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﴿ وقل ربي زدني علماً ﴾

صدق الله العظيم

Microalgae as primary producers for fry feeding of some marine fishes.

Thesis

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(Botany)

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To

all my family with all my love

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AND AIM OF THE WORK

Introduction

Marine microalgae are mainly the floating microscopic plant component of the sea water which form the basic food of almost all the larval organisms, either crustaceans, molluscs or fishes. They are primary producers of any aquatic ecosystem and they belong to various classes of algae (Depauw & Parsons , 1989). The important components of microalgae are Diatoms, Dinoflagellates, silicoflagellates (phy-toflagellates), coccolithophores, blue green algae and the "hiddenflora" the Nannoplankters. Among these the diatoms and phytoflagellates are the significant organisms since, they form the primary link in the food chain of the aquatic system.

The success of any hatchery operation depends mainly on the availability of the basic food of microalgae (Gopinathan, 1996). The importance of these microalgae as the essential food of almost all the larval forms, the isolation, maintenance and mass culture of these organisms are a pre-requiste in the hatchery systems throughout the world. They are likely to be of great importance as the chief food of molluscan larvae, particularly in the initial stages. Oyster larvae can ingest noting larger than 10 microns and appear to rely for food on minute phytoflagellates excluding the diatoms (Gopinathan, 1984).