



***Heritiera fomes* (Buch-Hum) leaf litter decomposition of a newly emerged virgin deltaic Island (Nayachar) located on north eastern part of Midnapore coast of West Bengal, India.**

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Abstracts:

Litter fall and decomposition of *Heritiera fomes* (Buch-Hum) leaves were compared for different seasons and sites in Nayachar Island (Latitude 21°58'33" and longitude 88° 04'54"). *Heritiera fomes* (Buch-Hum) leaf litter decomposition was estimated using litter bags method. Seasonal changes and soil microarthropods abundance has an impact on the decomposition of mangrove leaf litter. This study analysed the influence of weather conditions on the decay rate, physio-chemical parameters and microarthropods population abundance as a decomposition indicator of leaf litter of *Heritiera fomes*(Buch-Hum). This study present the decomposition rate for *Heritiera fomes*(Buch-Hum) leaf litter throughout the year. It also quantifies soil microarthropods (Acarina, Collembola, Coleoptera, Hymenoptera, Isopoda etc) abundance and different value of Physico-chemical parameters throughout the decomposition process. Finally this study emphasizes that the different groups of soil microarthropods not only plays important role in litter decomposition. Simultaneously, they also plays important role in the nutrient cycling in the coastal environment.

Key words: Mangrove, Litter decomposition, Soil microarthropods.