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Respon Pertumbuhan dan Hasil Tanaman Rosela Merah (*Hibiscus sabdariffa* L.) terhadap Pemberian Dosis Pupuk Anorganik dan Pemangkasan Pucuk

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### **ABSTRAK**

Tanaman rosela merah (*Hibiscus sabdariffa* L.) merupakan salah satu tanaman yang dapat dimanfaatkan sebagai tanaman obat. Bagian tanaman yang sering digunakan yaitu kelopak bunga. Daya produksi kelopak bunga rosela merah saat ini hanya 150 – 170 kg/Ha. Peningkatan produksi rosela dapat dilakukan dengan memberikan pupuk NPK dan melakukan pemangkasan pucuk. Penelitian ini bertujuan untuk mempelajari pemberian pupuk NPK dan pemangkasan pucuk. Penelitian dilaksanakan di Lahan Percobaan Agroekoteknologi, Fakultas Pertanian, Universitas Trunojoyo Madura pada bulan April sampai Juli 2022. Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) faktorial dengan faktor pertama pupuk NPK dan faktor kedua pemangkasan pucuk diulang sebanyak 3 kali. Analisis data pada penelitian ini menggunakan Sidik Ragam (ANSIRA) pada taraf 5% dan apabila terdapat pengaruh nyata terhadap hasil, maka dilakukan uji lanjut Beda Nyata Jarak Duncan (BNJD) pada taraf 5%. Hasil penelitian menunjukkan bahwa pemberian pupuk NPK berpengaruh nyata pada parameter tinggi tanaman, diameter batang, jumlah daun, luas daun, jumlah cabang, umur berbunga, jumlah bunga per tanaman, bobot basah bunga per tanaman, bobot kering bunga per tanaman, bobot basah brangkasan, bobot kering brangkasan. Pemangkasan pucuk berpengaruh nyata pada parameter jumlah daun, luas daun, umur berbunga, jumlah bunga pertanaman, bobot basah bunga pertanaman, bobot kering bunga pertanaman, bobot basah brangkasan, bobot kering brangkasan. Interaksi kedua perlakuan berpengaruh nyata pada parameter luas daun. Sistem budidaya dalam penelitian ini menghasilkan potensi produksi kering bunga rosela 6 kali lebih tinggi dibandingkan produksi sekarang, namun kandungan Vit C -nya relatif lebih rendah dibandingkan hasil dari Rahmawati (2012).

**Kata kunci : Rosela merah, Pupuk NPK, Pemangkasan Pucuk**

**Agistina Dwi Rahmawati (180311100114)**

Growth and Yield of Red Rosella (*Hibiscus sabdariffa* L.) Due to Application of Inorganic Fertilizer and Top Pruning

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### **ABSTRACT**

Red rosella (*Hibiscus sabdariffa* L.) is a plant that can be used as a medicinal plant, especially its flower petals. Production capacity of red rosella petals is currently only about 150 – 170 kg/Ha. Production of rosella flower petals can be enhanced applying NPK fertilizer and pruning the shoots. The objective of this study was to investigate effects of NPK fertilizer application and shoot top pruning on rossela yield.. This research was carried out at the Experimental Field of Agrotechnology, Faculty of Agriculture, Trunojoyo University, Madura from April to Juli 2022. The experiment was a factorial one arranged on a Randomized Block Design (RBD), consisting of two factors. The first factor was rates of NPK fertilizer, consisting of four levels, namely A0 (Control), A1 (200 kg/Ha), A2 (300 kg/Ha), and A3 (400 kg/Ha). The Second factor was pruning of top shoots, consisting two levels, namely P1 (without pruning), and P2 (shoot pruning). Data were analyzed by ANOVA at 5%, and the difference among means were analyzed the Duncan's Mean Range Test (DMRT) at 5%. The result showed that application of NPK fertilizer at rate of 300 kg/Ha had a significant effect on plant height, stem diameter, number of leaves, leaf area, number of branches, flowering age, numbers of flowers per plant, fresh weight of stover, dry weight of stover. Pruning shoots significantly affected number of leaves, leaf area, flowering age, number of flowers planted, fresh weight of stover, and dry weight of stover. The interaction of the two treatments had a significant effect on leaf area parameters. The yield as dry weight of petals was 6 fold higher than that of the current national production, but the vitamin C content was lower than that of result from Rahmawati (2012).

**Keywords : Red Rosela, NPK Fertilizer, Pruning shoot.**