The Assessment of Black Tiger Shrimp (*Penaeus monodon* Fabricius, 1798) Production from Community-Based Sea Ranching in Songkhla Lake

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Abstract

Community-based sea ranching is one of the activities in fishery resource restoration project in Songkhla Lake. The activity released 43.24 million of black tiger shrimp larvae (PL 15) into outer and inner Songkhla Lake during 2004 - 2005. After releasing for 4 months, artisanal fishermen caught 137,011 kg of black tiger shrimp at the average total length of 16.56 cm and weight 40.82 g or 24.76 shrimp/kg. The recapture rate was 7.83% while black tiger shrimp production per 1 million of released fry was 3,168.6 kg. The investment return rate was 792.2%. Moreover, the result revealed that the recapture rate highly depends on released fry and water salinity up to 95.5% ($r^2=0.955$). It is recommended that the salinity suitable for sea ranching activity should be more than 12 ppt. for black tiger shrimp in which resulted in the recapture rate of 4.73%.

Key words: Sea ranching, Black tiger shrimp

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