STUDIES ON THE FISHERY OF FLYING FISH OFF NORTH-WESTERN COAST OF SRI LANKA I. EFFECT OF LUNAR PATTERN ON THE FISHERY

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In Kandakuliya of the Kalpitiya peninsula, a seasonal fishery for flying fish exists. The fishing operations are mainly carried out by 37 FRP boats, using gillnets of 3.4 cm and 4.5 cm stretch mesh sizes. The fishery was investigated from October 2002 to April 2003.

Total catch, effort and catch per unit effort (CPUE) showed seasonal variations. During the period of survey, the highest catch was in November 2002 while the lowest catch was reported in March 2003. Fishing effort was high in November 2002 and remained at a more or less steady level till February 2003. The mean CPUE varied from 102 ± 37.8 to 224 ± 82.7 kg boat^{-1} day^{-1}. Total production from this fishery during the study period, was calculated as 489.3 tonnes.

CPUE values recorded during the full moon periods were found to be significantly lower than those recorded during the new moon period and quarter moon periods ($P<0.0001$). As such, influence of lunar pattern on the fishery of flying fish should be considered in defining fisheries management strategies.