

RECENT DISEASE INCIDENCE OBSERVED IN SHRIMP AQUACULTURE IN THE DUTCH CANAL AREA

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Shrimp aquaculture in the North western Province is strained by the White spot disease since 1996. Several precautionary methods taken to prevent the outbreaks of this disease have not been very successful. Prior to the outbreak of the disease several symptoms related to water quality and pond environment deterioration could be observed. These symptoms caused by bacteria, fungi, protozoans, or toxic effects of deteriorating environmental conditions receive very little attention at present. Therefore, the present study was carried out to study the disease incidences other than the white spot disease in shrimp farms situated along the Dutch canal. About 100 shrimp farms were used for the study.

The soft shell, black gills, fouling organisms on body, broken appendages and growth retardation were observed in 60 % of the farms. Mortality due to any of these reasons is considered as due to white spot disease by the farmers and immediate harvesting takes place. During the survey, alkalinity levels in the ponds were found to vary between 34 mg/l and 102 mg/l. Soft shell was recorded from 26 % of the farms where alkalinity levels were below 60 mg/l. Forty two percent of the farms reported growth retardation, 18 % reported algal crashes, 12 % reported black gills, and 7 % reported the occurrence of fouling organisms. Mortality due to high ammonia concentrations was recorded from 3 % of the farms and 45 % of the farms reported dead shrimp during early mornings. Although samples did not show any external symptoms of white spot disease, some samples indicated symptoms of low oxygen conditions. All these ponds were harvested immediately and reported as those affected by the white spot disease. During these disease incidences, ammonia level in the Dutch canal varied between 0.42 mg/l and 1.96 mg/l.

These results indicate that there is a need to pay more attention to the cause of mortality and environmental management in shrimp farms. It is also necessary to maintain correct records of data in order to revive the industry to its former levels.

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