THE EFFICIENCY OF SEAWEED *Acanthophora spicifera* (Vahl) Borgesen ON TREATING THE SEA WATER AND EFFLUENT FROM HATCHERY

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**ABSTRACT**

The efficiency of seaweed *Acanthophora spicifera* (Vahl) Borgesen on treating the sea water and effluent from hatchery of Trat Coastal Aquaculture Station was carried on 6 May – 5 June 2003. Sea water and the effluent from hatchery were treated by 10 liters 8 treatments and 3 replications. Treatment 1, no seaweed; treatment 2, 3, 4 used seaweed 0.1, 0.5 and 1.0 g/l. The efficiency of seaweed on reducing Nitrogen and Phosphorus from sea water and the effluent from hatchery, a density of 0.1 g/l was better than 0.5 and 1.0 g/l, respectively. Total ammonia nitrogen, nitrate, total nitrogen and phosphate of seaweed at 0.1 g/l in sea water and the effluent from hatchery could be treated at an average rate of 0.6575, 0.2220; 0.6654, 0.0829; 1.3229, 0.3050 and 0.2181, 0.1339 g/liter/day, respectively. Before treatment the amount of vibrio from plate count, total coliform bacteria and fecal coliform in the effluent from hatchery had high number more than in sea water. It was decreased within 2 and 3 days as the same as no seaweed. So that it should be treated bacteria in water by seaweed or storaged water for many days before use. The results show that seaweed can grow both of ADG and SGR in the effluent from hatchery better than sea water.

**Keywords:** Seaweed *Acanthophora spicifera* (Vahl) Borgesen, Treatment, Sea water, Effluent from hatchery