

# **PENGARUH KONSENTRASI PGPR BIOFERTI TERHADAP PERTUMBUHAN DAN HASIL KACANG TANAH DI VERTISOL**

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## **INTISARI**

Penelitian bertujuan mengetahui konsentrasi PGPR Bioferti yang tepat terhadap pertumbuhan dan hasil kacang tanah di vertisol. Penelitian dilaksanakan di kecamatan Sedayu, Bantul, Yogyakarta mulai bulan September sampai Desember 2020. Penelitian menggunakan rancangan perlakuan faktor tunggal dengan 4 perlakuan yang disusun di lapangan menggunakan Rancangan Acak Kelompok Lengkap dengan 3 ulangan. Perlakuan yang diuji yaitu 1) tanpa PGPR Bioferti, 2) PGPR Bioferti konsentrasi 20 ml/l, 3) PGPR Bioferti konsentrasi 25 ml/l, 4) PGPR Bioferti konsentrasi 30 ml/l. Variabel yang diamati meliputi tinggi tanaman, jumlah cabang total, jumlah bintil akar, volume akar, berat segar brangkas, berat kering brangkas, jumlah polong bernas, jumlah polong hampa, bobot polong kering pertanaman, berat 100 biji kering, bobot polong kering per petak. Hasil penelitian menunjukkan bahwa Pemberian PGPR Bioferti konsentrasi 20 ml/l, 25 ml/l dan 30 ml/l memberikan pengaruh pada pertumbuhan tanaman kacang tanah varietas Takar 2. Konsentrasi 30 ml/l dan 25 ml/l memberikan pengaruh yang sama dan lebih baik dibanding perlakuan yang lain. Pemberian PGPR Bioferti konsentrasi 20 ml/l, 25 ml/l dan 30 ml/l tidak memberikan pengaruh pada hasil tanaman kacang tanah varietas Takar 2. Pemberian PGPR Bioferti konsentrasi 20 ml/l, 25 ml/l, dan 30 ml/l mampu meningkatkan jumlah polong bernas per tanaman.

Kata kunci: Kacang Tanah, Konsentrasi, PGPR Bioferti, Vertisol.

## **Effect of PGPR Bioferti Concentration on Growth and Yield of Peanut in Vertisol**

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### ***ABSTRACT***

The aim of this study was to determine the correct concentration of PGPR Bioferti on the growth and yield of peanuts in vertisol. The research was conducted in Sedayu sub-district, Bantul, Yogyakarta from September to December 2020. The study used a single factor treatment design with 4 treatments arranged in the field using a Complete Randomized Block Design with 3 replications. The treatments tested were 1) without PGPR Bioferti, 2) PGPR Bioferti with a concentration of 20 ml/l, 3) PGPR Bioferti with a concentration of 25 ml/l, 4) PGPR Bioferti with a concentration of 30 ml/l. The variables observed included plant height, total number of branches, number of nodules, root volume, fresh weight of stover, dry weight of stover, number of pithy pods, number of empty pods, weight of dry pods per plant, weight of 100 dry seeds, weight of dry pods per plot. The results showed that the PGPR Bioferti concentration of 20 ml/l, 25 ml/l and 30 ml/l had an effect on the growth of peanut plants of the Takar-2 variety. Concentrations of 30 ml/l and 25 ml/l gave the same and better effect than other treatments. The provision of PGPR Bioferti concentrations of 20 ml/l, 25 ml/l and 30 ml/l did not have an effect on the yield of the Takar 2 peanut variety. Provision of PGPR Bioferti with a concentration of 20 ml/l, 25 ml/l, and 30 ml/l was able to increase the number of pithy pods in the plant.

Key words: Peanut, Concentration, PGPR Bioferti, Vertisol.