SCUTELLIDIUM PATELLARUM N. SP., A HARPACTICOID COPEPOD ASSOCIATED WITH PATELLA SPP. IN SOUTH AFRICA, AND A DESCRIPTION OF ITS LARVAL DEVELOPMENT

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During investigations on the biology of Patella in South Africa, large numbers of a new species of Scutellidium Claus, 1866 were found in association with the limpets. This species is described below as Scutellidium patellarum nov. sp. All stages of larval development were also found associated with the limpets, and a description of the nauplii and copepodids is given.

The copepods were found predominantly associated with Patella argenvillei Krauss and P. cochlear Born, although smaller numbers also occurred with P. tabularis Krauss, P. barbara L. and P. longicosta Lamarck. In the first two cases, respectively 80% and 45% of the limpets harboured copepods, with as many as 160 per limpet. The copepods were restricted to the pallial cavity, moving between the gills and over the foot.

Despite intensive examination of other possible hosts in the vicinity (including other limpets such as Helcion spp. and Siphonaria spp.) the copepods were only found on Patella spp., with the exception of a single free living specimen.

No other members of the genus have previously been found associated with other animals, although Lang, 1948, mentions the probably accidental occurrence of S. hippolytes on the head of Hippolyte aculeata (O. Fabr.) [= Lebbeus groenlandicus (Fabr.)]. This is surprising in view of the several species of the closely related genera Tisbe Lilljeborg, and Sacodiscus Wilson, found associated with a wide variety of animals. These are described or listed by Humes (1954, 1957, 1960) and Stock (1960).

Since Lang's review (1948), several new species have been added to the genus Scutellidium. Vervoort (1964: 103-112) lists eighteen species (and three of uncertain position) and gives a key to their identification. Of these, Lang (1965) is doubtful of the validity of S. loureiroi Jakobi, 1954, S. lamellipes Monk, 1941 and S. purpuracincta Monk, 1941.

Wells (1967) records S. plumosum Brady, 1899 and S. ligusticum (Brian, 1920) from Inhaca Island, Mozambique, but there are no other records of the genus from southern Africa.

Material and methods. — The type material consists of 200 specimens collected from Kommetjie, S. Africa (30°20'S 18°20'E). The holotype, allotype and
Figs. 1-8. *Scutellidium patellarum* n. sp., adult ♀. 1, dorsal; 2, lateral; 3, rostrum; 4, urosome with 2 attached spermatophores, ventral; 5, furca and posterior abdominal segments, dorsal; 6a, maxilla 2; 6b, alternative view of maxilla 2 with twisted basis; 7, maxilliped; 8, labrum. Scales indicate 50 microns.