

**EFEKTIVITAS BERBAGAI DOSIS HERBISIDA 2,4-D DIMETIL AMINA
DAN ISOPROPILAMINA GLIFOSAT TERHADAP PENGENDALIAN
GULMA DAN PENGARUHNYA PADA PERTUMBUHAN DAN HASIL
TANAMAN BABY CORN (*Zea mays saccharata* Sturt)**

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ABSTRAK

Budidaya jagung sering mengalami kendala, salah satunya adalah keberadaan gulma. Gulma pada tanaman budidaya harus dikendalikan salah satu caranya menggunakan herbisida. Penelitian bertujuan untuk mengetahui dosis herbisida 2,4-D Dimetil Amina dan Isopropilamina Glifosat yang efektif dalam mengendalikan gulma serta pengaruhnya terhadap pertumbuhan dan hasil tanaman baby corn. Penelitian dilakukan di Desa Kedungranti, Kecamatan Nglipar, Kabupaten Gunungkidul menggunakan Rancangan Acak Kelompok Lengkap satu faktor dan sembilan perlakuan dengan tiga ulangan yaitu A1 – Herbisida 2,4-D Dimetil Amina 0,75 L/ha, A2 – 2,4-D Dimetil Amina 1,00 L/ha, A3 – 2,4-D Dimetil Amina 1,25 L/ha, A4 – 2,4-D Dimetil Amina 1,50 L/ha, A5 – Isopropilamina Glifosat 1,50 L/ha, A6 – Isopropilamina Glifosat 2,25 L/ha, A7 – Isopropilamina Glifosat 3,00 L/ha, A8 – Isopropilamina Glifosat 3,75 L/ha, A9 – Kontrol. Analisis data menggunakan ANOVA pada taraf 5% kemudian data diuji lanjut dengan BNT pada taraf 5%. Hasil pengamatan menunjukkan bahwa dosis herbisida Isopropilamina Glifosat 3,00 L/ha paling efektif mengendalikan gulma dan meningkatkan pertumbuhan dan hasil baby corn. Dosis Isopropilamina Glifosat menunjukkan hasil terbaik parameter bobot kering gulma, Nisbah Jumlah Dominan, dengan nilai efisiensi 92,48% tanpa menimbulkan gejala fitotoksisitas pada tanaman. Parameter tinggi tanaman (98,23 cm), bobot per buah (33,75 g), bobot buah per tanaman (67,5 g), bobot buah per petak (0,41 kg), dan bobot buah per hektar (4,82 ton).

Kata kunci: *jagung manis, baby corn, 2,4-D Dimetil Amina, isopropilamina glifosat.*

**EFFECTIVENESS OF VARIOUS DOSES OF 2,4-D DIMETHYLAMINE
AND ISOPROPYLAMINE GLYPHOSATE HERBICIDES ON WEED
CONTROL AND THEIR EFFECTS ON THE GROWTH AND YIELD
OF BABY CORN (*Zea mays saccharata* Sturt)**

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ABSTRACT

Corn cultivation often faces obstacles, one of which is the presence of weeds. Weeds in cultivated plants must be controlled, one way being through the use of herbicides. This study aimed to determine the optimal dosage of 2,4-D dimethylamine and isopropylamine glyphosate herbicides for weed control and their effect on the growth and yield of baby corn. The study was conducted in Kedungranti Village, Nglipar District, Gunungkidul Regency, using a completely randomized design with one factor and nine treatments with three replicates, namely A1 – 2,4-D Dimethylamine herbicide 0.75 L/ha, A2 – 2,4-D Dimethylamine 1.00 L/ha, A3 – 2,4-D Dimethylamine 1.25 L/ha, A4 – 2,4-D Dimethylamine 1.50 L/ha, A5 – Isopropylamine Glyphosate 1.50 L/ha, A6 – Isopropylamine Glyphosate 2.25 L/ha, A7 – Isopropylamine Glyphosate 3.00 L/ha, A8 – Isopropylamine Glyphosate 3.75 L/ha, A9 – Control. Data analysis used ANOVA at the 5% level, followed by post-hoc testing with LSD at the 5% level. The results of the observations showed that a dose of 3.00 L/ha of isopropylamine glyphosate was most effective in controlling weeds and improving the growth and yield of baby corn. This dose of isopropylamine glyphosate yielded the best results for the parameters of dry weight of weeds and Dominant Ratio, with an efficiency of 92.48%, without causing phytotoxicity symptoms in the plants. Other parameters included plant height (98.23 cm), weight per ear (33.75 g), weight of ears per plant (67.5 g), weight of ears per plot (0.41 kg), and weight of ears per hectare (4.82 metric tons).

Keywords: *sweet corn, baby corn, 2,4-D dimethylamine, isopropylamine glyphosate*