

UNIVERSITI TEKNOLOGI MARA

**EFFECTIVENESS OF ORGANIC BASED
FORMULATION TO CONTROL OF
WEEDS IN PADDY**

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ABSTRACT

The studies were conducted in open space area at Jasin, Merlimau Melaka to evaluate effectiveness of formulation based on microbe and fertilizer from organic substance to control weedy rice and other weeds in the pot. The test were carried out using two types of formulation based on microbe bio-compose (Agroplus®) and (On Duty®). Also, study was carried out to investigate performance of organic adjuvant to control the distribution of weeds. Result indicates that evaluation on yield and panicle shows significant difference between treatment ($F = 15.326$, $P = 0.004$; $F = 22.4$, $P = 0.002$) respectively. Of this, both treatment in yield shows significant different when compared to the control while further investigate in panicle, (On Duty®) show significant different when compared to both (Agroplus®) and control. Result on controlling distribution and density of weeds shows a remarkable performance of organic adjuvant over the time period of 12 weeks application on paddy plant. Of this, organic adjuvant gradually reduces the density of weeds while Herbicide able to control and suppress weeds density successfully rapidly after application. In conclusion, although organic adjuvant proved has been potential to increase yield, panicle and reduce weeds over the time but herbicide is still needed at recommended application in order to increase yield and suppress weeds density.

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