Effect of Size of Bud Set Planting Material on Seed Growth of Sugarcane Plant (*Saccharum officinarum*)

HW Varieties

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**ABSTRACT**

Sugarance (*Saccharum officinarum L.*) is one of the largest sugarproducing plants belonging to the Graminae. Sugar is one of the basic necessities for the Indonesian population whose needs always increase from year to year in line with the increasing population. This study aims to determine the growth process of HW sugarcane bud set (*Saccharum officinarum L.*) in size of planting material. The research design used was a randomized block design (RBD), using one factor namely the size of the planting material consisting of 4 treatment (B1) was planting material measuring 5cm, the second treatment (B2) planting material measuring 10cm, the third treatment (B3) planting material measuring 15cm, the fourth treatment (B4) planting material measuring 20cm. The results showed that the size of the garden bud set had a very significant effect on the parameters of germination, seedling height and stem diameter, had a significant effect on the number of leaves, and had no effect on the number of tillers.

**Key words:** bud set size, growth, sugarcane seed