

Title Using "In Store" consumer tests to understand fresh fruit consumer acceptance

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Abstract

Cultivar segregation according to their organoleptic perception was achieved by using trained panel and principal component analysis of 27 peach, 28 nectarine and 12 plum cultivars, respectively, as a part of our three year program to develop minimum quality indexes. Source significantly affected cultivar ripe soluble solids concentration (RSSC) and ripe titratable acidity (RTA) but, it did not affect sensory perception of sourness and aroma by the trained panel. Based on this information, cultivars were consistently clustered in organoleptic groups with dominant perception of sweetness, sourness, aroma and flavor (peach, plum, or nectarine). This preliminary work demonstrated that high consumer acceptance was attained on ripe cultivars with stronger sensory characteristics than traditional ones without any specific sensory characteristic (balanced group) or cultivars in the sour group. Thus, developing and releasing new cultivars with specific sensory characteristics, low acid and free of chilling injury are desirable to increase consumption. However, proper postharvest temperature management and fast marketing within the market life of each cultivar are requirements to allow consumers to perceive the flavor potential of each cultivar.