ABSTRAK

Daun Gamal (*Gliricidia sepium*) selain digunakan sebagai pupuk organik cair, juga diketahui berpotensi sebagai larvasida nabati karena terdapat senyawa flavonoid, triterpenoid, coumarin, asam coumaric, asam melitotik, dan glukosida stigmastanol yang dapat diidentifikasi dan diisolasi dari berbagai bagian tubuh tanaman Gamal. Tujuan penelitian ini adalah menguji efek larvisidal ekstrak daun Gamal (*G. sepium*) terhadap larva nyamuk *Aedes aegypti*. Penelitian dilakukan menggunakan desain eksperimental dengan rancangan *Post test only control group design* dan Rancangan Acak Lengkap yang terdiri atas 6 kelompok perlakuan. Dua kelompok sebagai kontrol (kontrol positif dan negatif) sedangkan 4 kelompok lainnya mendapat perlakuan pemberian ekstrak daun Gamal (*G. sepium*) dosis 50 ppm (P1), 150 ppm (P2), 250 ppm (P3), dan 350 ppm (P4). Mortalitas larva *Ae. aegypti* hanya terjadi pada kelompok kontrol positif baik yang berasal dari lapangan maupun dari galur murni sedangkan pemberian ekstrak daun Gamal tidak menimbulkan mortalitas baik larva yang berasal dari galur murni maupun lapangan. Tidak diketahui LC_{50} dan $LC_{90.}$ Sebanyak 13 ekor (52%) larva *Ae. aegypti* galur murni tergolong toleran sedangkan sebanyak 19 ekor (76%) larva *Ae. aegypti* yang berasal dari lapangan tergolong resisten

Kata kunci: *Aedes aegypti*, Gamal, *Gliricidia sepium*, LC_{50}, LC_{90},

ABSTRACT

Gamal leaves (Gliricidia sepium) not only used as liquid organic fertilizer but also have potential as vegetable larvicide because of several component like as flavonoid compounds, triterpenoids, coumarins, coumaric acid, mitotic acid, and stigmastanol glucosides that can be identified and isolated from various parts of the Gamal plant. The purpose of this study was to examine the larvicidal effect of Gamal leaf extract (G. sepium) on the larvae of the Aedes aegypti. The study was conducted using an experimental design with a post-test-only control group design and a completely randomized design consisting of 6 treatment groups. Two groups as controls (positive and negative controls) while the other 4 groups received treatment with Gamal leaf extract (G. sepium) at doses of 50 ppm (P1), 150 ppm (P2), 250 ppm (P3), and 350 ppm (P4). Larval mortality of Ae. aegypti only occured in the positive control group both from the field and from laboratory, while there was no mortality after treatment with Gamal leaf extract in both of larvae from the laboratory and the field. There are no LC50 and LC90 calculate from this study. A total of 13 (52%) larvae of Ae. aegypti from laboratory were classified as tolerant, while as many as 19 (76%) larvae of Ae. aegypti from the field are classified as resistant.

Keywords: *Aedes aegypti*, Gamal, *Gliricidia sepium*, LC_{50}, LC_{90},