

SOMRIT SRISERMWONGSE : DEVELOPMENT OF WATER JET PUMP FOR SHRIMP CULTURE. THESIS ADVISOR : ASSO. PROF. WITHAYA YONGCHAREON, Ph.D., ASSO. PROF. KULTHORN SILAPABANLENG, Ph.D. 162 PP.

In Thailand, axial flow pump is widely used for moving salt water which contains young shrimps from sea to shrimp farms and from one well to another. However, it causes a large amount of dead shrimps.

The objective of studying the possibility of applying water jet pump to shrimp farms is to decrease a death rate in order to bring about a worthy and profitable outcome. The procedure of this research is divided into four parts. Firstly, the former research and relevant documents are studied. Secondly, a water jet pump is designed and built. Thirdly, the performance of water jet pump is evaluated. Finally, the selected size and type of water jet pump is experimented with young shrimps.

From the experiment, it was found that, for the different pressure head of 30 cm., the efficiency of the selected water jet pump achieved the highest value at 35%, its flow ratio achieved the highest value at 16, the suction flow rate reached the highest value at $61 \text{ m}^3/\text{hr.}$, the maximum overall efficiency is 6%, and the death rate of young shrimps was inconsiderable.