

Chanos chanos was cultured in a 0.15 ha earthen pond. Five hundred juveniles of the size range 6.9-8.9 cm were stocked in late December 1981 and were harvested in early June. Fertilization of the pond was done using 50 kg of urea and 15 kg of T.S.P. initially. Subsequently 15 kg of urea and 3 kg of T.S.P. was added monthly. No supplementary feeding was done. Over the six month period fishes grew to an average weight of 176 g and to an average length of 29 cm with a survival rate of 74.8%.

Penaeus indicus was cultured in a 0.15 ha earthen pond. Five hundred juveniles of the size range 4.2-6.6 cm were stocked in late April and were harvested in early June. Fertilization was done using 50 kg of urea and 15 kg of T.S.P. No supplementary feeding was done. Over the period of 70 days prawns grew to an average weight of 18.9 g and to an average total length of 14.8 cm with a survival rate of 42%.

A STUDY OF SPOILAGE IN PRAWNS STORED IN ICE

A. Vairavamurthy

(Bureau of Ceylon Standards, Colombo 3)

Prawns of head-on and headless types were stored in ice and assessed for organoleptic quality and indole. Organoleptic quality was assessed using a 7-point hedonic scale, 7 being very good 1 very poor, by a panel of 6-9 judges. Indole content was analysed using the modified spectrophotometric method².

The organoleptic quality deteriorated significantly, after a period of about 16 days in ice, in both head-on and headless prawns. Although absorbance at 570nm was present, the visible absorption spectrum did not indicate the presence of pure indole in prawn extracts up to 15 days in ice. The absorbance, it was suggested, was due to some substance similar to "Apparent Indole" or "Indole reacting substance" reported in fresh oysters and clams¹. Spectrally confirmable indole was found to be associated with prawns of poor organoleptic quality. Indole content of more than 30µg/100g was shown to indicate organoleptically unacceptable quality, although presence of lower levels would not necessarily mean good quality. Organoleptic quality of head-on prawns appeared to deteriorate faster than headless samples during the storage period, possibly due to the increased enzymic activities present in the head-on prawns. The rosindole complex formed when Ehrlich's reagent was added to prawn extracts, showed changes in absorbance at 570nm after keeping overnight. This aspect needs further study as it might give some information on the nature of indole related substances formed in prawns.

References

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OCCURRENCE OF *CHAETOGASTER LIMNAEI LIMNAEI* (OLIGOCHAETA) IN THE GASTROPOD SNAIL *LYMNAEA PHILIPPINENSIS* NEVILL IN METRO MANILA, AND ITS POSSIBLE ROLE IN THE CONTROL OF FASCIOLIASIS

C. Dimatulac and L. Pinto

(Dept. of Biology, De La Salle University, Manila
Philippines)

The gastropod snail *Lymnaea philippinensis* in addition to being the secondary host of trematode larvae also harbors an oligochaete, *Chaetogaster limnaei limnaei*. Shigina (1970) found that *C. limnaei* actively fed on

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trematode larvae. But Basch and Altomar (1969) reported the penetration of *C. limnaei* by cercariae bringing about its destruction.

In this study it was found that *C. limnaei* with mucus as its food had a longer survival period than those with cercariae.

From 720 snails collected from 4 stations in Metro Manila during the period September 1981 to February 1982, a regression line of the number of *C. limnaei* per snail on the incidence of trematode infections was computerized and given as $Y = -2.731X + 3.855$. The percentage infestation of *C. limnaei* in snails ranged from 90% in Malabon to none in Las Pinas. Conversely, trematode infection was highest (25.6%) in Las Pinas and lowest (5.6%) in Malabon. The absence of *C. limnaei* in Las Pinas was related to the PO_4^{3-} and NO_3^- concentrations.

Regression of the number of *C. limnaei* per snail on the length of the snail gave the equation $Y = 0.088X + 2.249$. There was also a significant seasonal variation in the number of *C. limnaei* per snail.

Although *C. limnaei* was not an obligate predator, there was evidence that its presence arrested the incidence of trematode infection.

References

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