ABSTRACT

MAULINA SEPTIARIE. The Growth Responses of Bakau (Rhizophora mucronata Lamk.) Seedling on Various Inundations of Level and Duration. Supervised by CECEP KUSMANA

Bakau (R. mucronata) represents the type of mangrove plant that growing in a group, located closely or in tidal area. Global warming affected the rise of sea-level brought the longer and deeper inundate of tidal water to mangrove zone. This research aims to analyze the tolerance of bakau seedling from various inundations level and duration. This research was conducted factorial 3 x 3 in Randomize Complete Design with the first treatment is the inundation duration (3-6, 6-9 and 12-15 hours) and the second treatment is the inundation level (until the root neck, between ¼-½ stem height and between ½-¾ stem height). Results of this research clearly showed that inundation duration bring significant effect to height growth and amount of internodes. Duration inundation treatment on 3-6 hours and 6-9 hours gave better responses than 12-15 hours.

Keywords: inundation duration, inundation level, Rhizophora mucronata