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## **The influence of nutrient availability on the growth and morphology of *Chromolaena odorata* (siam weed)**

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Invasion success is more often influenced by the nutrient availability in the ecosystems. The growth and morphological responses of the invasive plant species, *Chromolaena odorata* (Siam weed; *Asteraceae*) was evaluated in three different nutrient conditions. The experimental conditions were addition of 1g (High) and 0.25g (Medium) of 20:20:20 N: P: K mixture per pot, once in a week and natural soil as the control without adding any nutrients. The experiment continued for 100 days with 6 replicates. Statistical analysis was done by using one way ANOVA method. At the end of the experiment period, high nutrient condition significantly ( $P > 0.05$ ) increased the biomass content of the plant (shoot and root dry mass, relative growth rate, specific root length). High nutrient treatment increased relative growth rate more than 73% compared to the control. In general, nutrient addition significantly increased the biomass content of a plant. We hypothesize that invasion and domination of *C. odorata* can be suppressed by minimizing nutrients accumulation in invaded ecosystem as one control mechanism.

Key words: Biomass allocation, *Chromolaenaodorata*, growth, invasion success

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