EFFICATION INSECTISIDE OF CITRONELLAGRASS OIL (Cymbpogon nardus) ON LOCUST GRASSHOPPERS (Locusta migratoria) IN CORN CROPS

Lia Lutfiyanti

Food Crops Production Technology Study Program
Department of Agricultural Production, State of Polytechnic Jember
Street. Mastrip Po. Box 164, Jember 68101

ABSTRACT

Corn (Zea mays L.) is the main food commodity after rice which has a strategic role, corn production in 2018 reached 30 tons per year and increased compared to the previous year. In corn cultivation, it is inseparable from constraints that can reduce yields, one of which is pest attack whose control tends to use synthetic pesticides where can causes insect resistance to insecticides and plant residues. Use of botanical pesticides can be an alternative choice in reducing the impact of pesticide residues, one of which is citronella oil. The results showed that citronella extract was effective in causing mortality up to 57.50% and causing a decrease in larval feeding activity reaching 79.25%. The result of this final project is that the citronella oil treatment has a significant effect on the percentage of locust mortality. The effective concentration in the field application is a concentration of 5000 ppm with an EI value of 80%. The yield of the citronella oil treatment was 3.83 tons/ha and the Deltamethrin treatment was 1.98 tons/ha. The correlation value was 0.09 in the citronella oil treatment and 0.06 in the Deltamethrin treatment

Keywords: Grasshopper Kembara, Maize, Oil Citronellagrass