

Norris, J.N. 1975. Marine Algae of the Northern Gulf of California. Ph.D. Dissertation. University of California, Santa Barbara.

Seasonal collections have increased an understanding of the taxonomy, morphology and distribution of the benthic marine algae of the northern Gulf of California. Though the floristics of this region had been previously studied, by Setchell & Gardner (1924) and several reports by Dawson, little attention had been given to the seasonal changes of the marine flora. Many of the numerous diverse habitats had not been earlier visited. No collections by SCUBA diving, resulting in published accounts other than Norris (1972), had been made in the northern Gulf.

A research program carried out while the author was in residence in the Gulf of California enabled investigations to be conducted over extended periods of time. This permitted seasonal assessment of the marine flora. Extensive field surveys were made along the Gulf of California coasts of Baja California (San Felipe to Bahio de Las Animas) and Sonora (Puerto Peñasco to Bahía Kino). The Islas de la cintura (Midriff Islands) were studied during April 1974 while participating on the cruise of R/V DOLPHIN (Scripps Institution of Oceanography) to the northern Gulf. Studies were conducted in the intertidal and subtidal at selected study sites to 35 m depth where possible. These were surveyed at least once during each season. A large number of localities, including many previously unsurveyed, were reached by overland expeditions and by sea. Field collections were made from May 1972 to January 1975. Efforts were made to sample all green, brown and red algae present. Results obtained by the use of SCUBA equipment, enabling direct observation and collecting, has provided new information otherwise unobtainable.

There are currently 328 species (36 Chlorophyta; 37 Phaeophyta; 255 Rhodophyta) now recognized in the northern Gulf. As a result of this study, the marine flora has been substantially increased (by about 1/3). Several new nomenclatural combinations and new species are in the process of being described. Numerous distributional extensions and new records are given.