

ABSTRACT

The fishery and some aspects of biology of Penaeid prawns in the west coast of Sri Lanka were studied in Negombo and Chilaw areas from January 1979 to January 1981. The catch, effort, species composition, recruitment, mortality, survival rates, morphometrics, maturity stages, growth, fecundity, spawning seasons and by-catch were investigated for commercially important Penaeid prawns with Penaeus indicus being selected for detailed study.

In this study, for convenience, the prawns were categorised under two groups, namely small prawns consisting of Metapenaeus dobsoni, Parapenaeopsis stylifera, Metapenaeus affinis, Metapenaeus ensis, Parapenaeopsis cornuta, and Caridina sp. and large prawns consisting of Penaeus indicus, Penaeus monodon, Penaeus semisulcatus, and Penaeus merguensis. Of the small prawns M. dobsoni and P. stylifera are the most dominant in the fishery, while P. indicus is the most abundant of the commercially important large Penaeid prawns. In Negombo the high catches were mainly of small prawns while in Chilaw large prawns of commercial importance constitute ^{considerably in} the main catch. P. indicus, P. monodon, M. dobsoni and P. stylifera were caught throughout the year while P. merguensis and P. semisulcatus showed erratic fluctuations in catches during certain months. The annual prawn production was estimated to be 158,296 kg in Negombo area and 133,053 kg in Chilaw area. The