NOTES

The Crab Parasite Sacculina in the Fiji Islands

On March 18, 1949, through the kind help of Mr. Harold Gatty at Suva, I obtained the opportunity to collect corals on the reefs near Tomberua Island on the east side of Viti Levu, the main island of the Fiji Group. In addition to other material I found two specimens of the crab Xantho exaratus (H. Milne Edwards) which were infested with the parasite Sacculina leptodiae Guérin-Ganivet.

The parasites have the broadly oval shape which seems to be characteristic of the specimens living on Xantho exaratus (cf. Fig. 1a-d in Boschma, H., Zool. Meded. 30(3): 49–71, 21 figs., 1948); their greater diameter is approximately 6 and 5 mm. They are attached to hosts which have a carapace breadth of 13.5 and 11.5 mm. respectively.

In shape and size the excrescences of the external cuticle of the mantle do not differ from those of specimens found on the same crab from other localities. In the larger specimen these excrescences have a length of 35 to 45 μ (Fig. 1, upper row); in the smaller specimen they have a length of 30 to 40 μ (Fig. 1, lower row).

Sacculina leptodiae was described by Guérin-Ganivet (Trav. Sci. Lab. Zool. et Physiol. Marit. Concarneau 3(7): 1–97, 1911). His material came from the Gulf of Aden and from the Comoro Islands in the Mozambique Channel. Other specimens on Xantho exaratus are known from Zanzibar, the Red Sea, and the Andaman Islands. In the East Indies the parasite is of common occurrence on the crabs Thalamita stimpsoni A. Milne Edwards and Pseodozius cyanstrus Adams & White (Boschma, loc. cit.). The occurrence of the parasite in the Fiji Islands considerably extends its known range of distribution.

FIG. 1. Sacculina leptodiae Guérin-Ganivet: specimens from Tomberua Island, Fiji. Excrescences of the external cuticle of the larger specimen (upper row) and of the smaller specimen (lower row). × 530.

Until now there was only one record of a rhizocephalan parasite in the Fiji Islands, viz., that of specimens of the genus Thompsonia on the snapping shrimp Alpheus malleodigitus (Bate), obtained by the “Challenger” Expedition on the reef of Levuka, Ovalau Island, east of Viti Levu (Bate, C. S., Rept Sci. Results Voyage H. M. S. Challenger, Zool. 24. xc + 942 pp., xv + 76 figs., 157 pls.).—H. Boschma, Rijksmuseum van Natuurlijke Historie, Leiden.