

Title Physico-chemical characteristics of 'Bellezza', a new hybrid of mandarin
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Abstract

'Bellezza' is a hybrid of 'Okitsu' satsuma × 'Carvalhais' mandarin released in 1996 by the University of Catania (Italy). Fruit are large with a mass normally higher than 150 g, are oblate in shape, seedless in absence of cross-pollination and ripen in December. The overall aspects of 'Bellezza' mandarins are very attractive with deep orange peel colour and aromatic juicy flesh. Objective of this trial was: a) to compare the physico-chemical and nutritional characteristics of 'Bellezza' mandarins with the fruit of the parents; and b) to study their storability under retailing conditions for two weeks. Juice pH, titratable acidity, soluble solids, ascorbic acid, total phenols, sucrose glucose, fructose, flavonoids, and antioxidant activity were periodically monitored. The results indicate that 'Bellezza' mandarins ripen later than the parents and hold well on tree until the end of December. Titratable acidity was slightly higher than in parents as were sugars and ascorbic acid content. 'Bellezza' mandarins also had higher contents of total phenols, and narirutin and dydimin flavonoids. In addition the fruit maintained well both visual and qualitative attributes over simulated retail. The positive characteristics of 'Bellezza' fruit (pleasant taste, attractiveness, high content of nutritional compounds) superior to the parents, make this new hybrid worth of introduction in commercial orchards.