Breeding biology of Eleutheronema tetradactylum (Shaw, 1804) from the Bay of Bengal, Indian Ocean

ABSTRACT

Berried females of Eleutheronema tetradactylum (Shaw, 1804) were collected from the fish landing center of Chittagong (Bay of Bengal, Indian Ocean) to estimate the maturity stages, gonadosomatic index (GSI), ova diameter, fecundity, breeding time and both the macroscopic and microscopic appearance. Data were collected for consecutive 12 months following seasonal pattern of pre-monsoon, monsoon and post-monsoon. Study revealed that E. tetradactylum double breeder and one was from February to March and another one was from July to August. The GSI was recorded within 1.04 to 18.33. The ova diameter was found ranging from 0.40 mm to 0.79 mm and highly related (r = 0.846, p<0.05) with mean GSI. Fecundity was observed 1005219.00 to 2091927.00, which showed high fecundity compared to other marine fishes. Fecundity of E. tetradactylum was not significantly related to the total body weight and length.

Keyword: Biology; Eleutheronema tetradactylum; Fecundity; GSI