

MATURITY AND FECUNDITY OF LIZARD FISH, *SAURIDA TUMBIL*, IN THE EAST AND THE SOUTH CHINA SEAS¹

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ABSTRACT

Studies on maturity and spawning of lizard fish, *Saurida tumbil*, are based on samples caught by the Taiwan bull trawlers operating in the southern part of the East China Sea (R2), the Taiwan Strait (R3), the northern part of the South China Sea (R4), and the Gulf of Tonkin (R5) from January 1970 to January 1972. The results obtained are summarized as follows:

1. The spawning season of R2 and R3 is from March to June, while that of R4 and R5 is from February to May.

2. Biological minimum of the female is estimated as 27 cm in R2 and R3, 28 cm in R4, and 29 cm in R5. While that of all the male is 25 cm.

3. Sex ratio $\left(\frac{\text{♀}}{\text{♀} + \text{♂}} \times 100 \right)$ increases with the growth of fork length, i.e., the greater the fork length the more females.

4. The relationship between fecundity (Y) and the fork length (X) in R2 and R3 is represented as:

$$Y = 0.0700X^{4.2114}$$

and that of R4 and R5 is represented as:

$$Y = 2.0830 X^{3.0219}$$

INTRODUCTION

The lizard fish, *Saurida tumbil*, is one of the most abundant catches of Taiwan trawl fisheries. According to its catch and effort statistics (Liu, 1973), the fish is widely distributed from the East China Sea along the mainland continental shelf to the South China Sea where the most productive regions are the southern part of the East China Sea and the Taiwan Strait.

Several works have been written on the spawning ecology of the fish from the East China Sea (Okada, 1955; Yamada, 1965; Yamada, 1968) and the Taiwan Strait (Liu and Tung, 1959). However, very few papers concerning the reproduction of the

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