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 Dybowsk & Grochowski, 1894 and Macrothricidae Norman & Brady, 1867, still remain unrevised. Among the subfamily Aloninae Dybowsk & 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).