INTRODUCTION

For the past 4 decades, marine organisms have provided natural products chemists with a remarkable source of novel secondary metabolites (Faulkner 2000, and reviews cited therein). Because these compounds are often structurally complex, or present at high concentrations, chemists generally assumed that secondary metabolites provided some ecological function, often without any observational or experimental evidence. At the same time, ecologists were observing patterns of the distributions of marine organisms, or direct interactions of predators and prey or of competitors, and often assuming that chemistry played a specific role. Beginning in the 1980s collaborations began between chemists and ecologists. They resulted in an increasing number of studies in which up-to-date techniques of chemical isolation and identification were paired with ecologically relevant laboratory and field experiments. Since then, marine chemical ecology has developed rapidly, as evidenced by the number of pertinent reviews (e.g. Bakus et al. 1986, Hay & Fenical 1988, 1996, Hay & Steinberg 1992, Paul 1992, Pawlik 1992, 1993, Fenical 1993, Hay 1996, McClintock & Baker 1997).

ACKNOWLEDGEMENTS

The 29th Annual Benthic Ecology Meeting was co-organized by J.R.P. and Martin Posey, with primary financial and logistical support from the North Carolina Sea Grant College Program and the University of North Carolina at Wilmington. Assistance in coordinating the Marine Chemical Ecology Symposium was provided by Greg McFall, Timothy Henkel, Sebastian Engel, Sarah Kelly, Will O’Neal, Kristen Whalen, and Dan Pisut. J.R.P. wishes to thank Professor Otto Kinne for agreeing to publish selected symposium papers in the form of a MEPS Theme Section.

LITERATURE CITED


Submitted: July 29, 2000; Accepted: August 15, 2000
Proofs received from author(s): September 13, 2000