THE FECUNDITY OF SKIPJACK TUNA (KATSUWONUS PELAMIS) FROM THE WESTERN INDIAN OCEAN.

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ABSTRACT

From 281 females with fork lengths ranging from 43 to 73 cm and ripe ovaries, the batch fecundity of skipjack tuna (Katsuwonus pelamis) from the western part of the Indian Ocean has been studied. Gilson's fluid, used as a preservative and dissociative agent for oocytes, has a strong and fast action (5 days) on the shrinkage of these oocytes. Counts made with a Dollfus box on sub-samples of dissociated oocytes show that, within a single sexual maturity period (February), the fecundity of skipjack tuna is the same whatever the geographic area: (Mozambique Channel and South of Seychelles Islands). On the other hand, although sexual activity is noted for skipjack tuna throughout the year, individual fecundity changes with the season within a single area. This individual batch fecundity changes from 80000 eggs for a 44-cm female caught along the northwestern coast of Madagascar to 1.25 million eggs for a large female (75 cm) caught around the Seychelles Islands. The corresponding relative batch fecundity varies from 40 to 130 eggs/g body weight. For this species, 4 successive spawnings per year have been estimated.

