

## **ABSTRACT**

### **THE EFFECT OF TILLAGE SYSTEM AND HERBICIDE ON SURFACE RUNOFF AND EROSION FOR CASSAVA CROP FIELD IN LABORATORIUM LAPANG TERPADU OF AGRICULTURE FACULTY UNIVERSITY OF LAMPUNG**

By

**M. KHORY ANDREAWAN**

Land degradation is a major factor in decreasing the productivity of the land. The most frequently land degradation occurred is due to surface runoff and erosion. One of the causes of the surface runoff and erosion is human treatment. Human treatment of the land can accelerate or reduce surface runoff and erosion. This study aims to determine the effect of both tillage systems and herbicide on surface runoff and erosion on crop cassava field in laboratorium lapang terpadu Agriculture Faculty, University of Lampung. The experiment was design as a factorial in randomized complete block design with four block. This experiment used multislot devicer method with size 4 x 4 meter. Treatment consists of two factors which are tillage system and herbicide. The results of this experiment indicate that tillage system did not affect surface runoff and erosion significantly and herbicide treatment increase surface runoff compare to treatment without herbicide, which is 32,8 mm and 24,6 mm, but did not significantly affect erosion.

Keywords : *Tillage, herbicide, run off, erosion*