A new species of Charinus Simon, 1892 (Amblypygi, Charinidae) from termite nests in French Guiana

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Abstract: The genus Charinus is represented by 51 species, distributed in all tropical regions. Their small size allows them to use a wide range of micro-habitats, from caves, litter to insect nests. The new species C. sillami sp. nov. was found into termite nests of three different species: Neocapritermes taracua, Spinitermes sp. and Embiratermes neotenicus. Only Paracharon caecus (Paleoamblypygi: Paracharontidae) was previously known to be associated with Isoptera. Eleven species of Charinus were previously known from Northern South America. Charinus sillami sp. nov. is the second species of the genus occurring in French Guiana. An updated key of Northern South-American species is provided.

Key words: taxonomy, whip spider, systematic, termites, Charinus sillami

Introduction

Whip spiders are secretive animals that feed on small animals they can capture with their spiny pedipalps. They live in dark habitats like caves, tree trunks or insect nests (termites or ants) (Weygoldt, 2000).

The genus Charinus is characterized by a small size (usually less than a centimeter) and the presence of pulvilli at the leg tip. It is the largest genus of Amblypygi (Weygoldt, 2000) with 51 species (Miranda & Giupponi, 2011; Jocque & Giupponi, 2012; Vasconcelos et al. 2013; Vasconcelos et al. 2014). Its small size allows it to use a wide range of micro habitat from caves (like C. troglobius Baptista and Giupponi, 2002) to litter (C. seychellarum Kraepelin, 1898) including man-modified environment (C. vulgaris Miranda & Giupponi, 2011). The eleven known species in Northern South America are C. bordoni (Ravelo, 1977) (Venezuela), C. camachoi (González-Sponga, 1998) (Venezuela), C. gertschi Goodnight & Goodnight, 1964 (British Guiana and Surinam), C. insularis Banks, 1902 (Ecuador, Galapagos Islands), C. koepckeii Weygoldt, 1972 (Peru), C. pardillalensis (González-Sponga, 1998) (Venezuela), C. platnicki (Quintero, 1986) (Surinam), C. quinteroi Weygoldt, 2002 (Guyana), C. tronchonii (Ravelo, 1975), C. vulgaris Miranda & Giupponi, 2011 (Brazil), and the last one—the first species occurring in French Guiana- Charinus bromeliæa Jocque and Giupponi 2012. That last species was found in bromeliaceae plants near inselbergs. Recent captures have shown that this species can be found also on the ground, foraging on the litter (Courtial & Pétillon, pers. comm.).

In Amblypygi, only Paracharon caecus (Paleoamblypygi: Paracharontidae) was previously known to be associated with Isoptera (Hansen, 1921), but recently four specimens (1 male and 3 females) of Charinus sillami sp. nov. were captured in several termite nests in the Barrage de Petit Saut [Petit saut Dam] (French Guiana) belonging to two different genera of termites: Neocapritermes taracua Krishna & Araujo, 1968 and Spinitermes sp. (Isoptera, Termitidae). Two other specimens (1 male and 1 female) were found in the same locality than the first ones, but in nests of Embiratermes neotenicus (Holmgren, 1906) (Isoptera, Termitidae). The specimens were caught alive and one of the authors tried to breed them. Due to the stress of the travel and the dryness, they died soon after the reception of the specimens.