

INTISARI

Salah satu hama pasca panen yang merusak benih kedelai adalah *Callosobrochus chinensis* L. kerusakan biji kedelai akibat serangan *Callosobrochus chinensis* dapat mencapai 70%, mengingat besarnya presentase kerusakan yang dirimbulkan maka perlu dilakukan pengendalian. Daun sirsak dan sereh wangi termasuk tanaman yang potensial sebagai sumber bahan baku pestisida nabati, karena mengandung berbagai senyawa aktif. Tujuan dari penelitian ini adalah untuk mengetahui efektifitas dari pestisida nabati ekstrak daun sirsak dan sereh wangi terhadap hama *Callosobrochus chinensis* pada penyimpanan benih kedelai. Penelitian ini dilaksanakan pada bulan Maret-Juni 2021 di Laboratorium Agronomi, Fakultas Agroindustri, Universitas Mercu Buana Yogyakarta.. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) faktorial 2 faktor dengan 2 kontrol. Faktor pertama adalah jenis bahan dasar pestisida nabati, faktor yang kedua yaitu konsentrasi pestisida nabati. Kombinasi perlakuan yang digunakan adalah sereh wangi 10% (K1B1), sereh wangi 15% (K2B1), sereh wangi 25% (K3B1), daun sirsak 10% (K1B2), daun sirsak 15% (K2B2), daun sirsak 25% (K3B2), Kontrol (K0), dan acetone (AC) .Setiap perlakuan diulang sebanyak 4 kali. Dari penelitian yang telah dilakukan diketahui Pestisida nabati daun sirsak dan sereh wangi dapat menyebabkan antifeedent, repelensi, mortalitas dan menekan populasi *Callosobrochus chinensis*. Jenis pestisida nabati daun sirsak lebih baik daripada sereh wangi dalam menekan perkembangbiakkan *Callosobrochus chinensis* dan mempertahankan mutu benih kedelai selama penyimpanan 3 bulan. Kombinasi perlakuan jenis pestisida dan konsentrasi yang berbeda tidak terdapat interaksi. Konsentrasi pestisida nabati sereh wangi dan daun sirsak 10%, 15% dan 25% tidak memberikan perbedaan terhadap pengendalian *Callosobrochus chinensis* maupun mutu benih kedelai selama penyimpanan 3 bulan.

Kata kunci: *Callosobrochus chinensis*, daun sirsak, kedelai, konsentrasi sereh wangi.

ABSTRACT

One of the post-damaging pests of soybean seeds is Callosobrochus chinensis L. Damage to soybean seeds due to Callosobrochus chinensis attack can reach 70%, considering the large percentage of damage caused, it is necessary to control it. Soursop leaves and citronella are plants that have potential as sources of raw materials for vegetable pesticides, because they contain various active compounds. The purpose of this study was to determine the effectiveness of Biopesticide extracts from soursop leaves and citronella grass against Callosobruchus chinensis pests in soybean seed storage. This research was conducted in March-June 2021 at the Agronomy Laboratory, Agrotechnology Study Program, Faculty of Agroindustry, Yogyakarta Mercu Buana University. This study used a 2 factor factorial Completely Randomized Design (CRD) with 2 controls. The first factor is the type of vegetable pesticide base material, the second factor is the concentration of vegetable pesticides. The combination of treatments used were citronella 10% (K1B1), citronella 15% (K2B1), citronella fragrant 25% (K3B1), soursop leaves 10% (K1B2), soursop leaves 15% (K2B2), soursop leaves 25% (K3B2), Control (K0), and acetone (AC). Each treatment was repeated 4 times. From the research that has been done, it is known that vegetable pesticides from soursop leaves and citronella can cause anti-feeding, repellency, mortality and suppress the population of Callosobrochus chinensis. Soursop leaf vegetable pesticides were better than citronella in suppressing the proliferation of Callosobrochus chinensis and maintaining the quality of soybean seeds for 3 months storage. The combination of pesticide treatment and different concentrations did not show any interaction. The concentration of citronella and soursop leaf pesticides 10%, 15% and 25% did not make any difference to the control of Callosobrochus chinensis and the quality of soybean seeds during 3 months storage.

Keywords : *Callosobrochus chinensis, citronella grass, soursop leaves*