

ABSTRACT

Afida, Lutfi Nur. 2011. **Flower buds Picking Influence on Growth and Yield of Cotton Plant On Some Accessions** (*Gosypium hirsutum* L.). Advisors: Suyono, MP, Advisor: Sujak, SP, Consultant: Dr.Dwi Adi Sunarto, MP, Advisor Religion: Ach. Nasichuddin, M.A

Keywords: flower buds, plant height, number of nodes, number of fruit, cotton (*Gosypium hirsutum* L.)

Fruit borer (*Helicoverpa armigera*), potentially reducing productivity up to 30-50% cotton. Control chemically created many environmental problems, such as pollution and increased resistance of pests to synthetic chemical insecticides. One of the solutions to these problems is the use of resistant varieties (resistant), as indeterminate cotton plants showed growth patterns that enable components to withstand the loss of production without losing the results significantly. In other words, the cotton crop is able to recover (recovery) and compensation after the damage caused by pests, which are also part of integrated pest management (IPM) on cotton. This study aims to determine the age of plucking flower buds influence on growth and productivity in several accessions of cotton plants (*Gosypium hirsutum* L.).

Research conducted at the experimental Karangploso, Research Institute for Tobacco and Fiber Crops in Malang from June to October 2010. The study plot was prepared in draft Divided (Split-Plot Design), which consists of 10 main plots and 4 subplots, with the 3 replication. The main plot is the 10 accessions of cotton and subplot was 4 (picking 40, 60, 80 HST. and control) when picking flower buds.

The result of analysis of variance (ANOVA) to variable plant height, number of nodes, number of flower buds and the number of boll formation obtained results $F_{count} > 0.05 F_{table}$ that H_0 was rejected. This indicates that there are significant plucking flower buds on the growth and productivity, but between the ages plucking with accession no interaction.