EFEKTIVITAS PEMBERIAN KONSENTRASI *GA_3* TERHADAP PERTUMBUHAN DAN HASIL DUA VARIETAS TOMAT CERI (*Lycopersicum esculentum var. cerasiforme*)

Oleh : Vina Sabila Rosyada

Dosen Pembimbing
Dr. Ir. Basuki, M.P. dan Endah Wahyurini, S.P., M.Si.

ABSTRAK

Tomat ceri memiliki keunggulan dibandingkan tomat jenis lain yaitu kandungan gizi tinggi yang baik untuk kesehatan dan dapat di budidayakan di dataran rendah. Namun, Budidaya tanaman tomat ceri di dataran rendah tidak menghasilkan produksi yang maksimal. Upaya untuk meningkatkan produksi tomat ceri, mendapatkan bibit unggul, dan menambah ukuran buah dapat dilakukan dengan cara memberikan ZPT salah satunya GA_3. Tujuan penelitian untuk mengetahui konsentrasi GA_3 yang sesuai terhadap pertumbuhan dan hasil dua varieras tomat ceri beserta interaksinya. Penelitian dilaksanakan pada Agustus sampai November 2019 di rumah plastik Tirtomartani, Kalasan, Sleman, Yogyakarta. Metode percobaan lapangan menggunakan Rancangan Acak Lengkap (RAL) 2 faktor dengan 3 kali ulangan. Faktor pertama adalah varietas yaitu *Tropical Ruby* dan *Juliet*. Faktor kedua adalah konsentrasi GA_3 yaitu tanpa GA_3, 100 ppm, 200 ppm, dan 300 ppm. Parameter yang diamati yaitu tinggi tanaman, diameter batang, umur berbunga, jumlah tandan per tanaman, jumlah buah per tanaman, jumlah buah per petak, ukuran buah, bobot buah per tanaman, dan bobot kering tanaman. Data hasil pengamatan dianalisis dengan *Analysis of Variance* (ANOVA) pada taraf α = 5% dan dilanjut dengan *Duncan's Multiple Range Test* (DMRT) taraf α = 5%. Hasil penelitian menunjukan adanya interaksi pada parameter ukuran panjang buah dan bobot buah per tanaman pada kombinasi perlakuan varietas *Juliet* dan konsentrasi GA_3 200 ppm. Varietas *Tropical Ruby* menunjukkan hasil terbaik pada tinggi tanaman, diameter batang, jumlah tandan per tanaman, jumlah buah per tanaman, jumlah buah per petak, dan diameter buah. Konsentrasi GA_3 100 ppm dan 200 ppm menunjukan hasil terbaik pada jumlah tandan per tanaman.

Kata kunci : *GA_3 , varietas tomat ceri.*

THE EFFECTIVENESS OF THE CONCENTRATE OF *GA_3* ON THE TWO VARIETIES OF CHERRY TOMATOES GROWTH AND YIELD
(*Lycopersicum esculentum var. cerasiforme)*

By : Vina Sabila Rosyada

Supervised by
Dr. Ir. Basuki, M.P. and Endah Wahyurini, S.P., M.Si.

ABSTRACT

Cherry tomatoes has advantages over the other types of tomato, these are the richness of nutrition that good for health and cultivated ability on lowlands. however, this kind of cultivation may not produce at its maximum level. Applying GA_3 as a solution to increase its productivity, have superior seeds, and increase the fruit size. This research aims to know the suitable concentrate of GA_3 to growth and yield of the two varieties of cherry tomatoes and to know how the interactions are. This research held by August until November 2019 in the greenhouse Tirtomartani, Kalasan, Sleman, Yogyakarta. The trial method that been used in this research was randomize design with 2 factors and 3 replications. The first factor was the variety, which were *Tropical Ruby* and *Juliet*. The second factor was the concentrate of GA_3, which were 0 ppm, 100 ppm, 200 ppm, and 300 ppm. The parameters were plant height, diameter of the stem, age of flowering, number of bunches per plant, number of fruits per plant, number of fruits per plot, fruit size, fruit weight per plant, and dried plant weight. The data was analyzed by applying the analysis of varience (ANOVA), then duncan's multiple range test (DMRT) with a=5% for each. The results showed that there was an interaction in parameter of fruit length and fruit weight per plant with the combination treatment of *Juliet* variety and GA_3 with concentrate of 200 ppm. *Tropical Ruby* variety showed the best result in plant height, diameter of stem, number of bunches per plant, number of fruit per plant, number of fruit per plot, and the fruit diameter. The concentrate of 100 ppm and 200 ppm of GA_3 obtained the best result in number of bunches per plant.

Keywords : *GA_3, the varieties of cherry tomatoes*