

## **Article**



## New and rare Aloninae (Cladocera: Anomopoda: Chydoridae) from Indochina

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## **Abstract**

Several poorly known cladocerans of the subfamily Aloninae (Cladocera: Anomopoda: Chydoridae) from Indochina region are reinvestigated. Revision of the genus *Anthalona* Van Damme, Sinev & Dumont 2011 from Thailand, Cambodia and Vietnam reveals that the region is inhabited by Paleotropic *Alona harti harti* Van Damme, Sinev & Dumont, 2011 and a new species, *Alona sanoamuangae* sp. nov., which appears to be an Indochinese endemic. It has a number of features primitive for the genus, including non-specialised IDL setae and non-differentiated scraping setae. So far, these characters were recorded only in the Congolese *A. simplex* Van Damme, Sinev & Dumont, 2011, but *A. sanoamuangae* sp. nov. differs from it in the trilobed cosmaria of the lateral head pores. An updated key for the *Anthalona* of Eurasia and Africa is provided. The endemic *Alona freyi* Idris & Fernando, 1981 belongs to the recently described genus *Matralona* Van Damme & Dumont, 2010, sharing numerous common features with the type species, *Matralona simoneae* (Dumont, 1981). *Alona macronyx* Daday, 1898, despite numerous unique features, should be moved from *Alona* to *Celsinotum* Frey, 1999, and the diagnosis of *Celsinotum* should be emended. Finally, a new taxon with several unique features, *Coronatella* sp., was found in Thailand. Our investigation demonstrates once more the necessity of successive revisions of cladoceran taxa, even in relatively well-studied regions.

**Key words:** Crustacea, Cladocera, Indochina, Oriental zone, Aloninae, *Anthalona sanoamuangae*, new species, morphology, systematics

## Introduction

Cladocerans (Crustacea: Branchiopoda) of the Indochina region were intensively investigated during last decades. Faunistic composition was fully re-evaluated for Thailand (Maiphae *et al.* 2005, 2008) and local faunas were investigated in several regions of Thailand and Cambodia (Pholpunthin 1997; Sanoamuang 1998; Tanaka & Ohtaka 2009). Several taxonomic groups were revised, and a series of new species were described (Korovchinsky & Sanoamuang 2008ab; Kotov & Sanoamuang 2004ab; Kotov *et al.* 2005ab; Kotov 2009; Sinev 2011; Sinev *et al.* 2007; Sinev & Sanoamuang 2007, 2011). Presently, the cladoceran fauna of Indochina, especially of Thailand, is the best studied of Tropical Asia. But many taxa, especially Chydoridae Dybowski & Grochowski, 1894 and Macrothricidae Norman & Brady, 1867, still remain unrevised. Among the subfamily Aloninae Dybowski & Grochowski, 1894 emend. Frey, 1967 (Anomopoda: Chydoridae) there are several inadequately described, but quite remarkable taxa, recorded in previous papers (Maiphae *et al.* 2008; Van Damme *et al.* 2010).

One of the main trends in Aloninae systematics is a revision of the polyphyletic genus *Alona* Baird, 1843, which was historically formed by lumping together about a dozen of species groups, convergently similar in general morphology (Van Damme & Dumont 2008a–b; Van Damme *et al.* 2010). Recent revisions of such groups lead to description of several new genera (Dumont & Silva-Briano 2000; Sinev 2004; Sinev & Shiel 2008; Van Damme & Dumont 2008a, 2009; Van Damme *et al.* 2009, 2011; Van Damme & Sinev, 2011). A series of species of *Alona* s. lato were transferred to other previously described genera after accurate revisions (Kotov 2003; Van Damme *et al.* 2003; Sinev *et al.* 2005). Several large species-groups were partially revised, but not formally recognized as genera (Sinev 2008, 2009; Sinev *et al.* 2009).