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Notes on Norwegian marine Amphipoda. 9. *Aristias megalops* Sars, 1895 (Lysianassoidea) rediscovered

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The Lysianassoid amphipod *Aristias megalops* Sars, 1895 previously only known from the type-specimens, is recorded from western and northern Norway. In the Tromsø area the species lives in association with an unidentified sponge on the valves of the Iceland scallop *Chlamys islandica* (O.F. Müller).

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The Lysianassid amphipod *Aristias megalops* G.O. Sars, 1895 was described from a few specimens collected from deep water (300—400 fathoms) in the Trondheimsfjord in mid Norway (Sars 1890—95). It is a small (3 mm) yellowish amphipod, primarily characterized among the Norwegian *Aristias* species by its 'unusually large light reddish-brown eyes, which in the living animal appear pretty defined, though devoid of any distinctly developed visual elements' (Sars, op.cit.). Structurally *A. megalops* is very similar to *A. microps* Sars, 1895, so much so that Stebbing (1906) surmised that these taxa in reality were male and female of the same species.

Although *Aristias microps* has been refound on several occasions in deep water in both eastern and western N. Atlantic (Stephensen 1923 (map), 1944, Gurjanova 1962, Bousfield 1973), the only further record of *A. megalops* has been an uncertain identification of a very defective specimen from Balsfjord in northern Norway by Stephensen (1935—42).

It now turns out, however, that *A. megalops* indeed does occur in the Balsfjord area. At depths between 30—60 m, extensive beds of Iceland scallops *Chlamys islandica* (O.F. Müller) occur in this area (Wiborg & Bøhle 1968, Brun 1971). Adult specimens of this mollusk are often overgrown with sessile animals on one of the valves. Among these an unidentified soft-bodied sponge forms cushions of 1—4 cm thickness, and it is from these sponge cushions that *Aristias megalops* has been collected on several occasions. The amphipods are extremely patchily distributed, with an infestation rate well below 1 %, but up to 20 amphipods in a single infested sponge colony. Both males and females are present; this proves that *A. megalops* and *A. microps* are independent species.

A single specimen of *Aristias megalops* has also been collected by me from western Norway, on the well-known *Lophelia* reef of Brattholmen (collecting nr. E 39/71). Its living colour was noted as follows: 'The all-over yellowish colour is caused by yellowish-brown 'lipid droplets', concentrated around the intestine. The eyes are enormous, light brown with whitish coating; they have a quite clear, though superficial, honeycomb structure.'

I have not yet had any opportunity of studying the biology of the *Aristias megalops*- sponge association. In contradistinction to another common lysianassid sponge associate from Norwegian waters, viz. *Perrierella audouiniana* (Bate), a species that is found concentrated in the outermost layers of the host sponge (Bonnier 1893; Vader 1984), *Aristias* species appear to tunnel all through their host (cf. Vader 1969 for *A. neglectus* Hansen) and *A. megalops* is no exception. One other *Aristias* species has been collected from the sponge covering of living mollusks, viz the South African *A. symbiotica* K.H. Barnard from 'cavities and galleries in a sponge covering the gastropod *Tritonium murrayi* (Smith)' (Barnard 1916).

Although biological data are still lacking for many species, it is highly probable that all *Aristias* will turn out to be microphagous inquilines and possible commensals of marine invertebrates. Judging from the best-known species *Aristias neglectus* Hansen, which has been found associated with hosts of 6 different phyla (Vader 1979, 1983), host specificity is low.

Besides *A. megalops* and *A. symbiotica*, the

following *Aristias* spp have hitherto been found living in sponges: *A. commensalis* Bonnier (Bonnier 1896), *A. neglectus* Hansen (Arndt 1933, with many older references, Cecchini & Parenzan 1934, Oldevig 1959; pers. obs.), *A. topsenti* Chevreux (Chevreux 1900) and *A. tumidus* (Kröyer) (Vader 1984).

Representatives of the genus have also been found in association with Foraminifera (Gooday 1984), Actiniaria (Vader 1970b, 1983, unpublished observations from Europe and W. Africa), Brachiopoda (Vader 1970a, Logan 1979), Echinodermata (Vader 1979) and Ascidiacea (e.g. Aurivillius 1885, 1886, Sars 1890—95, Chevreux & Fage 1925, Vader 1984).

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