

ABSTRACT

Muhimmah, Izzatul. 2014. The Effectiveness Test Leaf Extract Fragrant Pandan (*Pandanus amaryllifolius* Roxb.) As Vegetable Insecticides to Reduce Number of Flies During Drying Process Mackerel (*Rastrelliger kanagurta*) Asin. Thesis, Department of Biology, Science and Technology Faculty, State Islamic University (UIN) Maulana Malik Ibrahim Malang. Lector I: Dr.Hj.UlfaUtami, M.Sc. Lector II: Ach. Nashichuddin, M.Ag.

Keywords : fragrant pandan leaves, Mackerel, effectiveness, perch flies, insecticide.

Salted fish processing business is a major part of traditional fish processing business, especially in the winding village in Pasuruan regency. The problems that arise from traditional salted fish processing by drying using the sun, have one drawback presence hinggapan flies that can damage the salted fish products. So many anchovies managers using synthetic insecticides which can harm the health of consumers. The solution of this problem, among others, by replacing synthetic insecticides with plant-based insecticide ingredients such as fragrant pandan leaves (*Pandanus amaryllifolius* Roxb) are safe for consumers. Fragrant pandan leaf extract as an alternative in reducing the number of flies that settle and maggot growth during drying, so as to provide a positive influence in terms of health and quality of fish products. Fragrant pandan leaves contain compounds such as alkaloids, saponins, flavonoids, tannins, polyphenols, dyes, and essential oils. This study aims to determine the effectiveness of the use of extracts fragrant pandan leaves (*Pandanus amaryllifolius* Roxb) in reducing the number of flies and maggots growth during the drying process salted mackerel, and the effect of the fragrant pandan leaf extract protein content of salted mackerel.

This research was conducted in the village of Pasuruan winding and protein analysis carried out in the Laboratory of the Department of Biology, University of Muhammadiyah Malang (UMM), in the month of March to June 2014. Research using completely randomized design (CRD) with five treatments, namely variations in the concentration of 0%, 2.5% , 5%, 7.5%, 10%, 12.5%, and 3 replications. The data were analyzed using ANOVA followed by Least Significant Difference test (LSD).

The results showed that the leaf extract fragrant pandan (*Pandanus amaryllifolius* Roxb) can effectively reduce the number of flies that settle on drying salted mackerel. And the fragrant pandan leaf extract has the potential to reduce the growth of maggots to fish with inhibitory concentration 10% power at 92%. And the fragrant pandan leaf extract effect on the protein content in salted mackerel. so as to provide value organoleptic taste better than the organoleptic value of color, aroma, and texture.