

③ B1 = 15

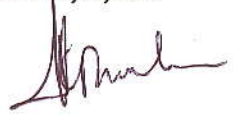
The Compatibility of *Aglaia odorata* Lour (Meliaceae) Extract Formulation with the Use of *Trichogramma* spp. (Hymenoptera: Trichogrammatidae) in Controlling *Crocidolomia pavonana* F. (Lepidoptera: Pyralidae)

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ABSTRAK

Kompatibilitas formulasi ekstrak *Aglaia odorata* Lour (Meliaceae) dengan penggunaan *Trichogramma* spp. (Hymenoptera: Trichogrammatidae) dalam pengendalian *Crocidolomia pavonana* F. (Lepidoptera: Pyralidae)

Ekstrak *Aglaia odorata* efektif terhadap larva beberapa spesies serangga hama tetapi relatif aman terhadap parasitoid tertentu. Namun, potensi formulasinya belum pernah diteliti terhadap interaksi inang dengan parasitoid telur. Penelitian ini bertujuan untuk mengevaluasi kompatibilitas ekstrak daun dan ranting *A. odorata* dengan parasitoid telur *Trichogramma* spp. dalam pengendalian *C. pavonana*. Hasil penelitian menunjukkan bahwa formulasi 15 EC dan 15 WP ekstrak daun dan ranting *A. odorata* relatif tidak menurunkan parasitisasi *Trichogramma* spp. pada telur *C. pavonana*. Tingkat parasitisasi *Trichogramma* spp. berkisar 10–20% dan kemunculan parasitoid mencapai 20% dengan umur koloni yang lebih lama. Potensi formulasi insektisida ekstrak *A. odorata* tersebut sebanding dengan insektisida mikrob berbahan aktif *Bacillus thuringiensis* dengan pengaruh yang lebih baik terhadap parasitoid dibanding insektisida sintesis berbahan aktif profenofos. Dengan demikian, formulasi EC dan WP ekstrak *A. odorata* kompatibel dengan parasitoid telur *Trichogramma* spp. dalam pengendalian hayati *C. pavonana*.

Kata kunci: *Aglaia odorata*, formulasi, kompatibilitas, *Trichogramma* spp., *Crocidolomia pavonana*

ABSTRACT

The extract of *Aglaia odorata* is effective against several insect pest larvae but relatively safe to parasitoid. However, the potency of its formulation has never been studied on interaction of host with egg parasitoid. The research was conducted to evaluate the compatibility of *A. odorata* leaves and twigs extract formulation with the use of egg parasitoid *Trichogramma* spp. in controlling *C. pavonana*. The results indicated that the *A. odorata* extract 15 EC and 15 WP formulations relatively did not decrease the *Trichogramma* spp. parasitization on *C. pavonana* eggs. The parasitization level was 10–20% and the emerging parasitoid was 20% with longer colony life span. The *A. odorata* extract formulations result was as high as the *B. thuringiensis* microbial insecticide and safer on the parasitoid than the profenofos synthetic insecticide. Therefore, the *A. odorata* extract formulations were compatible with egg parasite *Trichogramma* spp. in biological control of *C. pavonana*.

Keywords: *Aglaia odorata*, formulation, compatibility, *Trichogramma* spp., *Crocidolomia pavonana*