# Effects of different type of fertilizers on growth and physiology of MD2 pineapple

ABSTRACT

Study was conducted to evaluate the effects of two types of fertilizers (SRI and Kamila) on growth and physiological changes of MD2 pineapple. Results showed significant changes to the growth of the MD2 pineapple due to either use of soil with NPK or in combination. Application of NPK and SRI fertilizers showed the best performance on plant height and width from beginning until 10 weeks after treatment (WAT) while for leaf length fertilizer-Kamila combination showed the best performance until 10 WAT. Equally for the chlorophyll content, the treatment Kamila also showed the best performance at 6 MAT. Analysis of leaf of the pineapple plant showed that there was a decrease in nutrient content of most the elements in 3 MAT. But for nutrient analysis of soil, the outcomes showed that at 3 MAT the nutrients content increased especially in treatment of Kamila fertilizer combination. The nutrient contents of most of the elements were also very low from what has been expected, but the result of nutrient content in soil treated with Kamila - a controlled-release fertilizer showed a good result. Addition of controlled release fertilizer (Kamila) with SRI formulation showed positive improvement in the plant growth of pineapple variety MD2 compared to the plants without SRI formulation.

**Keyword:** Pineapple; Fertilizer; Field experiment; Physiological parameters