

KARAKTER FENOTIP *Cucumis melo* L. cv. TACAPA DAN KULTIVAR MELON KOMERSIAL HASIL UJI MULTILOKASI DAN MULTIMUSIM

Oleh:

Aziimatur Rifah (10/301649/BI/8492)

Dosen Pembimbing: Ganies Riza Aristya, S.Si., M.Sc.

INTISARI

Melon (*Cucumis melo* L.) merupakan tanaman buah termasuk familia Cucurbitaceae yang digemari masyarakat dan berpotensi untuk pemuliaan tanaman. TACAPA merupakan salah satu hasil pemuliaan tanaman yang berasal dari persilangan antara PI 371795 dan A434 dengan *testcross* PI 371795. TANIA merupakan hasil persilangan *backcross* antara TACAPA dengan PI 371795. TALITA merupakan hasil persilangan *testcross* antara TACAPA dengan A434. Penelitian ini bertujuan untuk mengetahui tingkat kestabilan karakter fenotip melon kultivar TACAPA berdasarkan uji multilokasi dan multimusim, mengetahui keunggulan karakter fenotip melon kultivar TACAPA dibandingkan dengan melon kultivar komersial berdasarkan uji multilokasi dan multimusim. Penelitian ini dilakukan pada bulan Juni 2013 hingga November 2014. Uji multilokasi dilakukan di Kabupaten Sleman Provinsi Daerah Istimewa Yogyakarta, Kabupaten Magetan Provinsi Jawa Timur, dan Kabupaten Kebumen Provinsi Jawa Tengah. Uji multimusim dilakukan pada musim hujan pada bulan Juni hingga November 2013 dan musim kemarau pada bulan Mei hingga November 2014. Pengamatan karakter fenotip melon dilakukan di Laboratorium Genetika Fakultas Biologi Universitas Gadjah Mada. Kultivar komersial yang digunakan sebagai pembanding antara lain A434, Honey Globe, Sun Lady, Orio, dan Kalila. Data karakter fenotip kualitatif kultivar TACAPA, TANIA, TALITA, dan kultivar komersial dianalisis secara deskriptif, sedangkan data karakter fenotip kuantitatif dianalisis dengan ANOVA menggunakan *software* PKBTSTAT 2.02 dan *Microsoft Excel* 2007. Berdasarkan hasil penelitian diketahui keseragaman dan kestabilan TACAPA berdasarkan uji multilokasi dan multimusim. TACAPA memiliki kestabilan berdasarkan uji multilokasi dan multimusim untuk karakter bentuk rongga buah, warna kulit buah, kejelasan net, warna daging buah, aroma, dan tekstur daging buah serta memiliki keunggulan untuk karakter kerapatan net dibandingkan kultivar komersial berdasarkan uji multilokasi dan multimusim. Hasil penelitian menunjukkan nutrisi TACAPA lebih unggul kandungan serat kasar (1.86%/100 g) dibandingkan melon kultivar komersial. Meskipun demikian kandungan mineral dan vitamin melon TACAPA lebih rendah dibandingkan kultivar komersial.

Kata Kunci : Melon, kultivar TACAPA, karakter fenotip, uji multilokasi dan multimusim

**PHENOTYPE CHARACTERS OF *Cucumis melo* L. cv. TACAPA AND THE
OTHER COMMERCIAL MELON RESULTED FROM MULTILLOCATION
AND MULTISEASON**

By :

Aziimatur Rif'ah (10/301649/BI/8492)

Supervisor : Ganies Riza Aristya, S.Si., M.Sc.

ABSTRACT

Melon (*Cucumis melo* L.) is one of the plant that is grouped in Cucurbitaceae. This fruit has a potential for cultivation and its favored by peoples. TACAPA was one of plant breeding product and derived from crosses between ♀ PI 371795 and ♂ A434 testcross with PI 371795. While TANIA was breeding product and derived from backcross between TACAPA and PI 371795. Whereas TALITA was a breeding product and derived from testcross between TACAPA and A434. The purposes of this research were to study the stability phenotypic characters of TACAPA melon cultivar based on multilocation and multiseason trial, study the superiority of phenotypic characters of TACAPA melon cultivar than commercial melon cultivars based on multilocation and multiseason trial. This research was conducted in June 2013 up to November 2014. This research has been done in three locations, there are Sleman Province of D.I. Yogyakarta, Magetan Province of East Java, and Kebumen Province of Central Java. Multiseason trial has been done on rainy season in June up to November 2013 and on dry season in May up to November 2014. Observations of melon phenotypic characters was conducted in the Genetic Laboratory, Faculty of Biology UGM. This research used A434, Honey Globe, Sun Lady, Orio and Kalila as comparison for commercial melon cultivars. The qualitative phenotypic characters of TACAPA, TANIA, TALITA melon and commercial cultivar were analyzed by ANOVA using PKBTSTAT 2.02 software and Microsoft Excel 2007. Based on results, uniformity and stability of TACAPA was determines. Results of this study suggested that TACAPA has stability based on multilocation and multiseason trial in fruit hole shape, fruit rind color, net clarity, color of the flesh, scent and texture of the flesh also suggested that TACAPA has superiority than commercial cultivars based on multilocation and multiseason trial in tight net character. Based on the research the crude fiber of TACAPA is higher than commercial melon cultivars it contains 1.86/100 g. However, the contents of mineral and vitamin C of TACAPA was lower than the commercial melon cultivars.

Keywords : *Cucumis melo* L., TACAPA cultivar, phenotypic character, multilocation and multiseason



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AZIIMATUR RIFAH, Ganies Riza Aristya, S.Si., M.Sc.

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