PERTUMBUHAN DAN HASIL TANAMAN CABAI MERAH KERITING (*Capsicum annum* L.) DENGAN PEMBERIAN PLANT GROWTH PROMOTING RHIZOBIUM DAN GIBBERELIN

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ABSTRAK

Tanaman cabai merupakan komoditas strategis pertanian yang banyak dibudidayakan oleh petani. Pemberian PGPR yang tepat dan pemberian gibberelin dapat meningkatkan hasil tanaman cabai. Penelitian ini bertujuan untuk mengetahui interaksi antara PGPR dan gibberelin serta konsentrasi PGPR dan gibberelin yang paling baik terhadap pertumbuhan dan hasil tanaman cabai merah keriting. Metode penelitian menggunakan rancangan *Split Plot Design* dengan main plot adalah konsentrasi PGPR (P1 = 15 ml/L, P2 = 30 ml/L, P3 = 45 ml/L) air, sub plot adalah gibberelin (G0 = tanpa gibberelin, G1 = 100 ppm, G2 = 200 ppm, G3 = 300 ppm). Masing – masing kombinasi perlakuan diulang sebanyak 3 kali. Data yang diperoleh dianalisis keragamannya menggunakan analisis varian (ANOVA) pada taraf α = 5%. Apabila terdapat beda nyata antar perlakuan maka dilanjutkan uji *Duncan's Multiple Range Test* (DMRT) taraf α = 5%. Berdasarkan hasil penelitian, tidak terjadi interaksi antara perlakuan PGPR dengan gibberelin. Perlakuan PGPR 30 ml/liter air dapat mempercepat umur bunga cabai merah keriting.Gibberelin dengan konsentrasi 200 ppm memberikan hasil paling baik pada parameter tinggi tanaman, luas daun, umur bunga, jumlah buah, dan bobot buah.

Kata Kunci : *Cabai Merah Keriting, PGPR, Gibberelin*

THE GROWTH AND YIELD OF RED CHILLI (*Capsicum annum* L.) ON THE VARIETY OF PLANT GROWTH PROMOTING RHIZOBIUM CONCENTRATION AND GIBBERELIN

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ABSTRACT

Red Chilli are national important commodity that cultivated by many of farmers. The right application of PGPR and gibberelin can utilized red chilli yield. This research aims to determine the interaction from both treatment also the precised concentration between PGPR and gibberelin towards growth and the yield of Red Chilli. This method of this research Split Plot Design in Which the main plot is PGPR concentration P1 = 15 ml/liter of water, P2 = 30 ml/liter of Water , P3 = 45 ml/liter of water, sub plot is gibberelin G0 = without gibberelin, G1 = 100 ppm, G2 = 200 ppm, G3 = 300 ppm. each combination was repeated three times. The data obtained analysed the variation using analysis of variance (ANOVA) at the standard of $\alpha = 5\%$. If there are significant differences between treatments then the test will be continued using *Duncan's Multiple Range Test* (DMRT) at the standard of $\alpha = 5\%$. Based on the research, there is no interaction between PGPR and gibberelin. Usage of PGPR 30 ml/liter of water are the decent amount for red chilli based on flowering age. Gibberelin 200 ppm concentration yield the best for red chilli based on leaf area, flowering age, amount of chilli, and chilli weight parameter.

Keywords : *Red Chilli, Plant Growth Promoting Rhizobium, and Gibberelin*