

**Impacts of Associated Fauna on Seagrass During The Conditioning Period In  
Husbandry Tanks: Gaya Island, Sabah, Malaysia Case Study**

**ABSTRACT**

Sustainability of seagrass restoration raised concern especially limitation and condition of donor seagrass meadows. To counter this, "gardening" approach can be applied by growing seagrass shoots asexually and sexually in a nursery facility. This study was carried out to identify the fauna species associated with seagrass in the husbandry tanks at Marine Ecology Research Centre (MERC), Gaya Island, Kota Kinabalu, Sabah, Malaysia. Associated fauna was identified to the lowest taxa, while their behaviour and potential impacts on seagrass growth were recorded weekly for 9 months (April 2016 to December 2016). Bite marks on the seagrass leaves were reconfirmed through isolation of fauna with seagrass leaves. Total of 18 species of fauna identified, mostly were mesograzers foraging on seagrass or epiphytic algae. Those are polychaeta, gammarid amphipod, sphaeromatid isopod, sea hares, nerites snails and greenspine sea urchin which left specific bite marks on the seagrass leaves. Also, there is discovery of boring bivalve residing inside the rhizome of the seagrass. Quarantine protocol should implement in the future nursery facility, by removing harmful organisms and introduce beneficial organisms as biological control, to ensure higher survival and growth of seagrass.