



***Akemetopon*, a new genus containing three new species of planthoppers (Hemiptera: Fulgoroidea: Delphacidae)**

KATHRYN M. WEGLARZ¹ & CHARLES R. BARTLETT^{1,2}

¹University of Delaware, Department of Entomology and Wildlife Ecology, 250 Townsend Hall, Newark, DE 19716-2160, USA.

E-mails: kweglarz@udel.edu; bartlett@udel.edu

²Corresponding author

Abstract

The new delphacid genus *Akemetopon* **gen. n.** (Delphacinae: Delphacini) is described and illustrated with 3 new species from Arizona and Mexico: *Akemetopon inornatum* **sp. n.**, *A. politum* **sp. n.**, and *A. ainigma* **sp. n.** A key to species is provided. The barcoding portion of the mitochondrial gene *Cytochrome Oxidase I* (COI) was sequenced for *A. politum* **sp. n.** A maximum likelihood analysis places this genus in the basal Delphacini.

Key words: Delphacinae, Delphacini, Auchenorrhyncha, Fulgoromorpha, planthopper, maximum likelihood, *Cytochrome Oxidase I* (COI)

Introduction

Entomological collections contain a wealth of unidentified delphacid specimens, some remaining in this state because they do not fit known taxa. Here a new genus (Delphacinae: Delphacini following Asche 1985, 1990; Urban *et al.* 2010) is described in part from specimens collected initially by R. H. Beamer in the 1930s. Beamer indicated he believed these specimens were undescribed species by including pleisotype labels. Other workers have noted the uniqueness of these specimens, particularly the sharp fastigium, and have speculated on their generic allies within the Delphacini.

The Delphacini are recognized by a well-developed suspensorium, the hind tibiae usually with 5 apical spines, a foliaceous, tectiform calcar usually with teeth along the posterior margin; and the phallobase elongate and completely fused with the aedeagus (forming a theca), without a sclerotized sperm-conducting tube. In America north of Mexico, the Delphacini contain 56 genera with 303 species.

In this paper we establish a new genus, *Akemetopon* **gen. n.** of Delphacini to accommodate three new species, namely *A. inornatum* **sp. n.**, *A. politum* **sp. n.**, and *A. ainigma* **sp. n.**, The new genus and species are described, illustrated and compared with similar taxa. A key to species is provided. The phylogenetic placement of the new genus is investigated using *Cytochrome Oxidase I* (COI) sequence data from one of the new species in a maximum likelihood analysis along with selected taxa from Urban *et al.* (2010).

Material and methods

Morphology. Morphological terminology follows Asche (1985), but for descriptive purposes the parameres will be referred to as having a proximal “basal angle” and distal “inner angle” (*sensu* Metcalf 1949). The heading ‘genitalia’ should be understood to refer to males and include the terminal segments.

The collections from which specimens were examined are as follows (collection abbreviations, except CMSU, following Arnett *et al.* 1993):