Identification of Best Management Practices' (BMP) to Medium and Small Scale Shrimp Farms to Minimize the Risk of White Spot Syndrome Virus Disease.

ABSTRACT

This study examines, both qualitatively and quantitatively, the motivation of small and medium scale shrimp farms operate in the North Western Province in Sri Lanka to adopt Best Management Practices (BMP) to minimize the risk of "white-spot viral disease". These BMP include techniques used to prepare the pond and related infrastructure, bio-security, larval, feed and water quality management, effluent discharge, and action plan for disease etc. It uses the primary data collected from 124 farms (small = 62; medium = 62) located in 6 different shrimp farming zones belong to the Puttalam district. A questionnaire-based survey was carried out with the owners and other technical officers of farms during the November 2005 – May 2006. The results based on an Additive Index, which used to develop and show the overall tendency of a farm to adopt a set of BMPs and results shows that medium-scale farms tend to adopt more BMPs', and case study on White Spot revealed three spread patterns during last crop and possibilities for case farms. Analysis points out that the current level of adoption of BMPs is not sufficient to manage the disease risk and to increase the farm performance. It is required to develop and introduce an appropriate set of BMP to all levels of the sector by regulatory agencies. Also, the awareness of farmers on the disease and its control measures should be increased and those who do not comply with such standards should be dealt with strict mandatory government regulation.

Key words: Additive Index (AI), Best Management Practices' (BMP), White Spot Disease.