

ABSTRAK

Tanaman melon (*Cucumis melo* L.) merupakan komoditas hortikultura penting yang banyak dibudidayakan di Indonesia karena nilai ekonomis dan kandungan nutrisinya. Penelitian ini bertujuan untuk mengkarakterisasi keragaman morfologi dan hasil dari sepuluh galur melon koleksi CV. Multi Global Agrindo. Penelitian dilakukan di screenhouse menggunakan Rancangan Acak Kelompok dengan 3 ulangan. Diantara 10 galur melon terdapat keragaman yang signifikan pada karakter kualitatif (warna daun, warna kulit buah, warna daging buah, tipe kulit buah, bentuk buah, tekstur daging buah, panjang tangkai daun dan panjang terminal daun) dan karakter kuantitatif (jumlah daun per tanaman, diameter batang). Galur G1 dan G7 cenderung menghasilkan berat buah per tanaman dan kadar gula yang lebih tinggi dibandingkan galur lainnya. Karakter kualitatif 10 galur tanaman melon tersebar menjadi dua kelompok besar, A dan B, dengan nilai koefisien kemiripan antara 0.15-0.50. Kelompok A (G1, G4, G5, dan G10,) dan B (G2, G6, G9, G3, G8, dan G7). Sedangkan nilai heritabilitas dari karakter kuantitatif menunjukkan kategori tinggi antara 52% sampai 99%. Luas daun per tanaman berkorelasi positif kuat dengan diameter batang (0,67) dan diameter buah (0,64), berkorelasi positif sedang dengan bobot buah (0,47) dan tebal daging (0,46), berkorelasi negatif lemah dengan umur berbunga (-0,13) dan kadar gula (-0,26). Sedangkan panjang tanaman dan jumlah daun justru berkorelasi negatif terhadap kadar gula (-0,62) dan tebal daging buah (-0,52). Hal ini menunjukkan bahwa tidak semua pertumbuhan vegetatif mendukung hasil yang optimal.

Kata Kunci: Melon (*Cucumis melo* L.), galur, karakter morfologi, heritabilitas, keragaman genetik.

ABSTRACT

The melon plant (Cucumis melo L.) is an important horticultural commodity that is widely cultivated in Indonesia due to its economic value and nutritional content. This study aims to characterize the morphological diversity and yield of the ten melon strains of the CV collection. Multi Global Agrindo. The research was conducted in a screenhouse using a Group Random Design with 3 replicates. Among the 10 melon strains, there is significant diversity in qualitative characters (leaf color, fruit skin color, flesh color, fruit skin type, fruit shape, pulp texture, petiole length and leaf terminal length) and quantitative character (number of leaves per plant, stem diameter). The G1 and G7 strains tend to produce a higher weight of fruit per plant and sugar content than other strains. The qualitative character of the 10 strains of melon plants is spread into two large groups, A and B, with a coefficient of similarity value between 0.15-0.50. Groups A (G1, G4, G5, and G10,) and B (G2, G6, G9, G3, G8, and G7). Meanwhile, the heritability value of quantitative characters shows a high category between 52% to 99%. Leaf area per plant was strongly positively correlated with stem diameter (0.67) and fruit diameter (0.64), moderately positively correlated with fruit weight (0.47) and flesh thickness (0.46), and weak negative correlation with flowering age (-0.13) and sugar content (-0.26). Meanwhile, plant length and number of leaves are negatively correlated with sugar content (-0.62) and pulp thickness (-0.52). This suggests that not all vegetative growth supports optimal yields.

Keywords: *Melon (Cucumis melo L.), strain, morphological character, heritability, genetic diversity.*