Morphology, Cultivation and Utilization of Sea Lettuce Seaweed

*Ulva rigida* C. Agardh, 1823

Suwanna Worasing*, Tawat Sriveerachai, Arun Srianun and Parkpoom Wongkang

Trat Coastal Aquaculture Station

Abstract

Study on morphology and cultivation of sea lettuce *Ulva rigida* C. Agardh, 1823 were conducted in Trat Coastal Aquaculture Station hatchery since January to November 2007. The experiments were planted in 3 cultured methods; cultivation in plastic basket in cement pond with roofs alternated between cement tile and plastic tile, *Plectropomus leopardus* Lacepède, 1802 earthen pond with plastic tile roofs and *Babylonia aereolata* Link, 1807 sand-bottom cement pond with roofs alternated between cement tile and plastic tile.

The morphology of sea lettuce was identified in green seaweed division Chlorophyta, class Chlorophyceae, order Ulvales and family Ulvaceae. Its characteristics were thallus membranous, composed of two layers of cells with each cell had a large cup-shaped chloroplast toward the exterior of the cell.

The sea lettuce cultivation at the salinity level 25 – 35 ppt designed on 3 patterns was found that cultivation in cement pond, *Plectropomus leopardus* earthen pond and *Babylonia aereolata* sand-bottom cement pond had average weight gains 2.45, 4.18 and 7.20 times of initial weights and the final densities of the productions were 0.414, 2.09 and 2.11 kilograms per square metre respectively.

The utilizations of sea lettuce were used for the human foods, organic fertilizers and water treatment in coastal cultured ponds.

**Key words:** morphology, cultivation, sea lettuce seaweed *Ulva rigida*

* Corresponding author: 205 Moo 2, Tambol Ao-yai, Muang District, Trat Province 23000

Tel. 0-3954-3334-5 e-mail: suwannaw@fisheries.go.th