



## 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 20<sup>th</sup> 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