Economical selective species for culture in salted freshwater resources, IEAN

ABSTRACT:
Possibility culture of the white-legged shrimp *Litopenaeus vannamei* in 2 inland brackish water - and 3 sea water - ponds at Hormozgan province, IRAN was compared. DO, hardness, NO^{-2}, N, Ca and Fe of sea water and temperature, pH, salinity, alkalinity, ammonia & magnesium of brackish-water were lower compared to next other corresponding water resource. The stocking density was approximately 20000 (3/00±0/38 g average weight)/1000 m^2 ponds. The shrimps were fed with average 5% of wet body weight daily (maximum 7%, during the first half of cultured period and minimum 3% for the rest). Results revealed although the average survival rate was changed significantly, 68.35% and 87.64% in inland brackish and sea water ponds, respectively, the total harvesting shrimp biomass after 3 months were 2108 kg (individual BW average, 18.89±0.24 g) and 2300 kg (20.11±0.84 g individual average BW) in brackish water and sea water pond, respectively ($P>0.05$). The average FCR was 1.45 in brackish water ponds and 1.3 in sea water ponds($P<0.05$). Basing on the results it may be concluded that *Litopenaeus vannamei* can also be cultured in inland brackish waters and could be a good candidate replacement culturing of warm water fish in limited Iranian inland freshwater resources at present global change condition.

Key words: Shrimp production, brackish water, freshwater limitation, IRAN