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Effect of Rootstock on Fruit Quality of Yashar Mandarin at Harvest Time and during Storage

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Rootstocks were involved on fruit quality at harvest and post-harvest times. In this experiment, the Yashar mandarin fruit quality on five rootstocks (Sour orange, Citrange, Citromelo, Poncirus and Fling dragon) at harvest and during cold (5^{o}C & 85% RH) and common (7-10^{o}C & 60-70% RH) storages was evaluated during two years. The results showed fruit had the lowest juice percentage at harvest time on Citrange but fruit on citromelo had the highest juice percentage during storage. TI (6.03 to 6.8 at harvest) slightly decreased but EC increased during storage. At harvest time, the TSS/TA ratio was the highest on Sour orange with 9.43 and the lowest with 7.83 on Flying dragon but it increased during storage. Fruits color development on Citrange was not as well as other rootstocks. Fruit on Sour orange has more phenol at harvest time significantly. The amount of vitamin C in peel of fruits that grafted on Flyingdragon were significantly higher than other rootstocks at harvest time and during storage. The amount of antioxidant capacity was varied depending on fruit tissue and rootstock type. According to overall acceptability data, no significant differences observed to 20 days of storage at all rootstocks. With sampling at 40 and 60 days of storage, fruits on sour orange take lower point with 4.67 and 3.67 respectively especially in common storage. Generally, Yashar fruit on poncirus had high nutrition value and juice content during storage.

Keywords: Fruit quality, Rootstock, Storability, Yashar mandarin.

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