

PENGHAMBATAN AKTIVITAS PENELURAN KUMBANG KACANG HIJAU CALLOSOBRUCHUS CHINENSIS L. (COLEOPTERA: BRUCHIDAE) OLEH EXTRAK SPULUH SPESIES TUMBUHAN

ABSTRACT

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Oviposition Deterrence of Bean Weevil, *Callosobruchus chinensis* L. (Coleoptera: Bruchidae) Treated with Ten Plant Extracts. Pest and Diseases attack agricultural products not only in the field but also in storehouse. Their attack causes decreasing both quantity and quality of stored materials. One of important stored product insect pests is *Callosobruchus chinensis* L. (Coleoptera: Bruchidae). Till now the effective strategy to control this insect pest is chemical control by using synthetic insecticides. The improper use of synthetic insecticides causes some undesirable effects, so alternative strategies should be searched to control insect pests in storehouse. One of the alternatives is by using plant materials as insect pest control agents. The aim of this study was to find out the oviposition deterrence of *C. chinensis* treated with ten plants which were extracted with methanol, hexane, and ether. Oviposition deterrence was evaluated by choice and no-choice methods at 1, 3, and 5% of extract concentration. Extracts of *Acorus calamus* (methanol), *A. calamus* (hexane), *A. calamus* (ether), *Illicium verum* (ether), *Pogostemon cablin* (hexane), *P. cablin* (ether), *Vetiveria zizanioides* (hexane), and *V. zizanioides* (ether) were able to deter oviposition activity of *C. chinensis* by more than 90% of deterrence. Further study should be conducted to isolate and identify the active compound and to make botanical insecticide formulations for practical use as a commercial product.