

Thanaporn Mangsang 2010: Seasonal Variation on Abundance and Distribution of Hydrilla (*Hydrilla verticillata*) in Phetchaburi River, Phetchaburi Province. Master of Science (Environmental Science), Major Field: Environmental Science, College of Environment. Thesis Advisor: Professor Wit Tarnchalanukit, Ph.D. 163 pages.

The study on Seasonal Variation on Abundance and Distribution of Hydrilla (*Hydrilla verticillata*) in Phetchaburi River, Phetchaburi Province was conducted during March 2008 to February 2009 by surveying at 10 proposed sampling stations. The results indicated that Hydrilla distributed only 4 stations. The average of dry weigh biomass in the rainy was 410.07 grams per square metres in the dry season was 248.09 grams per square metres and the total average was 1,424.30 grams per square metres. As for water qualities, the water temperature was 29.29 C°, pH was 7.68, dissolved oxygen was 5.63 mg/l, free-CO₂ was 7.47 mg/l, transparency was 0.55 m., water depth was 1.76 m., turbidity was 25.16 NTU, hardness was 125.85 mg/l as CaCO₃, salinity was 1.59 ppt, TKN was 1.39 mg/l, NH₃-N was 0.14 mg/l, NO₂-N was 0.60 mg/l, NO₃-N was 4.54 mg/l, ortho phosphate was 0.16 mg/l and total phosphorus was 0.27 mg/l. The water qualities as dissolved oxygen, free-CO₂, water depth, hardness, salinity, ortho phosphate and total phosphorus were significantly correlation with biomass of Hydrilla at the level of 0.05 and 0.01.

Student's signature

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