

**PENGARUH APLIKASI PUPUK BATUBARA DAN PUPUK
KANDANGKAMBING TERHADAP PERTUMBUHAN
BIBIT KELAPA SAWIT (*Elaeis guineensis* Jacq.)
FASE *PRE NURSERY***

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**PENGARUH APLIKASI PUPUK BATUBARA DAN PUPUK KANDANG
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ABSTRAK

Penelitian tentang pengaruh pemberian pupuk batubara dan pupuk kandang kambing terhadap pertumbuhan bibit kelapa sawit (*Elaeis guineensis* Jacq.) fase *pre nursery* telah dilakukan di kebun percobaan Kampus III Universitas Andalas Dharmasraya dari bulan Januari hingga Juli 2024, yang bertujuan untuk mengetahui apakah ada interaksi antara pemberian pupuk batubara dan pupuk kandang kambing terhadap pertumbuhan bibit kelapa sawit fase *pre nursery*. Penelitian ini dirancang menurut Rancangan Acak Lengkap (RAL) Faktorial yang terdiri dari 2 faktor dengan 4 taraf masing-masing perlakuan dan diulang 3 kali, sehingga diperoleh 48 satuan percobaan yang keseluruhannya dijadikan tanaman sampel. Faktor pertama dosis pupuk batubara yang digunakan yaitu 0 *g/polybag*, 1,25 *g/polybag*, 2,5 *g/polybag*, 3,75 *g/polybag* dan faktor kedua pupuk kandang kambing dengan dosis 0 *g/polybag*, 5 *g/polybag*, 10 *g/polybag*, 15 *g/polybag*. Variabel yang diamati yaitu tinggi bibit, diameter bonggol, panjang daun, jumlah daun, luas daun, bobot kering tajuk, bobot kering akar, dan rasio tajuk akar. Hasil analisis sidik ragam menunjukkan bahwa terdapat interaksi antara pupuk batubara dan pupuk kandang kambing pada tinggi tanaman dan bobot kering tajuk bibit tanaman kelapa sawit fase *pre nursery*. Dosis yang terbaik pemberian pupuk batubara adalah 3,75 *g/polybag* dan dosis yang terbaik pemberian pupuk kandang kambing adalah 5 *g/polybag* untuk menunjang pertumbuhan bibit tanaman kelapa sawit fase *pre nursery*.

Kata kunci : Bibit kelapa sawit, Pupuk batubara, Pupuk kandang kambing

THE EFFECT OF APPLYING COAL FERTILIZER AND GOAT MANURE ON THE GROWTH OF OIL PALM SEEDLINGS (*Elaeis guineensis* Jacq.) IN THE *PRE-NURSERY* PHASE

ABSTRACT

Research on the effect of applying coal fertilizer and goat manure on the growth of oil palm seedlings (*Elaeis guineensis* Jacq.) in the pre-nursery phase was carried out in the experimental garden at Campus III, Andalas Dharmasraya University from January to July 2024, with the aim finding out whether is an interaction between applying coal fertilizer and goat manure on the growth of oil palm seedlings. This research was designed according to a Completely Randomized Factorial Design (CRD) consisting of 2 factors with 4 levels for each treatment and repeated 3 times, so that 48 experimental units were obtained, all of which were used as plant samples. The first factor is dose of coal fertilizer used, namely 0 g/polybag, 1,25 g/polybag, 2,5 g/polybag, 3,75 g/polybag and the second factor is goal manure with dose of 0 g/polybag, 5 g/polybag, 10 g/polybag, 15 g/polybag. The variables observed were seedling height, stump diameter, leaf length, number of leaves, leaf area, shoot dry weight, root dry weight, and shoot-to-root ratio. The results of the analysis of variance showed that there was an interaction between coal fertilizer and goat manure on seedling height and shoot dry weight of oil palm seedlings in the pre-nursery phase. The best dose of coal fertilizer is 3,75 g/polybag and the best dose of goat manure is 5 g/polybag to support the growth of growth of oil palm seedlings in the pre-nursery phase.

Key words : Oil Palm Seed, Coal Fertilizer, Goat Manure

