

## Abstract

During the last decade, shrimp aquaculture has become a major sector of global fish farming in terms of space occupied and of market value. Narrow coastal belt of 120 km of Puttlam district in North Western Province facilitates for more than 90% of the shrimp farming in Sri Lanka. However in 1996 the industry was severely affected by White Spot Syndrome Virus. A questioner which consisted of 11 sections was used and 100 farmers which were experienced with disease in first season of 2011 in North Western Province were questioned. GPS locations were taken using GPS instrument. Results revealed that most of the farmers had good experience for shrimp culture, most of the farmers did farming in the first season and there was a little increment in farming in second season also. Most of the farmers preferred to obtain information from feed consultant and most preferred to attend training on disease prevention and identification. Most farms were visited by NAQDA and most farms extent to 1-5 ha. Dolomite was the most used lime type for shrimp farming and most of them used two paddle wheels per pond. Most of the farmers used stocking density of 50,000-100,000 of Post larvae per acre. Most farmers stocked PL age between 10–15 days. When considering bio security measurements all used organdie net for water filtration, bird lines and tea seed for fish treatment. Nearly 100% of farmers used killing method as crab treatment. Most farmers used one brand of feed type, feed four times per week and most measured pH as water quality parameter. pH between 7.5 and 8.5 was the favorable pH level for shrimps according to their knowledge. Only 3% experienced gill disease. Most of the farms were infected with disease after 60-90 days of culture. Most of the diseased shrimp were caught and sold by releasing water mainly to the Dutch canal. Starting from 2008 disease occurrence had increased rate until 2011. For Muthupanthiya, Udappuwa, Pinkattiya, Wattakkalliya, Madurankuliya, Karukupane, Karamba and Pulichchikulam areas disease spreading direction was unable to predict. In Thoduwawa and Ambakandawila area disease was spreaded to northern direction. In Puttlam area disease spreaded to western side.

**Key words:** WSSV, Puttlam District, Disease spread direction, Farmer culture practices, Farmer knowledge