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When the Lophopids cross the Lydekker line from New Guinea, a new species for the genus *Maana* (Hemiptera: Fulgoromorpha)

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Abstract

A new species of the genus *Maana* Soulier-Perkins, 1998 is described, *M. keiensis* Soulier-Perkins et Stroiński, **sp. nov**. The presence of this species on the Kei Islands is discussed from its historical biogeography point of view.

Key words: entomology, taxonomy, Lophopidae, Maana, new species, Kei Islands

Introduction

The genus *Maana* Soulier-Perkins 1998 contains four species found on the island of New Guinea. Two of these were collected in West Papua, *M. colorata* Soulier-Perkins, 1998 and *M. emeljanovi* Soulier-Perkins & Bourgoin, 2006, while the other two, *M. oriomoensis* Soulier-Perkins, 1998 and *M. erythina* Soulier-Perkins, 1998, were found in Papua New Guinea. With the description of this new species collected in the Kei islands, the distribution of this genus is extended beyond its original limit (Fig. 22) and becomes comparable to the distribution of its sister group, the genus *Jugoda* Melichar, 1915. Both of these genera present a distribution that goes across the Lydekker line (Lydekker 1896). The inevitable question arises on how we get to such distribution. What kind of geographic and or climatic events happened that could explain the actual distribution.

Material and methods

The abdomens of the specimen examined were cut off and cleared for 30 minutes in warm (50°C) 10% KOH with a few drops of chlorazol black (CAS No. 1937-37-7) for dying the ectodermic genital ducts based on the method introduced by Carayon (1969). Dissections and cleaning of genital structures were performed in distilled water. Final observations and drawings were done in glycerin using a camera lucida attached to a Olympus microscopes (SZH10 and BX50). The photos of the habitus were taken using a stereomicroscope Leica MZ 16 with IC3D digital camera; final images were produced using Synoptics Automontage software. The SEM photographs of uncoated specimens were taken in the Laboratory of Scanning Microscopy, MIZ PAS (Warsaw), using a scanning microscope HITACHI S-3400N under Low Vacuum conditions. The nomenclature of the male genitalia follows Bourgoin and Huang (1990).