

Abstract :

The survey was conducted during 2010 and 2011 on the banana prawn stocks in Sirik to Dargahan in Strait of Hormoz. Samples were taken by bottom trawl boats monthly. Growth in the prawns (male and female) was allometric and length of maturity in female was 31.7 (mm CL). Spawning season was occurred in winter from Jan to March. Growth parameters ( $K$ ,  $L_{\infty}$ ) were  $1.6 \text{ y}^{-1}$  and 49 (mm CL) for female and  $1.9 \text{ y}^{-1}$  and 38 (mm CL) for male respectively. Instantaneous mortality rate ( $M$ ,  $F$  and  $Z$ ) calculated  $2.6$ ,  $1$  and  $3.6 \text{ y}^{-1}$  for female and  $3.1$ ,  $1.4$  and  $4.5 \text{ y}^{-1}$  for male respectively. Banana shrimp recruited at to fishing ground in Jun and Jul. Opening time for starting catch at 2010 was calculated at 28/09/2010 and total allowable catch was 1380 tones. At 2011 starting catch was calculated at 29/09/2011 and total allowable catch was 1480 tones. Time for end of catch season were estimated at 04/11/2010 and 21/11/2011 for each year. According to yield per recruit model, the best size of the banana prawn was 30 (mm CL) for female.

Key word: banana shrimp, *Penaeus merguinsis*, stock assessment, yield per recruit, Persian gulf and Oman sea.