EFFECTIVENESS OF BIOINSECTICIDE MIXTURE EXTRACTS OF *(Cymbopogon nardus L* AND *Azadirachta indica* ON THE POPULATION AND INTENSITY OF PEST ATTACKS ON RICE PLANTS

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ABSTRACT

Rice damage due to *Leptocorisa oratorius* F. attack can reportedly reach 98.7%. Usually farmers control it by using synthetic pesticides which have residual impacts on the environment. Other control alternatives are needed, one of which is bioinsecticides. This research aims to determine the effectiveness of applying a mixture of *Cymbopogon nardus* L. and *Azadirachta indica* bioinsecticide to the population and intensity of *Leptocorisa oratorius* F attacks on Oryza Sativa plants. This research was conducted from June to September 2023 in a plant protection laboratory and on rice cultivation land in Dukuh Mencek Village, Sukorambi District, Jember Regency. This research consists of 2 stages, namely mortality and toxicity tests to determine the concentration that will be used in the field. Mortality and toxicity tests used 6 treatment levels, namely concentrations of 5%, 10%, 15%, 20% and 25%. The second stage of the research was a field test by comparing two treatments, namely a bioinsecticide treatment extract with a concentration of 15% and an imidacloprid treatment with a concentration of 0.25-1 ml/liter of water. The results of the mortality and toxicity test of bioinsecticides against the imago of the palm pest *Leptocorisa oratorius* F. were 15%. The population of Leptocorisa oratorius F. in the bioinsecticide treatment was 1.2 and imidacloprid was 1.3. The intensity of *Leptocorisa oratorius* F. attacks in different bioinsecticide treatments was significantly lower at 29.5 compared to the imidacloprid treatment at 34.7. The results of milled dry grain weight (GKG) were significantly different in the bioinsecticide treatment, which was 30.1 g/sample compared to the imidacloprid treatment, which was 24.8 g/sample

Keywords*: Bioinsecticide, Imidacloprid, Pest, Rice Bug*