

ABSTRACT

Part I contains a brief review of the literature on compounds isolated from marine organisms, many of which have been investigated pharmacologically.

Part II gives an account of chemical studies done in this laboratory on some marine invertebrate extracts. A comparative survey was made of the amino acids in the aqueous extracts of six animals. The sterol fractions of the organic extracts of two of the animals were examined and the major sterol identified.

In Part III a summary is given of a previous report (S.E.Thomas, M.Sc.Thesis, 1967) on the isolation and preliminary characterisation of the active substance from Arca zebra (Swainson). Further evidence leading to the establishment of the structure of Arcamine, the fish attracting substance from Arca zebra is described. During the investigation of the fish attracting substance, some amino acid derivatives were synthesized. A discussion of the relationship between structure and activity is also included.

The experimental work and relevant spectra are presented in Part IV.