STUDY ON THE RELATIONSHIP BETWEEN RAZOR CLAM ABUNDANCE AND ENVIRONMENTAL CONDITION AT DON HOI LOD IN SAMUTSONGKRAM PROVINCE

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ABSTRACT

The study on the relationship between razor clam abundance and environmental condition at Don Hoi Lod in Samutsongkram Province aimed at studying the relationship of the razor clams abundance with the variation of biological and physical environmental factors at Don Hoi Lod in Samutsongkram province. Examination was conducted during January 1999 to December 2000. The result showed that water salinity, hardness, nitrate, phosphate and BOD in year 1999 were greater than year 2000 but ammonia and silicate in year 1999 were less than year 2000 (p<0.05). The soil quality examination showed that soil pH, the percentage of silt and clay in year 1999 were greater than year 2000, while the percentage of sand in year 1999 was less than in year 2000. However, there are significantly difference in razor clams abundance, weight, length and width between year 1999 and 2000 (p<0.05). Razor clams growth in year 2000 was greater than year 1999, while its density was less than year 1999.

The study on correlation of environmental factors and razor clams abundance showed moderately positive correlation between abundance and pH, while pH showed moderately negative correlation with weight (p<0.01). Nitrate and phosphate showed moderately positive correlation with abundance (p<0.01).

Key words: razor clam, Don Hoi Lod, Samutsongkram, Environmental condition