

ABSTRACT

PARAQUAT DICHLORIDA EFFICACY ON CONTROLLING GENERAL WEED IN CASSAVA (*Manihot esculenta* Crantz.)

By

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Cassava (*Manihot esculenta* Crantz.) is a food crop because its product can be made into several food products. Cultivation is important to keep the quality of crop in a good condition. Weed management is important to keep the quality and yield of cassava because weed competes for absorption of nutrition, water, light, and growth the space. The objective of this study was to evaluate the efficacy of paraquat dichloride herbicide and the right dose of paraquat dichloride for controlling general weeds in cassava. The experiment was conducted in University of Lampung research site at Natar, South Lampung and Weed Science Laboratory University of Lampung. The experiment was performed in Randomize Block Design with 7 treatments and 4 replications. Treatments were paraquat dichloride at 414 g/ha, 552 g/ha, 690 g/ha, 828 g/ha, 966 g/ha, mechanical weeding and control (no weed control). The data were tested using Bartlett for homogeneity and Tukey test for additivity. If assumption were satisfied the data

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were analyzed using analysis of variance and means were separated using Least Significant Difference (LSD) at 5%. The results showed that paraquat dichloride herbicide at 414 g/ha–966 g/ha could be used to control weed total dry weight until 8 Week After Application (WAA). The herbicide at 414 g/ha–966 g/ha could also suppress broadleaf weed *Ipomoea triloba* and *Richardia brasiliensis* until 8 WAA and grass weed *Digitaria ciliaris* until 4 WAA. However, paraquat dichloride could not be used to control grass weed *Echinochloa colonum* from 2 WAA to 8 WAA.

Keywords : Cassava, *Digitaria ciliaris*, *Echinochloa colonum*, herbicide efficacy, *Ipomoea triloba*, paraquat dichloride, *Richardia brasiliensis*