Pengaruh Pemberian Minyak Atsiri Terhadap Mortalitas Hama Gudang (Sitophilus zeamais) dan Viabilitas Benih Jagung. Effect of giving essential oil to m pest warehouse mortality (Sitophilus zeamais) and maize seed viability. Supervisor Ir. Sri Rahayu, MP.

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ABSTRACT

Corn seeds (Zea mays L) often suffer damage in the storage process caused by warehouse pests. Warehouse pests that attack corn seeds are pests of Sitophilus zeamais. Attacks of this pest cause perforated seeds, quickly rupture and crumble into flour. One alternative way of controlling warehouse pests is to use botanical insecticides. Essential oils contain active compounds used for insecticides and their properties are capable of killing, repelling and inhibiting the live development of warehouse pests. This research was conducted from March to April 2019, located at State Polytechnic Jember. This research used a nonfactorial Completely Randomized Design (CRD) with 4 treatments, no treatment (M0), fragrant lemongrass (M1) 10ml, cloves (M2) 10ml and orange leaves (M3)10ml with 5 replications. The data was analysed by using analysis of variance and will be continued by Least Significance Different (LSD). The results showed very real different results on the parameters of total pest mortality and the percentage of damaged seeds and gave noticeable different results on the parameters of seed weight loss. The treatment of lemongrass essential oil (M1) shows the highest pest mortality yield of 90%, the lowest percentage of damaged seeds by 1.17% and the loss of seed weight by 0.78%.

Keywords: Corn, Pest Warehouse, Essential Oil