ABSTRAK

EFIKASI HERBISIDA CAMPURAN (DICAMBA 60 g/l + ISOPROPIL AMINA GLIFOSAT 250 g/l) PADA PENGENDALIAN GULMA DI LAHAN KELAPA SAWIT TANAMAN MENGHASILKAN

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Kelapa sawit merupakan komoditas perkebunan yang banyak dikembangkan di Indonesia. Pengendalian gulma di lahan kelapa sawit yang terus-menerus menggunakan herbisida berbahan aktif tunggal dapat menurunkan efektivitas pengendalian. Untuk mengatasi permasalahan ini, penggunaan campuran dua bahan aktif herbisida yang berbeda diharapkan dapat menjadi solusi. Penelitian ini bertujuan untuk mengetahui dosis herbisida berbahan aktif dicamba 60 g/l + isopropil amina glifosat 250 g/l yang efektif, mengetahui perubahan komposisi gulma, dan mengetahui fitotoksisitas pada tanaman kelapa sawit akibat aplikasi herbisida. Penelitian dilaksanakan di Muara Putih, Natar, Lampung Selatan dan di Laboratoriun Ilmu Gulma Fakultas Pertanian Universitas Lampung, pada bulan Januari hingga April 2024. Penelitian menggunakan Rancangan Acak Kelompok (RAK) dengan 6 perlakuan yaitu, Dicamba 135 g/ha + IPA Glifosat 562,5 g/ha, Dicamba 180 g/ha + IPA Glifosat 750 g/ha, Dicamba 225 g/ha + IPA Glifosat 937,5 g/ha, Dicamba 270 g/ha + IPA Glifosat 1125 g/ha, penyiangan mekanis, dan kontrol (tanpa pengendalian). Uji homogenitas data dilakukan dengan uji Bartlett, uji aditivitas dengan uji Tukey, jika asumsi terpenuhi data dianalisis ragam dan perbedaan nilai tengah perlakuan diuji BNT taraf 5%. Hasil penelitian menunjukkan bahwa campuran herbisida dosis dicamba 135 g/ha+ IPA glifosat 562,5 g/ha, dicamba 180 g/ha + IPA glifosat 750 g/ha, dicamba 270 g/ha + IPA glifosat 937,5 g/ha, dan dicamba 135 g/ha + IPA glifosat 1125 g/ha efektif mengendalikan gulma total, rumput, dan gulma berdaun lebar hingga 12 MSA. Herbisida campuran dicamba + IPA glifosat semua dosis tidak menyebabkan perubahan komposisi gulma dan fitotoksisitas pada kelapa sawit TM.

Kata kunci: herbisida, gulma, kelapa sawit TM

ABSTRACT

EFFICACY OF HERBICIDE MIXTURE (DICAMBA 60 g/L + ISOPROPYLAMINE GLYPHOSATE 250 g/L) FOR WEED CONTROL IN MATURE OIL PALM PLANTATIONS

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Oil palm is a widely cultivated plantation commodity in Indonesia. Continuous weed control in oil palm plantations using single-active-ingredient herbicides can reduce control effectiveness. To address this issue, using a mixture of two different active herbicide ingredients is expected to be a solution. This study aims to determine the effective dose of herbicides with active ingredients dicamba 60 g/L + isopropylamine glyphosate 250 g/L, evaluate changes in weed composition, and assess phytotoxicity effects on oil palm plants due to herbicide application. The research was conducted in Muara Putih, Natar, South Lampung, and at the Weed Science Laboratory, Faculty of Agriculture, University of Lampung, from January to April 2024. The study employed a Randomized Complete Block Design (RCBD) with six treatments: Dicamba 135 g/ha + IPA Glyphosate 562.5 g/ha, Dicamba 180 g/ha + IPA Glyphosate 750 g/ha, Dicamba 225 g/ha + IPA Glyphosate 937.5 g/ha, Dicamba 270 g/ha + IPA Glyphosate 1125 g/ha, mechanical weeding, and control (no weed control). Data homogeneity was tested using Bartlett's test, and additivity was assessed using Tukey's test. If assumptions were met, data were analyzed using analysis of variance (ANOVA), and mean differences among treatments were tested using the Least Significant Difference (LSD) test at a 5% significance level. The results showed that herbicide mixtures at doses of Dicamba 135 g/ha + IPA Glyphosate 562.5 g/ha, Dicamba 180 g/ha + IPA Glyphosate 750 g/ha, Dicamba 225 g/ha + IPA Glyphosate 937.5 g/ha, and Dicamba 270 g/ha + IPA Glyphosate 1125 g/ha were effective in controlling total weeds, grasses, and broadleaf weeds for up to 12 WAA (Weeks After Application). The dicamba + IPA glyphosate herbicide mixture at all doses did not alter weed composition or cause phytotoxicity in mature oil palm trees.

Keywords: herbicide, weed, mature oil palm