

INTISARI

Pemangkasan dilakukan untuk mengurangi kompetisi antara organ sumber dan lubuk, mengarahkan asimilasi ke buah, dan meningkatkan kualitas buah. Seiring bertambahnya umur tanaman, penyerapan nutrisi menurun sehingga diperlukan aplikasi K_2SO_4 secara foliar. Penelitian ini bertujuan mengkaji pengaruh pemangkasan daun di bawah buah dan aplikasi K_2SO_4 terhadap peningkatan bobot dan kualitas buah. Penelitian berlangsung selama tiga bulan (Oktober–Desember 2024) di *screenhouse* Pondok Pesantren Aqwamu Qila, Bantul, Yogyakarta, dan analisis dilakukan di Laboratorium Manajemen Produksi Tanaman, Fakultas Pertanian UGM. Penelitian menggunakan rancangan split-plot dengan dua faktor: konsentrasi K_2SO_4 (0, 1, 2, 3 g/L) sebagai plot utama dan pemangkasan daun (dengan/tanpa) sebagai sub-plot dengan 3 ulangan. Data dianalisis dengan ANOVA split-plot menggunakan R-studio, dan uji lanjut DMRT pada taraf kepercayaan 95%. Hasil menunjukkan bahwa pemangkasan daun di bawah buah yang dikombinasikan dengan penambahan K_2SO_4 pada konsentrasi 2 g/L meningkatkan kandungan kalium buah mencapai 1,90%, namun memiliki kemanisan yang lebih rendah dibandingkan perlakuan lainnya yaitu 8,65 °brix. Sedangkan, bobot segar buah, vitamin C, dan kekerasan buah tidak berbeda nyata tiap perlakuannya.

Kata kunci : foliar, K_2SO_4 , melon, pemangkasan daun.

ABSTRACT

Leaf pruning was performed to reduce competition between source organs and sinks, direct assimilates toward fruit development, and improve fruit quality. As the plant ages, nutrient uptake declines, necessitating the foliar application of K_2SO_4 . This study aimed to evaluate the effect of leaf pruning below the fruit and foliar K_2SO_4 application on fruit weight and quality improvement. The experiment was conducted over a three-month period (October–December 2024) in a greenhouse at Pondok Pesantren Aqwamu Qila, Bantul, Yogyakarta, with subsequent analyses carried out at the Laboratory of Crop Production Management, Faculty of Agriculture, Universitas Gadjah Mada. A split-plot experimental design was employed, with two factors: K_2SO_4 concentration (0, 1, 2, and 3 g/L) as the main plot and leaf pruning treatment (with or without pruning) as the subplot, each replicated three times. Data were analyzed using split-plot ANOVA in RStudio, followed by Duncan's Multiple Range Test (DMRT) at a 95% confidence level. The results showed that leaf pruning below the fruit, combined with foliar application of K_2SO_4 at 2 g/L, increased fruit potassium content to 1.90%. However, this treatment exhibited lower sweetness (8.65 °Brix) compared to other treatments. No significant differences were observed among treatments in terms of fresh fruit weight, vitamin C content, and fruit firmness.

Keywords : foliar, K_2SO_4 , leaf pruning, melon.