

RINGKASAN

Penelitian ini dilaksanakan di Rumah Kassa Fakultas Pertanian Universitas Islam Sumatera Utara, Gedung Johor, Medan. Penelitian dilaksanakan bulan Maret hingga September 2019.

Tujuan Penelitian untuk mengetahui pengaruh konsentrasi ekstrak kasar lengkuas (*A. galanga*) terhadap hama penghisap polong (*N. viridula*) pada kedelai.

Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) Non Faktorial dengan perlakuan pemberian ekstrak kasar lengkuas (*A. galanga*) yang diperoleh dengan *Soxhlet Extractor* dan diaplikasikan dengan empat taraf perlakuan yaitu K0 = 0% (Kontrol), K1 = 0,125%, K2 = 0,25%, dan K3 = 0,5% dilakukan masing – masing terhadap *N. viridula* pada tanaman kedelai. Data yang diamati adalah mortalitas, persentase kerusakan dan produksi.

Hasil penelitian menunjukkan bahwa aplikasi menggunakan ekstrak kasar lengkuas (*A. galanga*) dengan konsentrasi (0,5 %) dan (0,25 %) berpengaruh nyata terhadap mortalitas hama penghisap polong kedelai 100% pada 5 HSA. Aplikasi ekstrak kasar lengkuas (*A. galanga*) mempengaruhi konsentrasi *N. viridula*, pada persentase polong hampa, persentase polong hama, persentase polong terserang, biji terserang, produksi biji kedelai. Aplikasi ekstrak lengkuas berpengaruh nyata terhadap persentase kerusakan polong kedelai, juga berpengaruh nyata terhadap produksi tanaman kedelai.

Kata kunci : *N. viridula*, Insektisida botani, *A. galanga*, Kerusakan polong dan Produksi.

SUMMARY

This research was conducted at the Greenhouse of the Faculty of Agriculture, Islamic University of North Sumatra, Gedung Johor, Medan. The research was conducted from March to September 2019.

The purpose of this study was to determine the effect of the concentration of galangal (*A. galanga*) crude extract on pod sucking (*N. viridula*) pests on soybeans.

This study used a non factorial randomized block design with the treatment of galangal (*A. galanga*) crude extract obtained with Soxhlet Extractor and applied with four levels of treatment namely K0 = 0% (Control), K1 = 0.125%, K2 = 0.25%, and K3 = 0.5% were carried out respectively on *N. viridula* on soybean plants. Data observed were mortality, percentage of damage and production.

The results showed that the application using crude galangal (*A. galanga*) extract with concentrations (0.5%) and (0.25%) significantly affected the mortality of 100% soybean pod sucking pests at 5 HSA. Application of galangal (*A. galanga*) crude extract affects the concentration of *N. viridula*, on the percentage of empty pods, percentage of pest pods, percentage of pods attacked, seed attacked, soybean seed production. Application of galangal extract significantly affected the percentage of soybean pod damage, also significantly affected soybean crop production.

Keywords : *N. viridula*, Botanical insecticide, *A. galanga*, pod damage and production.