Reproductive Biology Analysis of Mullet (*Mugil dussumieri*) Captured by Fixed Lift Net in Mangrove Ecosystem in Western Coastof South Sulawesi

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Abstract: South Sulawesi province covers a land area of $62,482.54$ km^2 and sea area of about $48,000$ km^2. This province has an abundant marine resources, successfully produced $247,173$ tonnes from fish capture activities in 2012[3]. Fixed lift net, is one of traditional and small-scale fishing gear, is long time-but-exist carried out by fishermen. This gear is often installed in an area adjacent to mangrove forests, aimed to capture small pelagic species, especielly mullet (*Mugil dussumieri*) – one of predominantly captured. This research examined the reproductive biology of mullet such as : length–weight relation, sex ratio, composition of catch, and proportion of mullet captured from mangrove ecosystem in one season. The results showed the allometric negative growthof mullet, indicated by length growth domination compared to weight growth. The sex ratio proportion indicated the male and female mullets of 55.37% and 45.27%, and reached total sexual maturity (LT100) at 750 and 186 mm total length (LT) for males and females respectively.

Keywords : reproductive biology, mullet, fixed lift net, mangrove ecosystem.

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