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Shrimp farming practices in the northwestern coastal belt of Sri Lanka

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Abstract

Brackish water aquaculture in Sri Lanka has a short history and consists mainly of the culture of shrimp, which is almost entirely located along the North Western coast. The industry is facing problems due to diseases and proper information on management practices, which is in close relations with disease out-breaks are not available. This paper presents data collected from 62 farms. Most farms (58 %) have less than 5 ponds and most of these (67.7%) are < 0.004 km2 in size. All were of semi intensive culture system. Every farmer uses imported feed. The main water sources serving the industry are Chilaw, Mundala and Puttalam lagoons and the Dutch Canal. Most (80.6%) do not treat wastewater before disposing which leads to heavy pollution of the water sources. Most follow the recommended practices such as water exchange, aeration of ponds, maintaining pH values within 7.5-8.5, salinity levels between 10 – 35 ppt, turbidity levels of 25-35 cm secchi depth and liming of ponds. Very few apply urea and organic fertilizers to the ponds to enhance the algal growth. Very few are supplying vitamins to the shrimp. Many were attacked by White Spot disease and bacterial diseases such as black gill, soft-shell, tail rot and luminous disease. Most change pond water and use detergents, virucidals and lime as control measures. Very few use probiotics, antibiotics and chlorination. Proper planning for water usage and effluent discharge, improvements to the water bodies, studies to identify suitable feed formulations and effectiveness of various remedial measures are recommended.

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