

# **RESPON PERTUMBUHAN DAN HASIL TANAMAN BAWANG MERAH DI LAHAN PASIR PANTAI PADA APLIKASI PUPUK KOTORAN SAPI DAN PACLOBUTRAZOL**

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## **ABSTRAK**

Upaya untuk meningkatkan produktivitas bawang merah di lahan pasir pantai dilakukan dengan menambahkan pupuk kotoran sapi dan zat pengatur tumbuh paclobutrazol. Tujuan penelitian adalah mendapatkan kombinasi yang tepat antara dosis pupuk kotoran sapi dan konsentrasi paclobutrazol untuk meningkatkan pertumbuhan dan hasil tanaman bawang merah. Penelitian dilaksanakan pada bulan April hingga Mei 2023 di lahan pasir pantai Samas, Bantul, Daerah Istimewa Yogyakarta, penelitian menggunakan Rancangan Acak Kelompok Lengkap (RAKL) faktorial 2 faktor dengan kontrol. Faktor pertama yakni dosis pupuk kotoran sapi 3 taraf antara lain 20 ton/ha, 25 ton/ha, dan 30 ton/ha. Faktor kedua adalah konsentrasi paclobutrazol 3 taraf yakni 50 ppm, 75 ppm, dan 100 ppm. Hasil penelitian menunjukkan terdapat interaksi antara pupuk kotoran sapi 30 ton/ha dengan konsentrasi paclobutrazol 100 ppm terhadap jumlah daun tanaman bawang merah pada umur 42 HST. Aplikasi pupuk kotoran sapi 30 ton/ha berpengaruh terhadap parameter tinggi tanaman, jumlah daun, jumlah anakan per rumpun, jumlah umbi per rumpun, bobot segar umbi per rumpun, bobot kering umbi per rumpun, bobot segar umbi per petak, bobot kering umbi per petak, dan bobot kering umbi per hektar. Konsentrasi paclobutrazol konsentrasi 75 ppm berpengaruh terhadap parameter tinggi tanaman, jumlah daun, jumlah anakan per rumpun, jumlah umbi per rumpun, bobot segar umbi per rumpun, bobot kering umbi per rumpun, bobot segar umbi per petak, bobot kering umbi per petak, dan bobot kering umbi per hektar.

Kata Kunci: Bawang Merah, Paclobutrazol, Pupuk Kotoran Sapi

# **GROWTH AND YIELD EFFECTS OF SHALLOT ON SANDY SOIL BY APPLICATION OF COW MANURE FERTILIZER AND PACLOBUTRAZOL**

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## **ABSTRACT**

Efforts to increase the productivity of shallots in coastal sandy lands were carried out by adding cow manure and paclobutrazol growth regulator. The aim of the research was to find the right combination of doses of cow manure and paclobutrazol concentrations to increase the growth and yield of shallots. The research was conducted from April to May 2023 in Samas beach sand, Bantul, Special Region of Yogyakarta, using a 2-factor factorial Complete Randomized Block Design (CRBD) with control. The first factor is the dose of cow manure at 3 levels, namely 20 tons/ha, 25 tons/ha, and 30 tons/ha. The second factor was the concentration of paclobutrazol at 3 levels, namely 50 ppm, 75 ppm and 100 ppm. The results showed that there was an interaction between 30 tons/ha of cow manure and 100 ppm paclobutrazol concentration on the number of shallot leaves at 42 DAP. The application of cow manure 30 tons/ha affected the parameters of plant height, number of leaves, number of tillers per hill, number of tubers per hill, tuber fresh weight per hill, tuber dry weight per hill, tuber fresh weight per plot, tuber dry weight per plot, and tuber dry weight per hectare. The paclobutrazol concentration of 75 ppm affected the parameters of plant height, number of leaves, number of tillers per hill, number of tubers per hill, tuber fresh weight per hill, tuber dry weight per hill, tuber fresh weight per plot, tuber dry weight per plot, and tuber dry weight per hectare.

Keywords: Shallot, Paclobutrazol, Cow Manure