

## ABSTRACT

### THE EFFECT OF SOME LEAF EXTRACTS ON THE DOWNY MILDEW DISEASE OF SWEET CORN (*Zea mays saccharata*)

By

Rara Ayu Sekarsari

One of the important disease of sweet corn is downy mildew caused by the fungus *Peronosclerospora maydis*. This research aimed to know the effect of some leaf extracts (*Elephantopus scaber*, *Azadirachta indica*, *Piper betle* and *Cymbopogon nardus*) to control downy mildew on sweet corn. This research has been done from May to June 2012 in Plant Protection Laboratory, Faculty of Agriculture, University of Lampung. The treatments in this experiment are arranged in Completely Randomized Design (CRD) with five replications. The treatments consisted of the control was sterilize water (P0), *E. scaber* leaf extract (P1), *A. indica* leaf extract (P2), *P. betle* leaf extract (P3), *C. nardus* leaf extract (P4), synthetic fungicide (P5). Variables observed in this reseach were the incidence of the disease, incubation time, height and plants dry weight. Observations were carried out every day for four weeks. The data were analyzed using the ANOVA and followed by Test Least Significant Different (LSD) on the real level 5%. The results showed all of leaf extracts effectively reduced the incidence of the downy mildew on sweet corn and leaf extract *C. nardus* showed better potential to reduce incidence of the downy mildew on sweet corn.

Key words: Downy mildew, leaf extract, *Peronosclerospora maydis*