

RINGKASAN

Penelitian ini di laksanakan di Kebun Percobaan Fakultas Pertanian Universitas Islam Sumatera Utara, Jalan Karya Wisata Ujung, Kelurahan Gedung Johor, Kecamatan Medan Johor, Kota Medan, Provinsi Sumatera Utara. Topografi daerah penelitian datar dengan ketinggian 25 mdpl. Jenis tanah inceptisol. Penelitian ini di laksanakan pada bulan Desember 2021 sampai dengan bulan Maret 2022.

Penelitian ini dibimbing oleh Bapak Indra Gunawan, S.P., M.P. sebagai Ketua Pembimbing, dan Ibu Ir. Fenty Maimunah Simbolon, M.P. sebagai Anggota Pembimbing. Penelitian ini bertujuan untuk mengetahui pengaruh dan mendapatkan dosis terbaik pupuk bokashi kotoran walet terhadap pertumbuhan serta ketahanan penyakit di pembibitan pada kelapa sawit (*Elaeis guineensis* Jacq) di Pre-Nursery. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) non faktorial dengan 5 taraf perlakuan yaitu: V_0 = kontrol, V_1 = 250 g/polibeg, V_2 = 500 g/polibeg, V_3 = 750 g/polibeg dan V_4 = 1000 g/polibeg. Parameter yang diamati adalah tinggi tanaman, jumlah daun, luas daun, diameter batang dan intensitas serangan penyakit.

Hasil penelitian menunjukkan bahwa pemberian pupuk bokashi kotoran walet berpengaruh nyata dalam meningkatkan pertumbuhan tinggi tanaman, jumlah daun, luas daun dan diameter batang bibit tanaman kelapa sawit pre nursery. Pemberian pupuk bokashi kotoran walet dengan dosis 1000 g/polibeg mampu menekan intensitas penyakit pada bibit tanaman kelapa sawit pre nursery.

Kata Kunci: Tanaman Kelapa Sawit Pre Nursery, Pupuk Bokashi Kotoran Walet

SUMMARY

This research was conducted at the Experimental Garden of the Faculty of Agriculture, Islamic University of North Sumatra, Jalan Karya Wisata Ujung, Gedung Johor Village, Medan Johor District, Medan City, North Sumatra Province. The topography of the research area is flat with a height of 25 meters above sea level. Inceptisol soil type. This research was conducted from December 2021 to March 2022.

This research was guided by Mr. Indra Gunawan, S.P., M.P. as Chief Advisor, and Mrs. Ir. Fenty Maimunah Simbolon, M.P. as a Advisory Member. The purpose of this study was to determine the effect and obtain the best dose of swallow dung bokhasi fertilizer on growth and disease resistance in oil palm (*Elaeis guineensis* Jacq) nurseries at Pre-Nursery. This study used a non-factorial Completely Randomized Design (CRD) with 5 levels of treatment, namely: V_0 = control, V_1 = 250 g/polibeg, V_2 = 500 g/polibeg, V_3 = 750 g/polibeg and V_4 = 1000 g/polibeg. Parameters observed were plant height, number of leaves, leaf area, stem diameter and intensity of disease attack.

The results showed that the application of swallow dung bokashi fertilizer significantly increased the growth of plant height, number of leaves, leaf area and stem diameter of pre-nursery oil palm seedlings. The application of swallow dung bokashi fertilizer with an 1000 g/polibeg dose was able to suppress the intensity of disease in pre-nursery oil palm seedlings.

Keywords: Pre-Nursery Palm Oil Plants, Bokashi Swallow Manure Fertilizer