

Effects of light intensity on *Orthosiphon stamineus* Benth. seedlings treated with different organic fertilizers.

ABSTRACT

The main objective of this study was to investigate the effects of varying light intensities and different organic fertilizers on the growth performance of *O. stamineus* seedlings through measurement of Relative Height Growth Rate (RHGR) and biomass production. Randomized Complete Block Design (RCBD) was used. *Orthosiphon stamineus* was arranged accordingly into three blocks or replicates. The three blocks represented the percentage light intensity. Block 1 (30% of light), Block 2 (50% of light) and Block 3 (100% of light). Each Block had four treatments and 25 plants of *O. stamineus*. The treatments were chicken dung, cow dung, oil palm empty fruit bunch (EFB) and control. The four treatments were arranged randomly in each block. Growth parameters measured were plant height, biomass (aerial portion, root biomass and total biomass within sixth month's period. The 50% Relative Light Intensity (RLI) was better than 30 and 100% RLI. The chicken dung is better than oil palm EFB and cow dung.

Keyword: Herb; Light; Growth; Biomass; Photosynthesis; Fertilizer.