

Thaumatelsonine Stenothoids (Crustacea, Amphipoda). Part 2

TRAUDL KRAPP-SCHICKEL

Forschungsinstitut u. Museum A. Koenig, Adenauerallee 150, D-53113 Bonn, Germany
E-mail: traudl.krapp@uni-bonn.de

Table of contents

Abstract	2
Introduction	2
Taxonomy	4
Key to all thaumatelsonid genera	5
<i>Thaumatelson</i> Walker, 1906	6
<i>Thaumatelson herdmani</i> Walker	6
<i>Antatelson</i> Barnard, 1972	10
Key to <i>Antatelson</i> species	11
<i>Antatelson walkeri</i> Chilton	11
<i>Antatelson cuneatum</i> n. sp.	13
<i>Antatelson antennatum</i> Bellan-Santini & Ledoyer	17
<i>Verticotelson</i> gen. nov.	18
<i>Verticotelson mantis</i> n.sp.	18
<i>Prothaumatelson</i> Schellenberg, 1931	22
<i>Prothaumatelson nasutum</i> (Chevreux, 1912)	22
<i>Ausatelson</i> J.L. Barnard, 1972	24
Key to <i>Ausatelson</i> species	25
<i>Parathaumatelson</i> Gurjanova, 1938	25
<i>Parathaumatelson nasicum</i> (Stephensen, 1927)	26
Discussion	27
Acknowledgments	29
References	30

Abstract

The amphipod family Thaumatelsonidae was established by Gurjanova (1938) on the basis of the existence of special morphological characters in both the antennae and the urosome in certain southern genera of Stenothoidae; the separation of these taxa from the Stenothoidae has, however, been difficult and the family was reduced to subfamily rank by Barnard (1972). The present study confirms the validity of the Thaumatelsoninae, its taxa are shown to be very closely related to each other. A key to those thaumatelsonid genera with a blade-shaped telson of largely or completely vertical orientation is provided, and an additional genus *Verticotelson* nov.gen. (type *V. mantis* n.sp.) is erected. *Antatelson cuneatum* n. sp. is described, and a key to all *Antatelson* species provided.

Key words Taxonomy, Amphipoda, Stenothoidae sensu lato, *Verticotelson* nov. gen., *V. mantis* n.sp., *Antatelson cuneatum* n.sp.

Introduction

In the large amphipod family Stenothoidae the genera have traditionally been separated by using the number of articles in the palps of mandible and first maxilla, the presence or absence of a minute accessory flagellum, and the shape of the basis of the posterior pereopods. As earlier noted by Barnard & Karaman (1991, p. 684) 'these are very poor characters, because fusion or loss of articles is undoubtedly polyphyletic'; in addition, these characters are often badly or incompletely described in the older literature. Furthermore, within many of the present genera character states are transitional, e.g. the first gnathopods are 'simple to subchelate', the palps show different numbers of articles, an accessory flagellum may be present or absent, and the inner plates of the second maxillae may be variously reduced, in some cases resulting in the 'riding position' (cf Krapp-Schickel 1996, 2000). A phylogenetic evaluation of the family, based on new interpretations of the mouthpart structures, the shape of gnathopods and pereopods, and the various strengthening devices of the urosome is in preparation and will probably change the concept of the group Stenothoidae.

Figure 1a shows a typical stenothoid species, with long and thin antennae, expanded bases on the posterior pereopods and a thin, leaf-like telson. Thaumatelsonine stenothoids, on the other hand, have swollen, sometimes nasiform, first or second articles on the first antennae, shortened to reduced appendages, and either a 'cushion' over the urosome segments (genus *Raumahara*, Fig. 1 i, k) or a huge thickened telson, which tends toward a vertical orientation (*Antatelson*, Fig. 1 l). In thaumatelsonids pereonite 4 gets widened, coxa 4 becomes more or less shaped like a trapezium (Fig. 1 g) or even like a rectangular shield with parallel upper and lower margins (Fig. 1 h), and the pereopods are tiny and completely hidden by the coxal plates (Krapp-Schickel 2000).

Those stenothoid genera with nasiform antennae and aberrant telson were originally