ABSTRACT

(PRODUCTION AND DECOMPOSITION RATE OF MANGROVE (Rhizophora sp.) LITTER LEAF IN DURIAN VILLAGE AND BATU MENYAN VILLAGE PADANG CERMIN SUBDISTRICT PESAWARAN REGENCY)

By

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Mangrove litter leaf represent the organic substance supplier towards fertility of mangrove ecosystem, that able to support the mortal life within. The area of forest of mangrove represent the nursery ground, feeding ground, and area of spawning ground for various fish type, prawn and other biota sea and also as producer of amount of detritus for plankton as main foods source of the sea. The objectives of this research were to know production and decomposition rate of mangrove litter leaf in the mangrove ecosystem of Durian Village and Batu Menyan Village, Padang Cermin subdistrict, Pesawaran regency. Data was analysed by calculating the dry weight mean of litter leaf production and to counting decomposition rate was using the exponential rank function or from absolute decomposition percentage of litter leaf per day. This research was conducted in two place (station) based on the difference of subtrate characteristic. The research conducted from October to December 2013. The productivity of mangrove's litter leaf in both places is 0,56 g/m²/day, where the leaf organ gave the higgest contribution, (66%), stick and branch (14%), flower and fruit (20%). Decomposition rate of mangrove litter leaf showed that at the second station (0.20 g/hr) was faster than the first station (0.19 g/hr).

Keywords: Decomposition rate, litter leaf litter leaf, mangrove, production