



Redescription of the rheophilous cladocera *Camptocercus vietnamensis* Than, 1980 (Cladocera: Anomopoda: Chydoridae)

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Abstract

Little-known Vietnamese chydorid cladocera, *Camptocercus vietnamensis* Than, 1980 is redescribed on the material from Cat Tien national park, South Vietnam. Detailed morphology of limbs is described for the first time. In some features, *C. vietnamensis* is similar to *C. uncinatus* Smirnov, 1971, but can be easily differentiated from it by smaller size, morphology of postabdomen and labrum. *C. vietnamensis* is the only species of the genus *Camptocercus* strictly confined to the rheic conditions.

Key words: Cladocera, *Camptocercus*, morphology, systematics, Indochina

Introduction

The genus *Camptocercus* Baird, 1843 is one of the relatively well studied genera of Aloninae; a recent revision (Smirnov, 1998) lists 9 species belonging to this genera. However the limbs morphology remains unstudied for the majority of species, and our knowledge of the genus, especially in tropical areas, is far from being complete. One of such areas is Indochina. There are two taxa of *Camptocercus* commonly listed for this area: *C. australis* Sars, 1986 and *C. uncinatus* Smirnov, 1971. The first record of *C. cf. australis* for the area was provided by Idris & Fernando (1981), later on it was described in a monographic survey of Malaysian cladocera (Idris, 1983). According to provided description, specimens from Malaysia differ from *C. australis* s. str. in the body shape and in the armament of postabdomen. As Idris (1983) monograph was used as a main identification key for the Cladocera of the region, most of following citations of *Camptocercus* in Thailand were attributed to *C. australis* (see Maiphae *et al.*, 2008). Several other authors (Pholpunthin 1997; Sanoamuang 1998) reported another species, *C. uncinatus*, from the same country, while the occurrences of the species from Cambodia (Tanaka & Ohtaka, 2009) were identified as *C. rectirostris*, however the presence of this Palearctic species (Smirnov 1998) in the region seems to be particularly doubtful. An endemic species of *Camptocercus* from the area, *C. vietnamensis* Than, 1980, was not mentioned in Smirnov (1998) revision, probably because the description was published in a monograph in Vietnamese (Than *et al.* 1980). According to description, this species is similar to *C. uncinatus* in morphology of inner distal lobe of limb I, but according to Than *et al.* (1980) differs from it in much smaller size (up to 0.65 mm), more elongated, acute marginal denticles of postabdomen, and labrum with denticle and cluster of setules on posterior margin of keel. After the description, *C. vietnamensis* was never mentioned in literature.

The aim of present work was to study morphology of *Camptocercus* populations from South Vietnam, obtained by the author during his work in Cat Tien National Park during spring 2009 and autumn 2010.

Material and methods

Samples were collected during April–May 2009 and September–October 2010 in Cat Tien National Park, Dong Nai province, South Vietnam from more than forty water bodies, including large lakes (Bau Sau and Bau Chim),