

**Marudu bay community-based geloina spp. Aquaculture management: enhancing sustainable consumption, livelihood and food security**

**ABSTRACT**

A simple way to determine if mud clams (*Geloina* spp.) are being overharvested is to observe the average shell size of the latest catch. Due to increasing demand and price for the bivalves has motivated the Sabah Fisheries Department to support mud clam aquaculture among the communities living close to mangrove areas. This study surveyed the quantity and size of mud clams collected from two locations in Kudat district from in January to March 2017. The mangroves at Kimihang is a natural area where locals collect mud clams while the aquaculture centre in Kampung Kopunadan is run by the community. The collected mud clams were grouped as small (< 50 mm), medium (50mm to 70 mm) and large (>70 mm). This study found that the outer mud clam shell size collected in Kampung Kopunadan is larger than the wild type from Kimihang. From the surveys and interviews, it is discovered that the majority of locals in Kimihang prefer to consume small clams while Kopunadan locals prefer large ones. The respondents who liked small clams said the flesh is easier to chew, while the ones who chose large-sized clams cited more quantity of flesh. Majority of the respondents are from the Rungus ethnic group, who are low-income earners depending on the fisheries sector as their livelihood. Development of sustainable mud clam aquaculture in Kudat will ensure food security and safeguard the welfare of the locals. Collectors should be encouraged to practise sustainable harvesting management by collecting large clams or venture into aquaculture