

EFEKTIVITAS PENGHAMBATAN INSEKTISIDA TERHADAP HAMA *Phyllophaga* sp. PADA SEMAI JATI (*Tectona grandis* L.f)

Oleh :

Dodi Martian ¹⁾
Sumardi ²⁾
Musyafa ²⁾

Phyllophaga sp. (uret) merupakan hama potensial yang menyerang berbagai tanaman. Dewasa ini hama *Phyllophaga* sp. diketahui menyerang jenis-jenis tanaman kehutanan, salah satunya adalah tanaman jati muda di Persemaian Pusat Pengembangan Sumber Daya Hutan (PPSDH) Cepu. Pengamatan pendahuluan menunjukkan kerusakan tanaman oleh hama *Phyllophaga* sp. mencapai 15% - 65%. Pelaksanaan penelitian ini bertujuan untuk mengetahui potensi dua jenis bahan insektisida dan efektivitas dosis yang tepat dalam usaha mengendalikan hama *Phyllophaga* sp. pada persemaian jati.

Penelitian pertama dilakukan secara *in vitro* dengan menggunakan medium serbuk gergaji untuk mengetahui pengaruh 2 jenis insektisida terhadap aktifitas *Phyllophaga* sp. dengan 4 tingkatan dosis dan 3 ulangan sehingga total perlakuan 24 kontiner. Penelitian kedua dilakukan secara *in vivo* pada Persemaian PPSDH Cepu guna mengetahui pengaruh 2 jenis insektisida dengan 2 tingkatan dosis dan 3 ulangan sehingga total perlakuan 12 bedeng perlakuan.

Hasil penelitian pertama menunjukkan bahwa insektisida Fipronil dan Abamektin secara *in vitro* memberikan efektivitas penghambatan yang sama terhadap penurunan persen hidup hama *Phyllophaga* sp. karena medium yang digunakan dijadikan sebagai sumber makanan bagi hama yang ada. Insektisida Fipronil dan Abamektin mampu menurunkan persen hidup hama *Phyllophaga* sp. sampai angka 0%. Akan tetapi, dalam masalah waktu penghambatan bahan aktif Fipronil lebih cepat jika dibandingkan dengan Abamektin. Penelitian yang dilakukan secara *in vivo* menunjukkan bahwa Abamektin mampu menurunkan persen hidup hama *Phyllophaga* sp. sampai 30% sehingga mampu meningkatkan persen hidup semai hingga 92,30%. Sedangkan Fipronil mampu menurunkan persen hidup hama *Phyllophaga* sp. 40% dan dapat meningkatkan persen hidup semai sebesar 89,67%.

Kata kunci : *Tectona grandis*, *Phyllophaga* sp., Fipronil, Abamektin.

- 1) Mahasiswa Fakultas Kehutanan, Universitas Gadjah Mada, 99/126314/KT/04212
- 2) Staf pengajar Fakultas Kehutanan, Universitas Gadjah Mada, Yogyakarta.



**THE EFFECTIVENESS OF INSECTICIDE INHIBITION TOWARDS
Phyllophaga sp. PEST IN TEAK SEEDLING (*Tectona grandis* L.f)**

By
Dodi Martian¹
Sumardi²
Musyafa²

Phyllophaga sp. is a potential pest attacking many sorts of plants. Nowadays, the pest is found infecting forestry plant. One of them is seedling in the nursery of Forestry Resource Development Center (PPSDH) in Cepu. The initial investigation showed that the rate of infection by *Phyllophaga* sp. met 15% - 65%. The inquiry was intended to reveal the potential of two types of insecticide materials and the effectiveness of proper dosages in controlling the effects of *Phyllophaga* sp. towards teak seedling.

The initial research was conducted in terms of in vitro by means of sawing powder as the media for knowing the effects of 2 kinds of insecticides towards the activity of *Phyllophaga* sp. within 4 dosage levels and 3 repetitions so that the total treatments achieved 24 containers. The second study in terms of in vivo in the teak seedling of Forestry Resource Development Center (PPSDH) in Cepu in order to know the effects of 2 sorts of insecticides within 2 dosage levels and 3 repetitions so that the total treatment covered 12 divisions.

The results of the first research show that Fipronyl and Abamectin in terms of in vitro give the same inhibition effectiveness towards the decrease of living percentage of *Phyllophaga* sp. for the media used are employed as the feeding source for the available pests. Fipronyl and Abamectin insecticides can decrease the living percentage of *Phyllophaga* sp. until 0%. However, in case of inhibition time the active materials of Fipronyl are faster than those of Abamectin. The second research conducted in vivo show that Abamectin can decrease the living percentage of *Phyllophaga* sp. to 30% so that it can increase the living percentage of the seedling to 92.30%. While the Fipronyl can decrease the living percentage of *Phyllophaga* sp. pest for 40% and increase the living percentage of the seedling to 89.67%.

Keyword : *Tectona grandis*, *Phyllophaga* sp., Fipronyl, Abamectin.

¹ The Student of Faculty of Forestry, Gadjah Mada University, 99/126314/KT/04212

² The Teacher of Faculty of Forestry, Gadjah Mada University, Yogyakarta.