

Pemanfaatan Ekstrak Daun Mangga (*Mangifera indica* L.) dalam Mengendalikan Gulma dan Pengaruhnya Terhadap Hasil Jagung Semi (*Zea mays* L).

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ABSTRAK

Produksi jagung semi terus mengalami peningkatan, namun belum bisa memenuhi permintaan pasar, salah satu permasalahannya akibat gangguan gulma. Pengendalian dengan herbisida efektif tetapi berdampak negatif dalam jangka panjang, sehingga diperlukan alternatif yang lebih ramah lingkungan. Penelitian ini bertujuan untuk mengetahui pengaruh ekstrak daun mangga dalam mengendalikan gulma serta hasil tanaman jagung semi. Penelitian dilaksanakan di Kebun Percobaan Wedomartani, Sleman pada bulan November 2025 – Januari 2026, menggunakan Rancangan Acak Kelompok Lengkap (RAKL) yang terdiri dari 5 perlakuan dan 4 ulangan yaitu ekstrak daun mangga segar konsentrasi 60%, dan 70%; ekstrak daun mangga gugur konsentrasi 60%, dan 70%; serta kontrol. Data hasil pengamatan dianalisis menggunakan ANOVA jenjang 5% lalu diuji lanjut menggunakan uji Kontras Orthogonal taraf 5%. Hasil penelitian menunjukkan bahwa aplikasi ekstrak daun mangga segar dan gugur mampu mengendalikan gulma dengan nilai efisiensi 44%. Gulma dominan sebelum pengolahan lahan adalah *Eleusine indica*, sedangkan pada 3 dan 5 MST terjadi pergeseran dominansi menjadi *Cyperus rotundus*. Perlakuan ekstrak daun mangga segar 70% dan gugur 70% mampu meningkatkan pertumbuhan dan hasil jagung semi dibanding perlakuan kontrol.

Kata kunci: ekstrak, daun mangga, gulma, jagung semi.

Utilization of Mango Leaf Extract (*Mangifera indica* L.) in Controlling Weeds and Its Effect on Semi Corn Yield (*Zea mays* L).

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ABSTRACT

The production of baby corn continues to rise, but it has not yet been able to meet market demand; one of the causes is weed infestation. Herbicide control is indeed effective, but it has negative long-term effects, making more environmentally friendly alternatives necessary. This study aims to determine the effect of mango leaf extract on weed control and the yield of baby corn. The study was conducted at the Wedomartani Experimental Farm, Sleman, from November 2025 to January 2026, using a Completely Randomized Block Design (CRBD) consisting of 5 treatments and 4 replicates: fresh mango leaf extract at concentrations of 60% and 70%; falling mango leaf extract at concentrations of 60% and 70%; and a control. The observed data were analyzed using ANOVA at a 5% significance level, followed by a post-hoc Orthogonal Contrast test at a 5% significance level. The results of the study showed that the application of fresh and fallen mango leaf extracts was able to control weeds with an efficiency of 44%. The dominant weed before land preparation was *Eleusine indica*, whereas at 3 and 5 MST, there was a shift in dominance to *Cyperus rotundus*. The treatments with 70% fresh mango leaf extract and 70% fallen mango leaf extract were able to increase the growth and yield of baby corn compared to the control treatment.

Keywords: Extract, mango leaf, weeds, baby corn