

**APPLICATION VARIOUS CONCENTRATIONS OF *Cyperus rotundus*
AND *Chromolaena odorata* EXTRACTS FOR WEED CONTROL AND
THEIR EFFECT ON SWEET CORN YIELD**

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ABSTRACT

Natural herbicides are an alternative to synthetic herbicides, because synthetic herbicides can have bad effects on plants and the environment. Natural herbicides derived from natural ingredients are considered more environmentally friendly. This research aims to determine the effect and best concentration of Natural herbicide from *Cyperus rotundus* tuber extract and *Chromolaena odorata* leaf extract to control weeds and their effect on sweet corn yields. This study used a single factor RAKL consisting of 8 treatments with 3 replications, that is 5% *C. rotundus* tuber extract, 10% *C. rotundus* tuber extract, 15% *C. rotundus* tuber extract, 5% *C. odorata* leaf extract, 10% *C. odorata* leaf extract, 15% *C. odorata* leaf extract, weeding, and control. The data obtained were analyzed using analysis of variance (ANOVA) at 5% level and then tested further with the BNT test at 5% level. The results showed that 15% *C. odorata* leaf extract was able to control weeds in sweet corn plantations with a weed efficiency value of 52,26%. 15% *C. odorata* leaf extract was not significantly different from weeding on dry weight of weeds, plant height, number of cob per plant, cob weight with husk per plant, cob weight with husk per hectare, cob weight without husk per plant, and cob weight without husk per hectare.

Keywords: *Sweet corn, Natural herbicide, Concentration, Weed extract*