INTISARI

Uji daya hasil empat belas galur tomat bertujuan untuk menguji daya hasil dan kualitas buah empat belas galur dan tiga varietas tomat komersil (Marta, Tora, Kaliurang) sebagai pembanding. Penelitian dilakukan pada Februari-Juni 2020 di Fakultas Pertanian, Universitas Gadjah Mada dan di Balai Pengembangan dan Promosi Agribisnis Perbenihan Hortikultura (BPPAPH) Dinas Pertanian Kabupaten Sleman, Jl. Kaliurang KM 23 Ngipiksari, Hargobinangun, Pakem, Sleman, DI Yogyakarta. Penelitian menggunakan rancangan acak kelompok lengkap (RAKL) dengan 3 blok sebagai ulangan. Perlakuan berupa empat belas galur dan tiga varietas kontrol. Data pengamatan dianalisis menggunakan analisis varian dan uji lanjut DMRT pada taraf α = 5%, analisis korelasi, analisis lintas, dan analisis komponen utama. Analisis lintas menunjukkan karakter-karakter yang dapat digunakan sebagai parameter seleksi. Karakter yang dapat digunakan sebagai parameter seleksi diantaranya adalah panjang buah, tebal daging buah, bobot buah per tanaman, serta jumlah bunga per tandan. Analisis komponen utama menunjukkan galur-galur dengan potensi daya hasil tinggi yaitu galur MA 131-16-4, MA 131-22-5, MA 131-18-2, MA 131-16-3, dan MA 131-22-2 serta terdapat empat galur yang memiliki kualitas buah keras dan besar yaitu MA 131-6-1, MA 131-6-2, MA 131-6-3, dan MA 175-1-2.

Kata kunci : daya hasil, kekerasan, varietas, produktivitas

ABSTRACT

Yield potential evaluation of fourteen tomato lines was proposed to test the yield potential and fruit quality of fourteen tomato lines with three commercial tomato varieties (Marta, Tora, Kaliurang) as standard (control). This research has been conducted on February - June 2020 at Faculty of Agriculture, Universitas Gadjah Mada and at Institute of Development and Promotion of Horticulture Seeed in Yogyakarta of The Agriculture Sleman Regency Office, St. Kaliurang km 23, Ngipiksari, Hargobinangun, Pakem, Sleman, DI Yogyakarta. This research was arranged in Randomized Complete Block Design (RCBD) with three blocks as replications. The treatments were fourteen of tomatoes lines and three commercial tomato varieties standard. The data were analyzed using analysis of variance and Duncan Multi Range Test test at α = 5%, correlation analysis,path analysis, and principal component analysis. Path analysis shows the characters that can be used as selection parameters. The characters that can be used as selection parameters include fruit length, pulp thickness, fruit weight per plant, and number of flowers per bunch. The principal component analysis showed lines with high yield potential, had large and hard fruit. The results showed lines of MA 131-16-4, MA 131-22-5, MA 131-18-2, MA 131-16-3, and MA 131-22-2 had high yield potential. Lines of MA 131-6-1, MA 131-6-2, MA 131-6-3, and MA 175-1-2 produced big size of fruit and hard fruit.

Key words : yield, total dissolved solids, variety, productivity