1979

# Catch composition of penaeid prawns caught with fish corrals at Batan Bay, Philippines

Motoh, Hiroshi

Aquaculture Department, Southeast Asian Fisheries Development Center

Motoh, H., Solis, N., & Caligdong, E. (1979). Catch composition of penaeid prawns caught with fish corrals at Batan Bay, Philippines. SEAFDEC Aquaculture Department Quarterly Research Report, 3(3), 18–19.

http://hdl.handle.net/10862/2355

# Catch composition of penaeid prawns caught with fish corrals at Batan Bay, Philippines

Hiroshi Motoh, Noel Solis and Edna Caligdong

To ascertain the different commercially important species and their seasonal abundance in fish corrals, a study was undertaken from June 1976 to December 1978.

Fish corrals, locally known as "baklad", located at the shore-water to about 5 meters deep at the mouth of Batan Bay were used. The fish corrals consist of several posts made of wooden poles or coconut trunks as supporters for the guide net (walling) which are made of split bamboo matting or sometimes synthetic materials with a mesh size of 7 x 12 mm, and one terminal compartment or cod-end made of split bamboo matting forming a square or rectangular cage with a dimension of about 6 feet, having a mesh size of 5 x 10 mm.

A total of 12 species were commercially caught: *Penaeus monodon, P. semisulcatus, P. merguiensis, P. indicus, P. latisulcatus, P. japonicus, P. canaliculatus, Metapenaeus ensis, M. endeavouri, M. dalli, M. elegans* and *Trachypenaeus fulvus*.

In 1976, *P. merguiensis* and *P. indicus* were combined as *P. merguiensis-indicus* in ignorance of the taxonomical differences between the two species. *P. merguiensis-indicus* was dominant in number, accounting for 39.9% of all individuals caught, followed by *M. ensis* (25.4%), *P. semisulcatus* (16.7%) and other species (18%). In respect to body weight, however, *P. monodon* predominated accounting for 38.2% of the total weight, followed by *P. merguiensis-indicus* (28.1%), *M. ensis* (12.1%) and other species (21.6%). The group consisting of *P. monodon, P. semisulcatus, P. merguiensis-indicus* and *M. ensis* combined occupied 91.6% in individuals and 94.9% in body weight of all species. *M. dalli* and *T. fulvus* were, however, least both in number and in body weight showing less than 0.5% respectively.

During 1977, the dominant species in number was *P. merguiensis* accounting for 28.1% followed by *M. ensis* (24.3%) and *P. monodon* (16.2%), while in body weight it was *P. monodon* (54.6%) followed by *P. merguiensis* (17.7%) and *P. semisulcatus, P. merguiensis* and *M. ensis* combined occupied 82.7% in number and 91.3% in body weight. The poorest species showing less than 0.2% in both number and body weight were *M. dalli* and *T. fulvus,* same as that for the previous year.

During 1978, the dominant species in number was *M. ensis* (37.2%), followed by *P. merguiensis* (30.0%) and *P. monodon* (9.1%), while in body weight it was *P. monodon* (40.1%) followed by *P. merguiensis* (25.6%) and *M. ensis* (13.5%). The group of *P. monodon, P. semisulcatus, P. merguiensis* and *M. ensis* combined occupied 83.4% in number and body weight showing less than 10% respectively.

*P. monodon* grew biggest among all penaeids caught, showing maximum carapace length of 59.7 mm in males and 75.5 mm in females. Next to *P. monodon* were *P. semisulcatus* and *P. latisulcatus* showing maximum carapace length of 44.1 and 47.9 mm respectively, while the smallest species was *M. dalli* with a maximum carapace length of 25.1 mm.

Peak occurrences of all species combined were June-July and November in 1976, July and October-November in 1977 and May-June and September-October in 1978. Least catch occurred on October in 1976, April in 1977 and January-February in 1978.

## REFERENCES


Chakraborty, D., M. Ramos and L. R. Bautista, 1978. Municipal Fishery Statistics in the Philippines. 1976.

Hildebrand, H. H. and G. Gunter, 1953. Correlation of rainfall with the Texas catch of white shrimp, *Penaeus setiferus* (LINNAEUS). Trans. Amer. Fish. Soc., 82: 151-155.

Kungvankij, P., S. Dangsakul, S. Sampakdee and C. Chirastit, 1973. A survey of the distribution and abundance of economically important shrimps along the Indian Ocean Coast of Thailand. Bull. Phuket Mar. Fish. Sta., Fish. Cont. No. 3.

Kunju, M. M., 1976. Observation on the prawn fishery of Mahakashtra Coast. Symposium of Crustacea, Part. IV: 1382-1397.

Menon, M. K. and K. Raman, 1961. Observations on the prawn fishery of the Cochin backwaters with special reference to the stake net catches. Indian J. Fish., 8: 1-23.

Shaikhmahmud, F. S. and V. B. Tembe, 1960. Study of Bombay prawns: The seasonal fluctuation and variation in abundance of the commercially important species of Bombay prawns with a brief note in their size, state of maturity and sex ratio. Indian J. Fish., 7 (1): 69-81.

Subrahmanyam, M., 1966. Fluctuations in prawn landings in the Godavari Estuarine system. Proc. Indo-Pacific Fish. Coun., 11 (II): 44-51.