

Brief note: First report of the genus *Tetramereia* Klages, 1907 (Coleoptera: Scarabaeidae: Phanaeini) in Colombia - Notes to its distribution

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The tribe Phanaeini is one of the best known taxa in the family Scarabaeidae, with updated taxonomic revisions existing for some of its most speciose genera: *Phanaeus* MacLeay, 1819, *Sulcophanaeus* d'Olsoufieff, 1924 and *Oxysternon* Castelnau, 1840 (Edmonds 1994, Edmonds 2000, Edmonds & Zidek 2004), as well as synopses for the whole tribe (Edmonds 1972; Arnaud 2002).

Medina *et al.* (2001) reported 8 of the 12 genera of the Phanaeini (sensu Philips *et al.* 2004) in Colombia: *Coprophanaeus* d'Olsoufieff, 1924, *Dendropaemon* Perty, 1930, *Diabroctis* Gistel, 1857, *Gromphas* Brullé, 1834, *Oruscatus* Bates, 1870, *Oxysternon*, *Phanaeus* and *Sulcophanaeus*. Not reported by them in Colombia were *Bolbites* Harold, 1868, *Homalotarsus* Janssens, 1932, *Megatharsis* Waterhouse, 1891 and *Tetramereia* Klages, 1907, although the last three monospecific genera are known from neighboring countries (Edmonds 1972; Arnaud 2002).

During the biological surveys in several localities in the Orinoquía province (Hernández *et al.* 1992), an individual of *Tetramereia convexa* (Harold, 1869) (Fig. 1) was collected using a Winkler sack to search leaf litter. This is the first report of this species in Colombia (Fig. 2).

Collected Material. COLOMBIA. Vichada: 10 km N of Santa Rita, village of Santa Rita, Municipality of Cumaribo, Natural National Park El Tuparro, (4°50'3"N - 68°22.5'12"W, Fig. 2), 135 m, Feb 2004, J. Noriega leg., Collection Jorge Ari Noriega - CJAN.

T. convexa has an unusual nomenclatural history, in that it has been assigned to four different genera (*Dendropaemon* Perty, *Eurypodea* Klages, *Tetramereia* Klages and *Bouco-*

montius Olsoufieff), being the type-species or the senior synonym of that for three of them (Harold 1869; Klages 1906, 1907; d'Olsoufieff 1924; see Edmonds, 1972). It is a medium-sized species (12.5-15 mm), dark brown to black in color with a globose body and hind and middle tarsi four-segmented. The clypeus is bidentate, without lateral indentations, the cephalic carina is not pronounced and bears three tubercles in some specimens. The pronotal surface is punctured, without posterior fossae. The elytral interstriae are flat with shallow punctures, and the ventral surface bears long orange setae.



Figure 1. Habitus of *T. convexa* collected by J.A. Noriega in Santa Rita, Vichada - Colombia. Scale bar = 5 mm.

T. convexa has a wide distribution area in Central-Southern Brazil (“cerrado”); it is known from the Distrito Federal and from the states of Minas Gerais, Pará, and São Paulo (FZVM, pers. obs.; Fig. 2). Arnaud (2002) reports the species, with no precise data, from Brazil (Pará), Venezuela (Suapure, State of Bolivar) and French Guyana, without more information on the number of specimens collected. Klages (1907) discovered the species in the Valley of the Cuara River in Venezuela.

Very few specimens are supposed to be in collections in Venezuela (Roze 1955), and Martínez & Clavijo (1990) and J. Blanco (pers. comm.) report not having examined any specimens of this species from Venezuelan localities. Jorge Gamez (per. comm.) registered a specimen in the collection of MIZA (Universidad Central de Venezuela – Maracay). François Feer (pers. comm.) caught some *T. convexa* (5 individuals) in French Guiana in the Nouragues Natural Reserve (100 km south of Cayenne) with flight interception traps and never obtained them with baited pitfall traps. The existing geographical records

(Fig. 2) suggest that the genus *Tetramereia* has a relictual or disjunctive distribution, being found only in some very specific localities.

T. convexa has previously been recorded in association with nests of ants of the genus *Atta* (Vaz-de-Mello *et al.* 1998), and adults have been maintained in captivity with ant detritus (FZVM, pers. obs.). However, very little is known about the biology or natural history of this species and other related genera (*Dendropaemon*, *Homalotarsus* and *Megatharsis*). It is possible, as some authors proposed (Vaz-de-Mello *et al.* 1998; Philips *et al.* 2004), that these genera form a monophyletic myrmecophilous group and that their supposed rarity is a result of narrow ecological specialization.

The report of *T. convexa* in Colombia is the westernmost registry, and suggests a distribution pattern more in the Orinoquía zone than in the Amazon (Fig. 2). It is important to compare carefully and in greater detail the specimens from different regions in order to determine if they



Figure 2. Distribution of *T. convexa* including records from Colombia, Venezuela, French Guyana and Brazil. ● = records with specific location, ○ = records without information specifying location.

have some kind of taxonomic differences. Likewise it is necessary to continue with the study of the biology of those little-known genera with special habits, as well as

with their inventory in certain zones of Colombia, especially in the borders with Ecuador and Brazil, where new reports will eventually appear.

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