

Effectiveness Of Bioinsecticide Mixture Of Papaya Leaf And Wedusan Leaf Using The Maceration Method On *Leptocorisa Oratorius* F. Pest In Rice

Supervised by Jumiatus, S.P., M.Sc

Choirun Nisaa'ur Rohmah
Study Program of Crops Production Technology
Department of Agricultural Production

ABSTRACT

Yield losses due to attacks by *Leptocorisa oratorius* F. pests can reach 50%. In its control, farmers tend to use synthetic pesticides which have a residual impact on the environment. Other control alternatives are needed, one of which is with bioinsecticides. This study aims to determine the effectiveness of the application of a mixture of papaya leaf and wedusan leaf bioinsecticides against *Leptocorisa oratorius* F. on rice plants. This research was conducted from September to November 2022 in a plant protection laboratory and on rice cultivation land in the Antirogo Village, Summersari District, Jember Regency. This study consisted of 2 stages, namely mortality and toxicity tests to determine the concentration to be used in the field. Mortality and toxicity tests used 6 treatment levels namely concentrations of 5%, 10%, 15%, 20% and 25%. The second phase of the study was a field test by comparing two treatments, namely the bioinsecticide treatment of a mixture of papaya leaf and wedusan leaf extracts with a concentration of 11% and the 2ml/l fipronil treatment. The results of the mortality and toxicity tests of a mixture of papaya leaf and wedusan leaf bioinsecticides on the imago *Leptocorisa oratorius* F. was 11%. The population of the pest *Leptocorisa oratorius* F on the bioinsecticide and fipronil treatments was not significantly different at 58-70 DAP. The intensity of attack by the *Leptocorisa oratorius* F.pest in the different bioinsecticide treatments was significantly higher at 58 DAP – 77 DAP observations compared to the fipronil treatment. The yields of dry paddy grain weight (GKS) and dry milled grain weight (GKG) were significantly different in the bioinsecticide treatment which was lower than in the fipronil treatment. However, the percentage of grain bernass was not significantly different.

Keywords: *Leptocorisa oratorius* F, insecticide mixture, fipronil