Thesis Title Experiment on rearing Penaeus monodon Fabricius by pellets mixed with crude extract from Vitex glabrata R.Br.

Name Saowapa Yenchit

Degree Master of Science (Technology of Environmental Management)

Thesis Supervisory Committee

Thanakorn Uan-on, D.Engr.

Rungjarat Hutacharoen, M.Sc.

Nimit Visutirungsiuri, Ph.D.

Leurchai Daroonchoo, M.Sc.

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ABSTRACT

The dietary hormone of Ecdysones have been extracted from Vitex glabrata R.Br. The amount of hormone was $2.4 * 10^{-4}$ g/g dried fruits. The Duration of stage molting, growth, growth rate, percentage survival and food conversion ratio of the P_{15} of Giant tiger prawn Penaeus monodon Fabricius were investigated. The Ecdysone levels of testing were 0.20, 0.25, and 0.30 mg/g diet, each with 3 replicates. The prawns of which the initial size of 1.33 cm in length and 8 mg in weight, were reared in 1.5 m diameter cement ponds for 500 liters of sea water with a stocking density of 2 shrimps per liter of sea water for 8 weeks. Temperature, salinity, pH, dissolved oxygen, ni-

trite and ammonia were analyzed to observe the change in water quality during the experiment.

After 8 weeks of feeding, the result showed that Interval or Duration of stage molting by Ecdysone 0.2 mg/g diet was reduced from normal molting of 3.0 days to 1.9 days. This confirmed that the molting was accelerated by diet containing Ecdysone. The optimum dose of Ecdysone was 0.2 mg/g diet giving the best growth rate and food conversion ratio. The percentage survival were not significantly different from feeding without hormone.