Artificial propagation of Adriatic scorpionfish (Scorpaenidae) species

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Abstract
Artificial propagation of black scorpionfish (Scorpaena porcus) was successfully carried out in captivity. Broodfish were collected from the Adriatic Sea (Pula and Island Krk) in October, after the natural spawning season. Maturation stage of the gonads was determined using histological analysis. Broodfish were kept in two 700-L aquaria within a recirculation system and held under controlled conditions. Fish were stimulated to reach pre-ovulatory stage by weekly IP injections of common carp pituitary at 3mg.kg\(^{-1}\) and the specimens showing soft and swollen abdomen were induced to ovulate by 6mg.kg\(^{-1}\) CP. Frequency of ovulation and pGSI of the females were recorded. The mean pseudo gonado-somatic index (pGSI) reached 29\% and the average egg number per stripping ranged 5-6000. Dry fertilisation method was used. Fertilised eggs, floating on the water surface in gelatinous mass, were incubated in a fine net cage. Fry hatched out 53-59 hours post-fertilisation and began exogenous feeding three days after hatching at 20 °C. Female broodfish of the bigger relative species, largescaled scorpionfish (Scorpaena scrofa L.) were stimulated to ovulate also by the same method. The artificial propagation method functioning on the black scorpionfish could be adapted to the commercially valuable largescaled scorpionfish as well.

Key words: scorpionfish, Scorpaena porcus, Scorpaena scrofa sexual maturation, artificial propagation

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