Abstract

The preliminary study on breeding and nursing of western king prawn (*Penaeus latisculatus*, Kishinouye) was carried out during 1999-2000 at Krabi Coastal Aquaculture Station. Thirty-four females, with average TL (total length) 14.3±2.3 cm and weight 28.1±12.9 g, and thirty-one males, with average TL 12.2±0.8 cm and weight 17.5±3.3 g were collected from Saithai Coast, Krabi Province. Female broodstocks were induced by eyestalk ablation. Spawning activity occurred between 11:00 p.m. to 03:00 a.m. Fourteen spawners spawned and the number of eggs varied from 80,000 to 434,000 (0.32±0.03 mm in diameter). Fertilized eggs completely hatched in 11-12 hours. Hatching rate was 93.7% at temperature 30-31 °C and salinity 30 ppt. Larvae were nursed in 1,000 l fiberglass tanks with stocking density 100-110 larvae/l until PL4, after that moved to nurse in 12 tons cement tank with stocking density 50 larvae/l. Fertilized eggs developed to PL1 with in 8 days at temperature 30-31 °C and salinity 28-31 ppt. Shrimp in the zoea and mysis stage were fed *Skeletonema* sp. and artificial feed. Postlarvae were fed artemia and streamed egg. Survival rate from nauplius to PL18 was 55.0%.

**Key words:** western king prawn, breeding, nursing