

## 2. PREVIOUS LITERATURE ON THE MORPHOLOGY OF A. PLANCI

Madsen (1955) traced the history of the genus Acanthaster and compared the morphology of the Indo-West-Pacific species, A. planci, to that of its East-Pacific (American) relative, A. ellisii (Gray, 1840), concentrating on external features such as body-width to arm-length ratio, ventral and dorsal spines, pedicellariae and mouth plates.

Caso (1961) also compared the external morphologies of A. planci and A. ellisii, emphasising, as Madsen did, the importance of spines, pedicellariae and mouth (buccal) plates in distinguishing the two. She also named a new subspecies, A. ellisii pseudoplanci. In her 1970 paper, Caso confined her description solely to that of A. planci, once again concentrating on spines, pedicellariae and the buccal plates.

Blake (1979) described, or mentioned, most of the skeletal elements present in A. planci in his comparison of A. planci with members of the Oreasteridae and the Echinasteridae. According to Blake, the marginal ossicle series is "the key to the interpretation of these and other ossicle series" as the other series, i.e. the actinals and the abactinals, are recognised according to their position relative to the marginals. The terminology used by Blake was found to be satisfactory during the present study and has been retained wherever possible. For definitions of terms used the reader is referred to Spencer and Wright (1966).