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Feeding behavior and food preference of *Penaeus monodon* Fabricius with scrap tilapia

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The experiment was conducted in the 600 m^2 rectangular reservoir pond originally stocked with 4,000 *Penaeus monodon* juveniles averaging 1.3 g BW to determine feeding behavior and food preference of prawn. Feeding of stock with scrap tilapia collected from adjacent ponds was done daily for 2.5 months. Three types of feed preparations were used: fresh, dried and fermented tilapia, chopped and wrapped loosely in plastic screens and placed as lures in traps.

Feeding in *P. monodon* took place at any hour irrespective of the normal daily fluctuations in physico-chemical parameters observed in this study. However, feeding activity could be related to light intensity (Figure 1). *P. monodon* seems to prefer shadowed portions so that the level of preference becomes deeper as light penetration increases during the day.

Table 1 shows the tendency of *P. monodon* to concentrate at the bottom of the pond during the day, reaching a significant difference (P 0.05 or at 0.05 probability level) from subsurface level during noontime. A decrease in the number of catch at the center of the pond at night was due to the increase in the movements of the animals from the center towards the dikes. Table 1 also shows a slight tendency of *P. monodon* to swim and feed towards the surface as dark periods approached. However, there was no significant difference obtained in depth-feeding between subsurface and bottom levels during early morning and late afternoon.

P. monodon showed a special preference for dried tilapia compared to fresh and fermented ones. Fermented tilapia was second over fresh, however, the result of attractability may not be valid for the first experiment due to a hole made by a crab in one of the traps.

Jumbo tiger prawns, though basically nocturnal in habit, do not always remain inactive by imbedding themselves in the pond bottom during the day. Feeding activity has also been

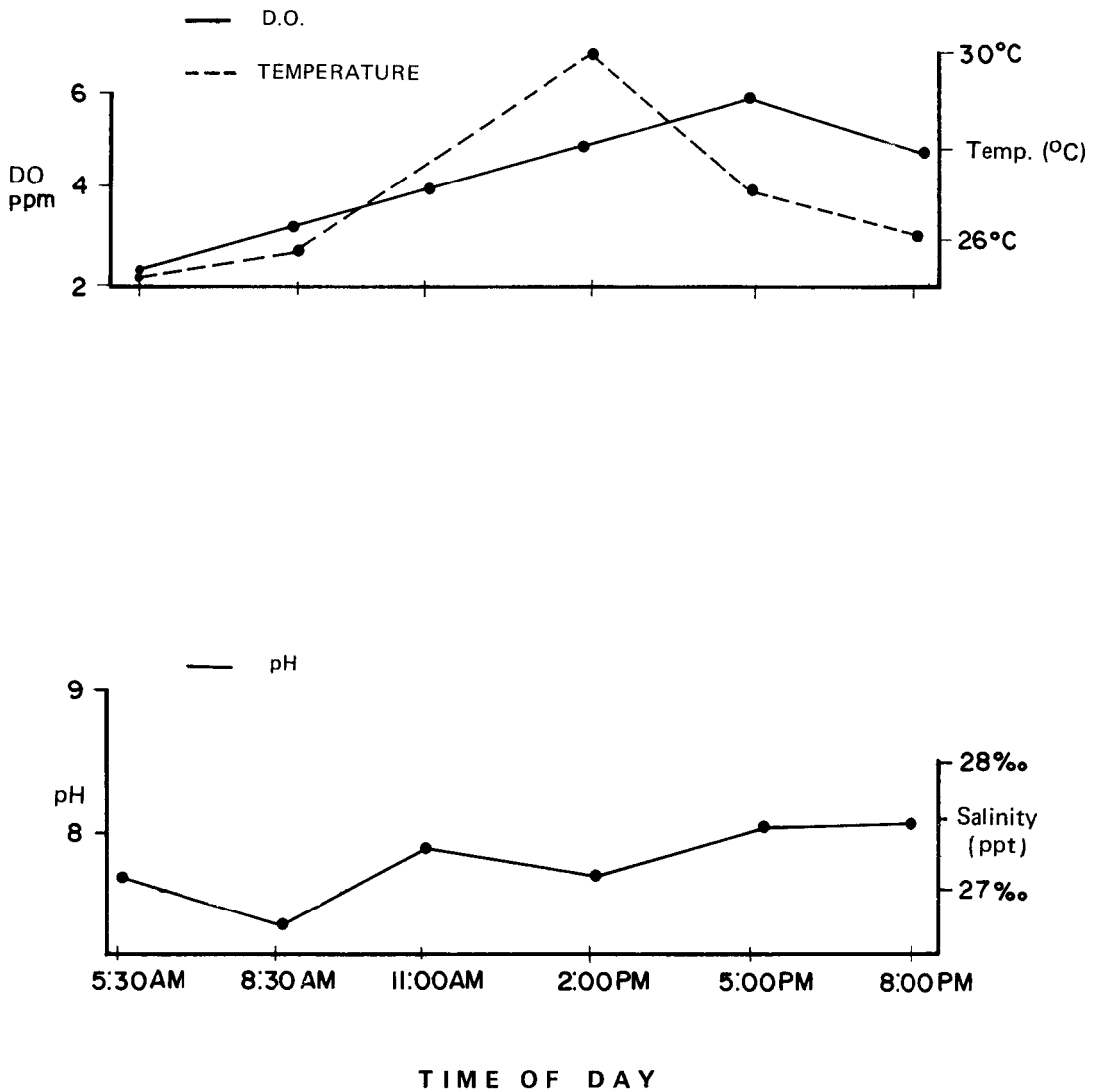

Figure 1. Variations of physico-chemical parameters in the reservoir pond.

observed to occur during the day with the presence of food even at the shallow portions of the pond. It is recommended that feeding of the stock be done during late afternoon along the periphery of the dikes where most of the prawns are concentrated.

Table 1. Average retrieval of *P. monodon* from trays per food preparation (fresh, dry, fermented) at both subsurface and bottom operated in early morning, at noon, and late in the afternoon.

Expt'l Run	Trays Position	Food Preparation (g) Fresh	Dry	Fermented	Mean
A = 5:30 –	Sub-surface	16.6	28.6	16	20.4
8:30 PM	Bottom	29.6	54.3	14	32.6
	Ave.	23.1	41.5	15	26.5
B = 11:00 –	Sub-surface	20.0	32.6	27.3	26.6
2:00 PM	Bottom	26.0	54.3	35.0	38.4
	Ave.	23.0	43.5	31.2	32.5
C = 5:00 –	Sub-surface	10.3	18.6	14.6	14.5
8:00 PM	Bottom	8.7	18.0	6.3	11.0
	Ave.	9.5	18.3	10.5	12.75