

RINGKASAN

Penelitian ini bertujuan untuk (1) mendapatkan dosis pupuk NPK yang tepat untuk meningkatkan pertumbuhan dan hasil tanaman jeruk chokun. (2) mendapatkan frekuensi pemberian pupuk daun yang tepat untuk meningkatkan pertumbuhan dan hasil tanaman jeruk chokun. (3) mendapatkan kombinasi perlakuan terbaik antara dosis pupuk NPK dan frekuensi pupuk daun untuk pertumbuhan dan hasil tanaman jeruk chokun. Penelitian dilaksanakan mulai dari bulan November 2019 sampai bulan Juni 2020 di *Ex-farm* Fakultas Pertanian Universitas Jenderal Soedirman.

Rancangan penelitian yang digunakan adalah Rancangan Acak Kelompok Lengkap (RAKL) dua faktor. Faktor pertama yaitu dosis pupuk NPK yang terdiri atas = 0, 25, 50, 75 g/pohon dan faktor kedua adalah frekuensi pemupukan daun = 0, 2, 4, 6 kali; dengan demikian terbentuk 16 kombinasi perlakuan, diulang 3 kali sehingga diperoleh 48 unit percobaan. Setiap unit percobaan terdiri atas satu tanaman per planterbag. Data analisis menggunakan uji F, apabila berbeda nyata dilakukan uji lanjut DMRT dan regresi dengan taraf kesalahan 5%.

Hasil penelitian menunjukkan bahwa dosis pupuk NPK 25 g/pohon meningkatkan jumlah bunga, jumlah buah terbentuk, jumlah buah periodik dan jumlah dompol buah. Dosis pupuk NPK 50 g/pohon meningkatkan tinggi tanaman, jumlah cabang kuarter dan diameter buah. Bobot per buah tertinggi dicapai melalui dosis pupuk NPK 75 g/pohon. Frekuensi pemberian pupuk daun dua kali meningkatkan diameter buah dan bobot per buah. Frekuensi pemberian pupuk daun empat kali meningkatkan tinggi tanaman, jumlah cabang kuarter dan jumlah dompol buah. Jumlah bunga, jumlah buah terbentuk dan jumlah buah periodik tertinggi dicapai melalui frekuensi pemberian pupuk daun enam kali. Interaksi antara dosis NPK dan frekuensi pemberian pupuk daun berpengaruh terhadap variabel jumlah bunga, jumlah buah terbentuk, jumlah buah periodic dan bobot buah per buah. Jumlah bunga, jumlah buah terbentuk dan jumlah buah periodik tertinggi dicapai melalui dosis pupuk NPK 75 g/pohon dan frekuensi pemberian pupuk daun enam kali. Bobot per buah terbesar dicapai melalui dosis pupuk NPK 75 g/pohon dan frekuensi pemberian pupuk daun empat kali.

SUMMARY

This research aimed to obtain (1) the best dose of NPK fertilizer to increase the growth and yield of chokun citrus plants. (2) the best frequency of foliar application to increase the growth and yield of chokun citrus plants. (3) the best combination of NPK fertilizer dose and frequency of foliar application for chokun citrus plant growth and yield. The research was conducted from November 2019 to June 2020 at the Ex-farm Faculty of Agriculture, Jenderal Soedirman University.

*The research used was a Randomized Complete Block Design (RCBD) of two observed factors. The first factor is the dose of NPK fertilizer (0, 25, 50, 75 g / tree) and the second factor is the frequency of foliar application (0, 2, 4, 6 times). Thus, 16 treatment combinations were formed, repeated 3 times in order to obtain 48 experimental units. Each experimental unit consisted of one plant per planterbag. Data analysis used the *F* test, a significantly different analysis was carried out further DMRT test and regression with an error of 5%.*

The results showed that the NPK fertilizer dose of 25g/tree increased the number of flowers, the number of fruit formed, the number of fruit periodically, and the number of fruit bunches. The NPK fertilizer dose of 50 g/tree increased plant height, the number of quarter branches, and fruit diameter. The highest fruit weight were achieved through NPK fertilizer dose of 75 g/tree. The frequency of foliar application of two times increased the fruit diameter and the weight per fruit. The frequency of foliar application of four times increased plant height, the number of quarter branches, and the number of fruit bunches. The number of flowers, the number of fruit formed, and the number of fruit periodically were achieved through the frequency of six times of foliar application. The interaction between the NPK fertilizer dose and the frequency of foliar application affected the number of flowers, number of fruit formed, number of fruits periodically, and weight per fruit. The application of NPK fertilizer with 75 g/tree and the frequency of foliar application six times increased the number of flowers, the number of fruit formed and the number of fruit periodically. The application of NPK fertilizer with 75 g/tree and the frequency of foliar application four times increased the weight per fruit.