

**THE EFFECT APPLICATION OF LEAF FERTILIZER GANDASIL D
ON THE GROWTH AND YIELD OF
TOBACCO PLANTS (*Nicotiana tabacum* L.)**

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ABSTRACT

*Tobacco (*Nicotiana tabacum* L.) is one of the plantation crop commodities with high economic value and is widely cultivated in Indonesia. In tobacco cultivation, the availability and balance of nutrients greatly influence the physical and chemical quality of leaves, such as texture, color, and nicotine content. One of the main factors affecting the growth and productivity of tobacco is fertilization. The application of foliar fertilizer becomes an effective alternative strategy because it can increase nutrient uptake efficiency, especially in soil conditions that are less fertile or have high nutrient fixation. This study aims to determine the effect of Gandasil D foliar fertilizer on the growth and yield of tobacco plants (*Nicotiana tabacum* L.). This study was conducted at the Field Laboratory of Jember State Polytechnic in September-December 2025, the experimental design used in this study is (RAK) Non-Factorial with 4 treatments: P0 (control), P1 (2 g/l), P2 (4 g/l), and P3 (6 g/l). Parameters observed include plant height, stem diameter, number of leaves, leaf area and fresh leaf weight. The results show that Gandasil D fertilizer affects the growth of tobacco plants in stem diameter, leaf area, and fresh leaf weight of tobacco plants.*

Keywords: *Kasturi Tobacco, Foliar Fertilizer, Gandasil D*