

ABSTRAK

PENGARUH PEMBERIAN PESTISIDA DARI UMBI GADUNG (*Dioscorea hispida dennst.*), DAUN NIMBA (*Azadirachta indica A. Jus*) DAN DAUN TEMBAKAU (*Nicotiana tabacum*) TERHADAP HAMA DAN PENYAKIT TANAMAN CABAI (*Capsicum annuum*)

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Salah satu kendala yang sering dihadapi petani tanaman cabai adalah masalah serangan hama dan penyakit. Solusi penanggulangan menggunakan pestisida kimia cukup efektif namun dampak yang ditimbulkan ternyata sangat berbahaya bagi lingkungan dan organisme lain. Penelitian ini dilakukan untuk mengetahui tanaman mana antara umbi gadung, daun nimba dan daun tembakau serta pada perbandingan konsentrasi berapa yang paling baik menekan serangan hama dan penyakit tanaman cabai. Jenis penelitian ini adalah penelitian eksperimental. Percobaan dilakukan pada 100 sampel tanaman cabai yang terdiri dari 9 perlakuan dan 1 kontrol yang didesain menjadi penelitian dua faktor yakni menguji tiga jenis bahan tanaman dan tiga perbandingan konsentrasi. Aplikasi pestisida dilakukan seminggu sekali dengan cara menyemprotkan ekstrak pestisida ke semua bagian tanaman. Penyemprotan diberikan pada sore hari. Pengambilan data dilakukan sekali seminggu selama sepuluh minggu dengan menghitung intensitas serangan dalam bentuk persen. Hasil penelitian menunjukkan bahwa ditemukan hama kutu putih dan virus. Aplikasi pestisida tidak memberikan pengaruh yang berbeda signifikan antara tiap perlakuan terhadap penurunan intensitas hama kutu putih. Sedangkan pada virus, aplikasi pestisida memberikan pengaruh yang berbeda signifikan terhadap intensitas virus yakni terdapat pada perlakuan dengan bahan tembakau pada konsentrasi 1:4 (P3K1).

Kata Kunci: Pestisida, hama, penyakit, tanaman cabai, umbi gadung, daun nimba, daun tembakau.

ABSTRACT

THE IMPACT OF APPLYING ORGANIC PESTICIDE MADE OF GADUNG TUBER (*Dioscorea hispida dennst.*), NIMBA LEAVES (*Azadirachta indica A. Jus*), AND TOBACCO LEAVES (*Nicotiana tabacum*) TOWARDS PESTS AND DISEASES OF CHILI PLANT (*Capsicum annum*)

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One of the obstacles often faced by chili farmers is the problem of pests and disease. The solution to reduce those problems by using chemical pesticide is quite effective but the impact generated is very dangerous for the environment and other organisms. This research was conducted to determine which organic pesticide source plants between gadung tuber, nimba leaves and tobacco leaves and in what comparison of concentration is the best way in pressing both pests and disease of chili. This research was a kind of experimental research. Experiments were performed in 100 samples of chili plants consisting 9 treatments and 1 control which was designed to be two factors research which were testing three types of plant material and three comparisons of concentration. The application of pesticides was done once a week by spraying an extract of pesticide to all parts of plants. The spray was given in the afternoon. The data was collected once a week for ten weeks by counting the intensity of the attacks in the form of percent. The results of research showed that white lice pests and virus were found. The application of pesticides didn't show significantly the different impact in every treatment done to decrease the intensity of white lice pests. Whereas on the virus, the application of pesticides showed different impact to the intensity of virus which was also found in tobacco treatment in the concentration of 1:4 (P3KI).

Keywords: Organic pesticide, pests, disease, and chili plants, gadung tuber, nimba leaves, tobacco leaves