

**EFFECTIVENESS OF LIQUID SMOKE FOOD AND COCONUT SHELL  
INSECTICIDES IN CONTROLLING GREEN LOSS PESTS (*Oxya  
chinensis*) IN RICE**

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***ABSTRACT***

One of the losses in rice crops in Indonesia is caused by locust attacks that can eat 30-50% of their body weight. Natural pest control alternatives can use natural insecticides in the form of liquid smoke. The purpose of this study was to determine the effectiveness of liquid smoke insecticide of coconut fronds and shells against *Oxya chinensis* pests. This research was conducted in the Plant Protection Laboratory and in the field of Jember State Polytechnic. The design used in this study consisted of 2 designs. The first design, a laboratory research design using the dip feed method. The second design was a field research design. This design was carried out by comparing two fields. The first field was treated with liquid smoke insecticide of coconut fronds and shells with 20% concentration. The second field was treated with synthetic insecticide made from Sipermetrin at a concentration of 2 ml/liter. The results showed that the treatment of liquid smoke insecticide of coconut fronds and shells produced significantly different effects on all observation variables. The population of green locusts (*Oxya chinensis*) in the treatment of liquid smoke insecticides and cipermetrin was significantly different at the observation of 45-66 HST. The intensity of attack of green locusts (*Oxya chinensis*) in the liquid smoke insecticide treatment was significantly higher at 45-66 HST observation than the sipermetrin treatment. The results of dry grain weight (GKS) and plant crown weight were significantly different in the liquid smoke insecticide treatment which was lower than the sipermetrin treatment.

***Keywords:*** Rice, *Oxya chinensis*, Liquid Smoke