THE EFFECTS OF SOIL APPLICATION OF BIOFERTILIZERS ON THE EARLY GROWTH OF BEAUTY LEAF (*Calophyllum inophyllum* L.)

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ABSTRACT

Beauty leaf (*Calophyllum inophyllum* L.) is an emerging energy tree indigenous in the Philippines. This screen house study was carried-out to determine its early growth response to five biofertilizers namely Azotobacter, Bio Green, MyKo Vam, Vam Root Inoculant, and Bio N when compared with the Untreated -control. The experimental treatments were laid-out in a Randomized Complete Block Design, each replicated three times. The planting medium was a mixture of clean river sand and clay loam soil in 2:1 ratio and oven-sterilized at 80°C for 3 hours before sowing the shelled seeds. Results showed that plant height and root length are comparable in Azotobacter, Bio Green, MykoVam, and Vam Root but significantly different from Bio N and Untreated-control. All biofertilizers have comparable shoot dry matter weight but were significantly different from the Untreated–control. A significantly highest root dry weight was registered by Azotobacter over four other biofertilizers. Final leaf count, shoot base diameter, fresh shoot and root biomass, however, did not differ significantly among all treatments. Based on the results, Azotobacter, Bio Green, MyKoVam, and Vam Root Inoculant are potential biofertilizers for Beauty leaf under a screen house condition. A field study, however, is suggested for further performance evaluation of the materials.