

Scorpaena scrofa: A Promising Aquaculture Candidate for Sicilian Aquaculture

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Abstract

Scorpaena scrofa is a much appreciated species in the Mediterranean and Sicilian markets. The high quality of its meats, the excellent palatability and the high market value make this species a good candidate for the assessment on the new species farmed in aquaculture. In particular in Sicily was reported for the first time the natural spawning of *S. scrofa* kept in captivity at the experimental plant of Messina (IAMC-CNR). In my opinion, further experiments must be carried out, focused on: finding a suitable starting live food for red scorpion fish larvae, a suitable tanks environment to obtain a useful production of this important species.

Keywords: *Scorpaena scrofa*; Aquaculture; Innovative species

Introduction

The red scorpionfish, *Scorpaena scrofa*, is the most appreciated species among the scorpionfish in the Mediterranean and Sicilian markets and has a good potential of becoming a future candidate for marine aquaculture due to the high quality of its meat, the excellent palatability and the high market value. The species reach the sexual maturity respectively at 3 years for the females and 4 years for males [1]. The spawning period occurs from May to August and is characterized by multiple spawning events, the fertilization is external and the eggs are embedded in a gelatinous matrix [2]. In 2014 Maricchiolo et al. [3], thanks to the Research project PON02_3362185 "Innovaqua", reported the first case of spontaneous spawning of *S. scrofa* in captivity at the experimental plant of Messina (IAMC-CNR) obtained for a period comprised from 29 June to 18 July 2013 with 14 spawning events. Unfortunately, the lack of previous information on the mouth size and the impossibility of having living prey of suitable dimension did not allow us to continue beyond the sixth life day.

The management of red scorpionfish broodstock, is to be considered as a starting point to obtain spontaneous spawning in captivity and for future propagation technologies.

In my opinion, further experiments must be carried out, focused on: finding a suitable starting live food for red scorpion fish larvae, a suitable tanks environment to obtain a useful production of this important species.

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