

**EFFICACY OF ATRAZINE AND MESOTRION HERBICIDE FOR WEED
CONTROL, AND THE EFFECT ON GROWTH AND YIELD OF SWEET
CORN (*Zea mays sacharata* Sturt.)**

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ABSTRACT

Sweet corn are planted in Indonesia because they have important, role as food. Cultivation of sweet corn in the tropics often experiences problems, one of them is the presence of weeds that can interfere the main crop. This study aims to determine the best dose of atrazine and mesotrion herbicides for controlling weeds and their effect on growth and yield of sweet corn. The experimental design used was a single factor Completely Randomized Block Design (RAKL): dose of herbicides with active ingredients of atrazine and mesotrion consisting of 5 levels : doses of 0.25 l a.i/ha, 0.5 l a.i/ha, 0.75 l a.i/ ha, 1 l a.i/ha and 1.5 l a.i/ha and mechanical weeding and control with 4 replicates. The data were analyzed using analysis of variance at the 5% level then if there is a significant effect then the data is tested further with the LSD (Least Significant Difference) at the 5% level. The results showed that the application of atrazine and mesotrion herbicide dose of 1.5 l a.i/ha was effective in controlling weeds with weed control efficiency at 4 WAP between 87.75% - 97.75%. The herbicide doses of atrazine and mesotrion 0.25 l a.i/ha were able to give higher yields on cob length, non-sticky cob length, cob weight, non-cob weight, cob weight per plot, and cob weight per hectare.

Keywords : Sweet Corn, Dose, Atrazin, Mesotrion