RINGKASAN

Penelitian ini dilaksanakan di Bagansiapiapi, Kabupaten Rokan Hilir, Provinsi Riau pada bulan November 2023 sampai Januari 2024. Tujuan penelitian adalah mengetahui pengaruh dosis eco enzyme dan posisi pelepah kelapa sawit umur 10 tahun pada media gambut terhadap pertumbuhan vegetatif dan hasil tanaman jahe merah (*Zingiber officinale*).

Penelitian menggunakan Rancangan Acak Kelompok (RAK) faktorial dengan dua faktor, yaitu dosis eco enzyme (E0 = tanpa perlakuan, E1 = 30 ml/2 L air, E2 = 60 ml/2 L air) dan posisi pelepah (J1 = pelepah kesatu, J2 = pelepah kedua, J3 = pelepah ketiga), diulang 3 kali. Parameter yang diamati meliputi tinggi tanaman, jumlah daun, panjang akar, dan bobot rimpang.

Hasil penelitian menunjukkan bahwa perlakuan E2J3 menghasilkan nilai tertinggi pada semua parameter: tinggi tanaman 29 cm, jumlah daun 9,9 helai, panjang akar 11,7 cm, dan bobot rimpang 73 g. Peningkatan dosis eco enzyme cenderung meningkatkan pertumbuhan dan hasil tanaman.

Kata Kunci: Jahe Merah, Eco Enzyme, Posisi Pelepah, Tanah Gambut, Pertumbuhan.

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SUMMARY

This research was conducted in Bagansiapiapi, Rokan Hilir Regency, Riau Province from November 2023 to January 2024. The aim was to determine the effect of eco enzyme dosage and the position of 10-year-old oil palm fronds on peat soil media toward the vegetative growth and yield of red ginger (*Zingiber officinale*).

A factorial Randomized Block Design (RBD) was applied with two factors: eco enzyme dosage (E0 = no treatment, E1 = 30 ml/2 L water, E2 = 60 ml/2 L water) and frond position (J1 = first frond, J2 = second frond, J3 = third frond), repeated three times. Observed parameters included plant height, number of leaves, root length, and rhizome weight.

The results showed that the E2J3 treatment produced the highest values for all parameters: plant height 29 cm, number of leaves 9.9, root length 11.7 cm, and rhizome weight 73 g. Increasing eco enzyme dosage tended to improve plant growth and yield.

Keywords: Red Ginger, Eco Enzyme, Frond Position, Peat Soil, Growth.