

Population Biology of Squid *Loligo pealeii* in the Waters of Barru Regency, South Sulawesi

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Joeharnani Tresnati¹⁾, Achmar Mallawa¹⁾ dan Nuraeni L. Rapi²⁾

1) Faculty of Marine Science and Fisheries, Hasanuddin University

2) Postgraduate Program, Hasanuddin University

Abstarct

Squid is an economically important resource. Currently, squid populations, especially in the District Barru, were intensive exploited, that is feared to affect the population biology parameters. The study was conducted from February to April 2011. The sampling period was three times a week. The Samples were obtained using random collection from the fishermen catch using Rambo left net. Squid mantle length was measured to the nearest one mm. The parameters analyzed were age group, gonad maturity stage, growth, mortality, and exploitation rate. Squid population in Barru district consists of three age groups with the length of each mode of 51 mm, 98 mm, 133 mm for males, and 51 mm, 96 mm, 127 mm for females. The gonad maturity stage ranging from TKG I to IV for males and females, with the largest percentage of TKG TKG III (47.82% in males and 50.06% in females). The squid first maturity is reached at 94.3827 mm in long coat for males, and 59.6735 mm for females. Growth equation for males was $L_t = 227 \{1 - e^{-0.31(t + 0.30)}\}$ and females are $L_t = 196 \{1 - e^{-0.37(t + 0.26)}\}$. The total mortality rate (Z) is 1.59 for males and 1.63 for females. The natural mortality rate (M) is 0.20 for males and 0.57 for females. The capture mortality rate (F) is 1.39 for males and 1.06 for females. The highest CPUE values ??reached in 1999 was 0.0022 ton per trip, while the smallest CPUE values ??reached in 2001 was 0.0001 tons per year. The greatest catches could be ??reached with fishing effort of 50 000 trips with catches of 50 tonnes.

Keywords: Squid, CPUE, gonado matuity stage