PENGARUH PEMBERIAN PUPUK KOMPOS LIMBAH BATANG SAWIT TERHADAP PERTUMBUHAN BIBIT KELAPASAWIT (*Elaeis guineensis* Jacq.) PADA FASE *MAIN NURSERY*

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ABSTRAK

Kelapa sawit merupakan tanaman perkebunan utama di Indonesia. Peremajaan atau *Replanting* menghasilkan limbah paling besar dari batang kelapa sawit. Penelitian ini bertujuan untuk melihat pengaruh dan mendapatkan dosis pupuk kompos limbah batang kelapa sawit terhadap pertumbuhan bibit kelapa sawit pada fase *main nursery*. Penelitian ini dilaksanakan di kebun percobaan Fakultas Pertanian Kampus III Universitas Andalas Kecamatan Pulau Punjung, Kabupaten Dharmasraya selama 6 bulan yaitu Oktober 2018 sampai April 2019. Penelitian ini dilakukan menggunakan metode percobaan dalam Rancangan Acak Lengkap (RAL) dengan 4 taraf perlakuan dan 5 ulangan sehingga diperoleh 20 satuan percobaan. Adapun taraf percobaan sebagai berikut yakni perbandingan 50% pupuk kompos batang kelapa sawit + 50% tanah; 35% pupuk kompos batang kelapa sawit + 65% tanah; 25% pupuk kompos batang kelapa sawit + 75% tanah; 15% pupuk kompos batang kelapa sawit + 85% tanah. Variabel yang diamati yakni tinggi tanaman, jumlah daun, panjang daun, lebar daun, diameter bonggol. Pupuk kompos batang kelapa sawit mengandung unsur hara N yakni 1,60 %, unsur P 0,01 %, unsur K yakni 0,04 %, unsur C yakni 45,09 % dan C/N 28,18 %. Hasil penelitian menunjukan pupuk kompos limbah batang kelapa sawit tidak berpengaruh terhadap pertumbuhan bibit kelapa sawit.

Kata kunci : Dosis, Limbah, *Replanting*, Pembibitan, batang kelapa sawit, dan Pertumbuhan.

THE EFFECT OF FERTILIZER from oil palm WASTE COMPOSITE ON GROWTH OF oil palm SEEDLINGS (Elaeis guineensis Jacq) IN MAINNURSERY PHASE

ABSTRACT

Oil Palm is the main plantation crop in Indonesia. Rejuvenation or replanting produces the most waste from oil palm's stems. This study aims to see the effect and obtain a dosage of oil palm's stem compost fertilizer on the growth of oil palm seedlings in the main nursery phase. This research was carried out in the experimental garden of the Faculty of Agriculture, Campus III, Andalas University, Pulau Punjung District, Dharmasraya Regency for 6 months, October 2018 to April 2019. This research was conducted using the experimental method in a Completely Randomized Design (RAL) with 4 levels of treatment and 5 replications to obtain 20 units of experiment. The experimental stages are as follows: a ratio of 50% compost of oil palm + 50% soil compost; 35% composted oil palm's stem + 65% soil; 25% compost fertilizer for oil palm + 75% soil; 15% oil palm's stem compost + 85% soil. The observed variables were plant height, number of leaves, leaf length, leaf width, tuber diameter. Oil palm compost fertilizer contains nutrients N which is 1.60%, element P is 0.01%, element K is 0.04%, element C is 45.09% and C / N is 28.18%. The results showed that compost of oil palm's stem waste did not affect the growth of oil palm seedlings.

Keywords: Dosage, Waste, Replanting, Nurseries, oil palm's Stems, and Growth.