

**THE EFFECT OF VARIOUS TYPES OF PLANTING MEDIA ON THE
GROWTH OF BUDSET SUGAR CANE SEEDLINGS (*Saccharum
officinarum* L.) VARIETY PS 862**

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ABSTRACT

This research aims to analyze the effect of various planting media on the growth of sugar cane budset (*Saccharum officinarum* L.) PS 862 varieties. The main problem in sugar cane breeding is the lack of standard planting media that supports optimal growth. The research was conducted at Jember State Polytechnic with a non-factorial Randomized Block Design (RAK) involving five planting media treatments: control (NPK), cow manure fertilizer, chicken manure fertilizer, goat manure fertilizer, and filter cake fertilizer, each mixed with soil. and sand (1:1:1). Parameters observed included seedling height, number of leaves, stem diameter, number of tillers, and root volume. The results of the analysis showed that the planting medium had a significant influence on the number of tillers, with goat manure (M3) producing the highest average number of tillers (5.24), followed by the control treatment (NPK) with an average of 5.04. Other parameters, namely seedling height, number of leaves, stem diameter and root volume, did not show significant differences between treatments. Goat manure has been proven to be effective because it contains balanced macronutrients such as nitrogen (N), phosphorus (P) and potassium (K), supporting optimal growth and development of seedlings. The conclusion of this research shows that goat dung fertilizer is the best planting medium to support the growth of the number of tillers in budset sugar cane seedlings of the PS 862 variety.

Keywords: sugarcane budset, planting media, seedling growth