

**PENGARUH DOSIS DAN WAKTU APLIKASI HERBISIDA BERBAHAN
AKTIF METAMIFOP TERHADAP PENGENDALIAN GULMA DAN HASIL
TANAMAN KACANG HIJAU (*Vigna radiata* L.)**

Oleh: Adinda Dyah Ayu Maharani
Dibimbing oleh: Abdul Rizal AZ.

ABSTRAK

Tantangan budidaya kacang hijau adalah kompetisi gulma yang menghambat pertumbuhan dan produktivitas tanaman. Penelitian bertujuan menentukan pengaruh dosis dan waktu aplikasi herbisida metamifop terhadap pengendalian gulma dan hasil tanaman kacang hijau. Penelitian dilaksanakan di Desa Gondowangi, Kecamatan Sawangan, Kabupaten Magelang, Jawa Tengah bulan Juli-September 2024. Percobaan lapangan dengan Rancangan Acak Kelompok Lengkap (RAKL) 10 perlakuan dan 3 ulangan yaitu, P0 = kontrol (tanpa pengendalian gulma), P1 = Dosis Metamifop 0,75 L/ha diaplikasikan 2 MST, P2 = Dosis Metamifop 0,75 L/ha diaplikasikan 4 MST, P3 = Dosis Metamifop 0,75 L/ha diaplikasikan 2 MST + 4 MST, P4 = Dosis Metamifop 1 L/ha diaplikasikan 2 MST, P5 = Dosis Metamifop 1 L/ha diaplikasikan 4 MST, P6 = Dosis Metamifop 1 L/ha diaplikasikan 2 MST + 4 MST, P7 = Dosis Metamifop 1,25 L/ha diaplikasikan 2 MST, P8 = Dosis Metamifop 1,25 L/ha diaplikasikan 4 MST, P9 = Dosis Metamifop 1,25 L/ha diaplikasikan 2 MST + 4 MST. Hasil pengamatan dianalisis dengan Anova 5% dan uji lanjut Skott Knott 5%. Hasil penelitian menunjukkan bahwa dosis herbisida metamifop dan waktu aplikasi berpengaruh terhadap berat kering gulma dan berat kering berangkasan. Dosis herbisida metamifop 1 L/ha dengan waktu aplikasi 2 MST + 4 MST paling efisien dalam mengendalikan gulma pada budidaya tanaman kacang hijau, tetapi tidak memberikan hasil panen yang signifikan.

Kata Kunci: Kacang hijau, Gulma, Herbisida metamifop, Dosis dan waktu aplikasi herbisida

***EFFECT OF DOSE AND TIME OF APPLICATION OF HERBICIDES WITH
THE ACTIVE INGREDIENT METAMIFOP ON WEED CONTROL AND YIELD
OF MUNG BEAN PLANTS (*Vigna radiata* L.)***

by Adinda Dyah Ayu Maharani
Supervised by: Abdul Rizal AZ.

ABSTRACT

The challenge of mung bean cultivation is weed competition that inhibits plant growth and productivity. The study aims to determine the effect of metamifop herbicide dosage and application timing on weed control and mung bean yield. The study was conducted in Gondowangi Village, Sawangan District, Magelang Regency, Central Java, from July to September 2024. The field experiment used a completely randomized block design (CRBD) with 10 treatments and 3 replicates, namely, P0 = control (without weed control), P1 = Metamifop dose of 0.75 L/ha applied at 2 MST, P2 = Metamifop dose of 0.75 L/ha applied at 4 MST, P3 = Metamifop dose of 0.75 L/ha applied at 2 MST + 4 MST, P4 = Metamifop dose of 1 L/ha applied at 2 MST, P5 = Metamifop dose of 1 L/ha applied at 4 MST, P6 = Metamifop dose of 1 L/ha applied at 2 MST + 4 MST, P7 = Metamifop dose of 1.25 L/ha applied at 2 MST, P8 = Metamifop dose of 1.25 L/ha applied at 4 MST, P9 = Metamifop dose of 1.25 L/ha applied at 2 MST + 4 MST. The observation results were analyzed using 5% ANOVA and 5% Skott Knott follow-up test. The results showed that the metamifop herbicide dose and application time affected the dry weight of weeds and dry weight of crop residues. The metamifop herbicide dose of 1 L/ha with an application time of 2 MST + 4 MST was most effective in controlling weeds in green bean cultivation, but did not produce significant yields.

Keywords: Green beans, Weeds, Metamiophop herbicides, Herbicide dose and time