

**PENGARUH PUPUK KOTORAN KELELAWAR DAN NPK Mg
TERHADAP PERTUMBUHAN BIBIT KELAPA SAWIT (*Elaeis
guineensis* Jacq.) DI MAIN NURSERY PADA ULTISOL**

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Abstrak

Kelapa sawit merupakan salah satu komoditas pertanian utama dan unggulan di Indonesia. Pertumbuhan kelapa sawit yang lebih baik tergantung pada ketersediaan zat hara dan bahan organik yang dapat dipenuhi oleh pemanfaatan pupuk kotoran kelelawar dan NPK Mg terhadap pertumbuhan bibit kelapa sawit pada tahap *Main nursery*. Penelitian ini dilaksanakan di PT. Kencana Sawit Indonesia (KSI) Solok Selatan pada bulan Juli – November 2021 menggunakan rancangan acak lengkap factorial 4x4 dalam 3 ulangan (pupuk kotoran kelelawar: 0 g, 500 g, 1000 g, 1500 g dan NPK Mg : 30 g, 40 g, 50 g, 60 g). Data yang diperoleh dianalisis menggunakan sidik ragam dan dilanjutkan dengan uji Duncan's New Multiple Range Test (DNMRT) pada taraf 5%. Parameter yang diamati adalah analisis tanah, analisis pupuk kotoran kelelawar (guano), tinggi tanaman (cm), panjang pelepah (cm), jumlah pelepah (helai), diameter bonggol (mm), panjang akar (cm), bobot segar tajuk (g), bobot segar akar (g), bobot kering tajuk (g), bobot kering akar (g), dan Rasio tajuk akar. Hasil penelitian menunjukkan bahwa terdapat interaksi antara pemberian dosis pupuk kotoran kelelawar (guano) dan NPK Mg pada diameter bonggol, bobot segar akar, bobot kering akar, bobot segar tajuk, dan bobot kering tajuk bibit kelapa sawit di *Main Nursery*. Dosis pupuk kotoran kelelawar (guano) terbaik pada 1500 g/polibag pada pembibitan di *Main nursery*. Dosis NPK Mg yang terbaik pada 60 g/polibag pada pembibitan bibit kelapa sawit di *Main nursery*.

Kata kunci : Pupuk kotoran kelelawar, NPK Mg, Kelapa sawit, Main nursery, uji lanjut.

EFFECT OF BAT MANURE AND NPK Mg ON THE GROWTH OF OIL PALM SEEDLINGS (*Elaeis guineensis* Jacq.) IN THE MAIN NURSERY ON ULTISOL

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Abstract

Palm oil is one of the main and leading agricultural commodities in Indonesia. Better oil palm growth depends on the availability of nutrients and organic matter that can be met by the use of bat manure and NPK Mg for the growth of oil palm seedlings at the Main nursery stage. This research was conducted at PT. Kencana Sawit Indonesia (KSI) Solok Selatan in July – November 2021 used a complete randomized design of factorial 4x4 in 3 tests (bat manure: 0 g, 500 g, 1000 g, 1500 g and NPK Mg: 30 g, 40 g, 50 g, 60 g). The data obtained were analyzed using fingerprints and continued with Duncan's New Multiple Range Test (DNMRT) test at a level of 5. The parameters observed were soil analysis, analysis of bat manure fertilizer (guano), plant height (cm), frond length (cm), number of midribs (strands), weevil diameter (mm), root length (cm), fresh weight of the canopy (g), fresh weight of the root (g), dry weight of the canopy (g), dry weight of the root (g), and Ratio of root headers. The results showed that there was an interaction between the application of doses of bat manure (guano) and NPK Mg on the diameter of the weevil, fresh weight of the roots, dry weight of the roots, fresh weight of the canopy, and dry weight of the canopy of oil palm seedlings in the Main Nursery. The best dose of bat manure (guano) fertilizer at 1500 g/polybag in the nursery at the Main nursery. The best dose of NPK Mg at 60 g/polybag in the nursery of oil palm seedlings in the Main nursery.

Keywords: Bat manure fertilizer, NPK Mg, Palm oil, Main nursery, advanced test.