



Systematic position and cladistic analysis of *Gyrasida* Koch, a remarkable genus of Praocini (Coleoptera: Tenebrionidae) from Chile

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Abstract

Gyrasida Koch (Pimeliinae: Praocini), distributed in central Chile is elevated to generic status and transferred from Asidini to Praocini on the basis of constant tribal level characters. Prior to this study *Gyrasida* was considered a subgenus of the South African *Afrasida* Wilke. Character states of *Gyrasida* shared with the other genera of Praocini and not shared with genera of Asidini are discussed. A cladistic analysis of the six species of the genus is presented including: *G. propensa* (Wilke) (type species), *G. lucianoi* Flores & Vidal, *G. fernandoi* Flores & Vidal, *G. tomasi* Vidal, *G. franciscaae* Vidal, and *G. camilae* Vidal. This article includes a redescription of the genus, habitus photographs, illustrations of external morphology and genitalic features, a cladogram, and a distribution map.

Key words: Tenebrionidae, *Afrasida*, *Gyrasida*, Chile, Asidini, Praocini

Introduction

The South African genus *Afrasida* was described by Wilke (1921) and assigned to the tribe Asidini. Within *Afrasida*, Wilke included eight known species (transferred from other genera) plus six new species, which he arranged in three subgenera: *Afrasida* (*Afrasida*), *A. (Archasida)* and *A. (Asidomachla)*. One of the new species, *Afrasida propensa* Wilke, was described with only one specimen labeled as from Natal, South Africa, obtained from Kraatz's collection, and placed in the subgenus *A. (Archasida)* (Wilke 1921). Later, Wilke (1924) reviewed *Afrasida* describing some new species, transferring others and providing a key for the species.

Koch (1962) studied the genera of Asidini from Africa South of Sahara and Madagascar. He transferred the species of the subgenus *Afrasida (Asidomachla)* to the genus *Machlomorpha* Péringuey. At the same time he created a new monotypic subgenus of *Afrasida* which he named *A. (Gyrasida)* based on *A. propensa* (Koch 1962).

Specimens of *Afrasida propensa* were found in central Chile and identified as such by Wilke, Kulzer, and Kaszab in the 20th century. During our extensive explorations in South America through the years we found different species of *Afrasida (Gyrasida)* in central Chile. According to a note written by Kulzer, the type of *Afrasida propensa* was thought to be lost and we could not establish which of these species was the originally described as *A. propensa* and which no yet described species were. During last years we were able to find the Wilke's type of *Afrasida propensa* in Museum für Naturkunde der Humboldt Universität, Berlin (Germany), establishing five new species for Chile which have been recently described (Vidal & Flores 2007). Later, we requested some other known species of *Afrasida* and a systematic research was carried out to establish if *Afrasida (Gyrasida)* belongs to *Asidini* as described originally, as there were no other members of this tribe