

Aktivitas Minyak dan Serbuk Enam Spesies Tumbuhan terhadap Peneluran dan Mortalitas *Callosobruchus* sp. (Coleoptera: Bruchidae)

DADANG¹⁾, BUDI SAPUTRO¹⁾, DAN KANJU OHSAWA²⁾

¹⁾Departemen Proteksi Tanaman, Fakultas Pertanian, Institut Pertanian Bogor
Jl. Kamper, Kampus Darmaga, IPB, Bogor

²⁾Departement of Boi-Science, Faculty of Applied Bio-Science, Tokyo University of Agriculture

ABSTRACT

Activity of Oil and Powder of Six Plant Species against Mortality and Oviposition of *Callosobruchus* sp. (Coleoptera: Bruchidae). Storage pests remain one of the main problems in storage. The pest attacks occur not only in the field, but also in storage. Control should be done to maintain the quality of stored-products. The environmentally friendly measures should be implemented to avoid negative impacts to the environment and human being. The objective of this research was to study the mortality and oviposition deterrence caused by powder and oil of six plant species against *Callosobruchus* sp. (Coleoptera: Bruchidae). Flowers of *Eugenia aromatica*, roots of *Vetiveria zizanioides*, leaves of *Pogostemon cablin*, seeds of *Ricinus communis*, seeds of *Foeniculum vulgare*, and stems of *Cymbopogon citratus* were air-dried and milled to yield powder. Oil of six plant species were purchased from local market. Oviposition deterrent bioassay was conducted by no-choice method for both powder and oil, while mortality bioassay was conducted by topical application and residual methods for plant oil only. Several plant species showed high biological activity to *Callosobruchus* sp. Powder of *E. aromatica* and oil of *V. zizanioides* caused high oviposition deterrence, while oil of *V. zizanioides* and *E. aromatica* caused high mortality.

KEY WORDS: *Callosobruchus* sp., mortality, oviposition deterrence, plant oil, plant powder