

Deep-sea amphipods

Taxonomic revision

By Tammy Horton

AT THE SOUTHAMPTON OCEANOGRAPHY Centre, work is being carried out to improve the taxonomy of deep sea amphipods and is being sponsored by BP (see <http://www.soc.soton.ac.uk/gdd/bp> for more information). Currently, a large family revision is being undertaken which includes amphipods in shallow waters in addition to those from deeper waters. The family under revision, the Scopelocheiridae, are scavenging lysianassoid amphipods that are found from shallow waters down to the deep ocean trenches.

Scopelocheirids are scavengers, with some genera known to specialise on spatangoid echinoids, while others are likely to be more generalist, coming to feed at baited traps. The problems with this family are largely taxonomic and stem from confusions between genera and species, mostly due to a lack of good material (the deep-sea material in particular is difficult to come by) but also because of inadequate original descriptions and illustrations of a number of the species. We are therefore focusing on redescribing the problem species from holotype material where available, and using new material (often from the type locality) if necessary. There are currently nine genera being dealt with, including one new one, and so far at least 30 species (and counting!). The work on the deeper water species is fairly advanced, although we will not be at all surprised if more new species of *Paracallisoma* (Fig 1) turn up. Currently, we are concentrating on the genus *Scopelocheirus*, which is the most commonly encountered shallow-water genus. Currently, only two species are recognised from north-east Atlantic and Mediterranean waters: *Scopelocheirus hopei* Costa, 1851 (Fig 2) and *Scopelocheirus polymedus* Bellan-Santini, 1984. However, the authors of this revision (Tammy Horton, Mike Thurston and Hans Georg Andres) believe that there are probably two or even three species currently being recorded as *S hopei* in European waters.

This is where MARBEF can help; the authors would be grateful for material of these species (and any other scopelocheirid material) in good condition from as many sites as possible. It will be particularly useful to see material from the Mediterranean

close to the type locality of Naples, and also from Norwegian waters (where it is believed two species co-exist). Anyone willing to help out should know that *Scopelocheirus* seems to be a generalist scavenger, with reports of animals attracted to various baits in traps, but also associated with trawl damage and fishery discards. Therefore, specimens of these amphipods may be found in collections from surveys related to these events. For simple species identification, use Lincoln, 1979.

Reference

Lincoln, R. J. (1979). British Marine Amphipoda: Gammaridea. London, British Museum (Natural History). ●

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Fig 1. A Scopelocheirid, *Paracallisoma alberti*, the type species collected from the type locality.



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Fig 2. *Scopelocheirus hopei* (Costa, 1851), the entity we believe may be comprised of two or three closely-related species.



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