawings were prepared using a Zeiss Axioskop®