

Title Quality evaluation of some local and imported mango cultivar grown in the United Arab Emirates

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Keyword mango; imported; the United Arab Emirates

Abstract

This study was done at the fruit Research Station, Eastern Region, Ministry of Environment & Water, UAE to evaluate the growth behavior and fruit quality of some mango cultivars grown under the UAE environment.

Afonso, Alsaf, Amrabally, Doshery, Khad Al-Gameil, Krat, Langra Hindi, Langra Pakistani, Malda, Safida, Taimour, Tatabouri, Zafraan and Zebdia imported mangoes in addition to Balady (Local) # 3, # 4, # 5, # 6, # 7, # 8, # 9 and # 10 local cultivar were evaluated for eating quality under UAE environmental conditions. Fruits were harvested at the firm ripe stage in each of 3 years. Fruits were sampled for qualitative (skin color, skin thickness, fruit and seed weight, fruit and seed dimensions and pulp percentage) and quantitative (firmness, °Brix, titratable acidity, and V.C. percentage) analysis. Comparisons between cultivars for sensory evaluation were also performed. Times of flowering and growth habit were observed. Time of flowering for most cultivar was in Jan. except for Langra Pakistani and Tataboury which started to flower in Feb. Also, Krat cultivar has two cycles of flowering one in Feb. and the other is in June. Panicle length differed between different cultivars and ranged from 14-19 cm for most of the local and Langra Hindi cultivar while ranged from 20-30 cm for the rest of the cultivars. Average fruit weight for imported cultivars ranged from 135 gm (Amrabally) to over 1000 gm for Malda while for local cultivars fruit weight ranged from 77-230 gm. Imported mango cultivars had the highest pulp percentage (62-83); however, local cultivars had the lowest percentage (56-72). The best eating quality (no fibers, nice yellow/orange pulp color, high sugars and low acidity) was obtained from Alfonso, Amrabally, Doshery, Langra Hindi, Langra Pakistani, Safida, Taimour, Zafraan, Balady # 7 and # 9 mangoes. These cultivars are good for fresh market. However, Dabsha, Khad Al-Gameil, Krat, Malda, Tatabouri, and Zebdia mangoes are good for processing. In Addition, Balady mangoes # 3, 4, 5, 6 and 10 are not recommended for cultivation because of their bad eating quality.