

**PENGARUH TAKARAN PGPR DAN MACAM PUPUK TERHADAP  
PERTUMBUHAN DAN HASIL OKRA MERAH DI LAHAN  
PASIR PANTAI**

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**INTISARI**

Keberadaan garis pantai yang membentang luas, lahan pasir pantai yang melimpah dapat dikonversi untuk lahan budidaya sayuran bernilai nutrisi dan ekonomi tinggi salah satunya okra. Agar lahan marginal tersebut dapat dimanfaatkan secara optimal, rekayasa budidaya perlu dilakukan. Penelitian ini bertujuan untuk mengetahui pengaruh ragam aplikasi dosis PGPR dan pupuk terhadap pertumbuhan dan hasil okra merah yang dibudidayakan di lahan pasir pantai. Penelitian ini dilaksanakan di lahan pasir pantai Dusun Kriyan, Desa Karangwuni, Kecamatan Wates, Kabupaten Kulon Progo, Yogyakarta pada bulan April hingga Juni 2019 dengan ketinggian tempat sekitar 30 meter diatas permukaan laut, menggunakan percobaan faktorial yang disusun dalam Rancangan Acak Kelompok Lengkap (RAKL) tiga ulangan. Faktor pertama adalah takaran PGPR yang terdiri 0%, 10%, 20% dan 30%. Faktor kedua macam pupuk meliputi pupuk kimia, pupuk kandang, pupuk hijau orok-orok dan pupuk hijau gamal. Parameter yang diamati meliputi tinggi tanaman, diameter batang, jumlah daun, saat awal berbunga, bobot segar brangkasan, bobot segar akar, bobot kering brangkasan, bobot kering akar, volume akar, panjang buah, diameter buah, jumlah buah pertanaman, bobot buah setiap panen pertanaman, dan bobot buah pertanaman. Hasil penelitian menunjukkan terjadi interaksi pada variabel panjang buah dan diameter buah. Pemberian takaran PGPR 20% dan pupuk kandang memberikan pertumbuhan dan hasil tanaman okra merah lebih baik.

Kata kunci : tanaman okra merah, lahan pasir pantai, PGPR, dan macam pupuk

**THE EFFECT OF PGPR DOSSAGE AND KIND OF FERTILIZERS ON  
GROWTH AND YIELD OF RED OKRA IN COASTAL SANDY LAND**

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**ABSTRACT**

*As Indonesian coastline is vastly stretched, beach sand soil which is potentially utilized to intensively expand valuable crop production such as red okra is enormously abundant. To agronomically and economically produce the vegetable on the marginal land, cultivation engineering is on-demand, among which are appropriate application of PGPR and numerous fertilizers. The purposes of the study were to discover impacts of diverse PGPR treatment doses and fertilizers as well as interaction in between on growth and yield of Red Okra planted on beach sand soil. The research was carried out at beach sand soil of Karangwuni village located in Wates, Kulon Progo regency throughout April to June 2019 in the altitude is about 30 meters above the sea level. The experiment itself was a two-factor trial set in a Randomized Complete Block Design (RCBD) with four treatment levels and three replications for each. The first factor was PGPR solution concentration (0%, 10%, 20% and 30%), and the other was fertilizers application consisted of recommended synthetic fertilizer, livestock manure, green fertilizer of gamal, and orok-orok. The observed parameters were plant height, stem diameter, leaves number, flowering date, plant fresh and dry matter weight root volume, fruit weight, length and diameter, number of fruit of each plant per harvesting time. The findings conclude that there are interactions between the factors found in the length and diameter of okra. Overall, the application of 20% PGPR solution combined with livestock manure result the best yield and growth of red okra.*

**Keywords:** *red okra, beach sand land, PGPR, various fertilizer*