# THE SCLERACTINIAN CORAL ARCHOHELIA LIVING ON THE COASTAL SHORES OF QUEENSLAND, AUSTRALIA

### JOHN W. WELLS

## Department of Geological Sciences, Cornell University, Ithaca, New York

and

# PHILIP N. ALDERSLADE Roche Research Institute of Marine Pharmacology, Inman Road, Dee Why, NSW

### SUMMARY

Live colonies of the oculinid genus *Archohelia* Vaughan, previously known only from the fossil records of the West Indies and Central and North America, have been discovered in shallow water off Rat Island on the coast of Central Queensland, Australia.

Archohelia rediviva n. sp. differs from the genotype A. limonensis in having the tertiary septa regularly fused to the six secondary septa. The small white colonies of A. rediviva with branches up to 10 cm long grow more or less erectly from thin encrusting bases. They occur in 3.5 metres of sheltered, turbid water by the shoreline of a rocky island having no fringing coral reef. The coral is subject to strong tidal currents and large changes in salinity.

There are no hints as to the provenance of this coral from the other occurrences of this genus or *Oculina* in Australia.

## INTRODUCTION

The oculinid genus *Archohelia* Vaughan, distinguished from *Oculina* only by the presence of a persistent axial corallite similar to that of *Acropora*, has been thought to be extinct. It has been previously known from the Upper Cretaceous of New Mexico, represented by a number of species in the Eocene of California, Barbados and the Gulf Coast region of the United States, by several species in the Oligocene of the Gulf Coast and the State of Washington, and made a last appearance in the Pliocene of Costa Rica, Florida and California (Durham, 1942; Hertlein and Grant, 1960; Vaughan, 1919, 1927, 1941; Wells, 1933, 1945).

That this genus is neither extinct nor perculiar to the Americas is evidenced by the surprising discovery by the junior author in 1974 of several living colonies of *Archohelia* at Rat Island, Gladstone Harbour, Queensland, the subject of this notice.

SYSTEMATIC ACCOUNT Order SCLERACTINIA Suborder FAVIINA Family OCULINIDAE Genus Archohelia Vaughan 1919

Type species — A. limonensis Vaughan 1919. Pliocene Costa Rica.

"Archohelia bdiffers from Oculina solely by having a persistent axial corallite, whereas in Oculina there is no axial corallite. Pali or paliform teeth are present on all but the last

Records of Australian Museum, 1979 Vol. 32 No. 5, 211-216. Figures 1-2