Redescription of three species of Haploniscus Richardson, 1908 (Isopoda, Asellota, Haploniscidae) from the Angola Basin

Wiebke Brökelanda, Johann-Wolfgang Wägeleb

Zoologisches Institut und Museum Hamburg, Martin-Luther-King-Platz 3, 20146 Hamburg, Germany
Lehrstuhl für Spezielle Zoologie, Ruhr-Universität Bochum, Universitätsstr. 150, 44780 Bochum, Germany

Received 31 January 2004; accepted 13 February 2004

Abstract

Based on material from the deep sea of the Angola Basin (South Atlantic Ocean), new diagnoses are provided for the genus Haploniscus Richardson, 1908 and the species H. bicuspis (Sars, 1877), H. spinifer Hansen, 1916, and H. nondescriptus Menzies, 1962. Full redescriptions, including previously undescribed details, and a discussion of phylogenetic status are given in an electronic supplement.

© 2004 Elsevier GmbH. All rights reserved.

Keywords: Crustacea; Isopoda; Haploniscidae; Taxonomy; Deep-sea; Angola Basin

See also Electronic Supplement at http://www.senckenberg.de/odes/04-07.htm.

Taxonomic diagnoses

Haploniscus Richardson, 1908

Haploniscidae with pereonites 5–7 at least laterally free, anterior angles of pereonites 2–4 not prolonged. Antenna 2 longer than antenna 1, third article only a little longer than wide, often with dorsal tooth. Fifth and sixth article of antenna 2 not fused, flagellum distinct. Distal carpus of pereopod 6 usually with stout spine bearing a distal sensillum. Female pleopod 2 circular. Uropods small, cylindrical, inserting near proximal end of anal valves. (Modified after Lincoln 1985.)

Haploniscus bicuspis (Sars, 1877)

(Fig. 1; Electr. Suppl. 04–07: Figs. 1–12)
Body oval, about three times longer than wide. Cephalothorax 1.8 times wider than long, anterior margin convex, with small blunt rostral process. Pleotelson with two dorsal longitudinal keels, posterolateral processes moderately long. Antenna 1 about one quarter of body length, flagellum five Segmented in males, four Segmented in females. Antenna 2 slender, 0.66 of body length, article three with strong spinous dorsal process. Outer endite of maxilla 1 with five dentate and seven simple spines. Endopod of pleopod 2 1.3 times longer than protopod, 6.5 times longer than wide.

Haploniscus spinifer Hansen, 1916

(Fig. 2; Electr. Suppl. 04–07: Figs. 13–25)
Body about three times longer than wide, oval. Cephalothorax 2.4 times wider than long, frontal margin slightly convex, without rostrum. Dorsal surface of pleotelson with two longitudinal keels, ending near insertion of uropods, postero-lateral angles larger in males (nearly one quarter of the remaining pleotelson), projecting far beyond terminal margin, distinctly shorter in females. Antenna 1 about one fifth of body length, flagellum four-segmented in males, three-segmented in females. Antenna 2 nearly half of body length, basal flagellar articles with rim, antenna 2 distinctly more robust in males than in females. In both sexes peduncle article three with stout dorsal spinous process. Outer endite of maxilla 1 with three dentate and ten simple spines. Male Plp2 with strongly curved endopod, more than three times longer than protopod.

*Haploniscus nondescriptus* Menzies, 1962

(Fig. 3; Electr. Suppl. 04–07: Figs. 26–32)
Body oval, about twice as long as wide. Cephalothorax 2.5 times wider than long, frontal margin concave, without rostral process. Pleotelson short, about one quarter of body length, dorsal surface with two longitudinal keels, ending near uropod insertion and each beginning at a small tubercle. Posterolateral angles slightly extending beyond terminal margin of pleotelson, not distinctly surpassing uropods. Antenna 1 one quarter of body length, flagellum with four articles. Third article of antenna 2 with small dorsal tooth, fourth, fifth and sixth articles with numerous triangular scales. Pars molaris of left mandible on grinding surface with row of nine teeth and additional teeth beside cuticular rim as well as nine pilose setae. Outer endite of maxilla 1 with nine simple and four setulated spines. Median endite of maxilla 2 with short serrated spine. Carpus of all pereopods with comb-like spine rows. Pleopod 2 of subadult male with short endopod, not exceeding protopod.

Acknowledgements

The authors are grateful to Prof. A. Brandt and Dr. M. Türkay, who helped organize the expedition. Nils Brenke kindly provided sorted samples for this study.

Reference