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Revision of the genus *Tanycypris* (Ostracoda, Cypricerinae) with the description of *Tanycypris alfonsi* n. sp., and an identification key to the genus

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Abstract

Specimens of a new species of the non-marine ostracod genus, *Tanycypris* Triebel, 1959 were found in samples from water plant containers, displayed in a greenhouse of the botanical garden in Munich, Germany. Beside the ubiquitous species *Cypridopsis vidua* O.F. Müller, 1776, the samples contained four alien species of the subfamily Cypricerinae, namely *Chlamydotheca arcuata* Sars, 1901, *Strandesia bicuspis* Claus, 1892, *Tanycypris centa* Chang *et al.*, 2012, and *Tanycypris alfonsi* n. sp.. The genus *Tanycypris* has mainly been reported (native) from Asia, and (invasive) from Italian rice fields.

The Cypricerinae unite all species possessing a Triebel loop, a character of the caudal rami attachment. The subfamily is split into the tribes Cypricerini McKenzie, 1971, Bradleystrandesiini Savatnalinton & Martens, 2009 and Nealecypridini Savatnalinton & Martens, 2009, the latter of which comprises the genera *Tanycypris* Triebel, 1959, *Astenocypris* G.W. Müller, 1912, *Diaphanocypris* Würdig & Pinto, 1990 and *Nealecypris* Savatnalinton & Martens, 2009.

During the process of describing the new species, a number of taxonomic uncertainties were detected within the genus *Tanycypris*, leading to a revision of the nine species currently ascribed to it: *Tanycypris camaguinensis* (Tressler, 1937), *Tanycypris centa* Chang *et al.*, 2012 *Tanycypris clavigera* (G.W. Müller, 1898) (now: *Nealecypris clavigera* nov. comb.), *Tanycypris madagascarensis* (G.W. Müller, 1898), *Tanycypris marina* (Hartmann, 1965) (now: *Dolerocypris marina* nov. comb.), *Tanycypris pedroensis* (Tressler, 1950) (now: *Diaphanocypris pedroensis* nov. comb.), *Tanycypris pellucida* (Klie, 1932), *Tanycypris siamensis* Savatnalinton & Martens, 2009a, and *Tanycypris telavivensis* (Krampner, 1928) (now: *Herpetocypris telavivensis*). An identification key has been developed to the species of the genus *Tanycypris*.

Key words: Nealecypridini, Wouters organ, Rome organ, Triebel loop, invasive species, alien species

Introduction

The approximately 2000 living non-marine ostracod species (Martens & Savatnalinton 2011) are divided into three superfamilies, the Darwinuloidea, Cytheroidea and Cypridoidea, the majority of which belong to the superfamily Cypridoidea (Meisch 2000). The genus *Tanycypris* belongs to the family Cyprididae Baird, 1845 and to the subfamily Cypricerinae McKenzie, 1971, which is the most common ostracod subfamily in the tropics, with 11 genera. These genera are: *Astenocypris* G.W. Müller, 1912, *Bradleycypris* McKenzie, 1982, *Bradleystrandesia* Broodbakker, 1983, *Bradleyriebella* Savatnalinton & Martens, 2009b, *Cypricerus* Sars, 1895, *Diaphanocypris* Würdig & Pinto, 1990, *Nealecypris* Savatnalinton & Martens, 2009a, *Pseudostrandesia* Savatnalinton & Martens, 2009, *Spirocypris* Sharpe, 1903, *Strandesia* Stuhlmann, 1888, *Tanycypris* Triebel, 1959. The Cypricerinae are defined by a peculiar morphology of the caudal rami (CR) attachment, forming a closed loop. This trait was named after Walter Triebel, who first described it (Triebel 1959). Savatnalinton & Martens (2009a) arranged the genera of the Cypricerinae into three tribes: Bradleystrandesiini, Cypricerini, Nealecypridini. Nealecypridini includes the genus *Tanycypris* and the monospecific genera *Astenocypris*, *Diaphanocypris* and *Nealecypris*.

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