

The Effects of Siltation in Seagrass along Claver Surigao Del Norte

Authors : Dawn Rosarie M. Fajardo

Abstract : Seagrass plays a crucial role in sustaining marine ecosystem. In this investigation two areas (Panyug and Kinalablaban) were studied to assess the effect of siltation in seagrass condition. The size of the sediment was also examined. Data analysis showed that Panyug had higher level of silt compared to Kinalablaban. The results indicate that seagrass is vulnerable to environmental disturbances. The results also indicate that plants grown in undisturbed natural sediments were more successful than plants in sediments which were disturbed. In addition to that, there are total of seven species of seagrass that are found tolerant with siltation it includes *Enhalus acoroides*, *Cymodocea rotundata*, *Halophila minor*, *Halodule pinifolia*, *Halodule uninervis*, *Syringodium isoetifolium*, and *Thalassia hemprichii*. The results were given emphasis especially for the five representative quadrats in each area. Among these species of seagrass *Cymodocea rotundata* is the most tolerant to siltation. There is also no significant relationships between silt and seagrass percent cover which had $r^2 = 0.192$, Panyug and $r^2 = 0.145$, at Kinalablaban at $P > 0.05$. The data showed that Panyug (area 1) was characterized with high level of silt compared to that of Kinalablaban that contains more granulated sediments.

Keywords : seagrass, siltation, *cymodocea rotundata*, sediments, environmental issues

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