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New *Phlugidia* species (Orthoptera: Tettigoniidae: Meconematinae, Phlugidini) from the Eastern Arc Mountains of Tanzania, Africa

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Abstract

Two new species of *Phlugidia* (Orthoptera: Tettigoniidae: Meconematinae) are described from the Eastern Arc Mountains of Tanzania. *P. planicercus* Hemp **n. sp.** occurs in lowland forest at the foothills of the Uluguru Mountains, while *P. obtusicercus* Hemp **n. sp.** was collected in the Nguru Mountains. A key to *Phlugidia* species is provided.

Key words: species, description, Phlugidini, East Africa

Introduction

The genus *Plugidia* was erected on *P. africana* by Kevan & Jin (1993) occurring on the Kenyan coast south of Mombasa. Another species was detected in the East Usambara Mountains of northern Tanzania and described as *P. usambarica* by Hemp (2002). *Phlugidia* is the only representative of Phlugidini in Africa.

Phlugidia has short tegmina, covered for most of its length by the pronotum. The posterior ends of the tegmina are rounded or almost square lobes. The pronotal sterna are unarmed, the fore coxa bears a spine. *Phlugidia* is characterized by the male genitalia where the supra-anal plate has a median, v-shaped notch. The cerci are stout and provide the easiest characters to distinguish the species. Females have a rather short, but slender and moderately up-curved ovipositor.

When alive *Phlugidia* species are conspicuous because of their iridescent pattern of blue-green and reddishorange colours. *Phlugidia* species are found on broad leaved bushes and trees in coastal and lowland evergreen forest.

Aim of this paper is to describe two new *Phlugidia* species and provide some ecological data on *P. usambarica*.

Methods

Samples. Specimens of *P. obtusicercus* Hemp **n. sp.** were observed in the Nguru Mountains of central Tanzania but only one male specimens was captured. Ecological data on *P. usambarica* were gained by evaluating samples obtained by canopy fogging project by S. H. McKamey et al. in July and December 1995 in the Kwamgumi forest reserve, Muheza District, Tanga Province of Tanzania. Detailed information about this fogging project focusing on Homoptera is published in McKamey (1999). The extensive insect material of this fogging project is stored in the entomological collection of the Zoological Museum of Copenhagen. One male of *P. planicercus* Hemp **n. sp.** labelled Kimboza forest reserve was discovered in the alcohol collection of the Danish Zoological Museum, Copenhagen (ZMUC) as well.

Measurements. Measurements of body length include male genitalia but not the ovipositor of the female.

Images. Photographs were taken either with a Canon 450 D digital camera or with a Leica multifocus camera at the entomological department of the Zoological Museum, Copenhagen, Denmark.