

Abstract

Sensory descriptive measures of six breeding lines and four supermarket items of tomatoes were determined using the 150 mm unstructured line scales with and without partitioning of taste from aromatic flavor notes using nose clips. Chemical/instrumental analysis measurements of pH, titratable acid, soluble solids, glucose, fructose, total sugars, sucrose equivalents and gas chromatographic analysis of flavor volatiles was also conducted. Taste descriptors were significantly correlated to nonvolatile components when partitioned from flavor perception. Aroma descriptors were more pronounced when following taste perception than when evaluated simultaneously with taste descriptors. Regression models were more effective at predicting sensory descriptors when taste descriptors were partitioned than when they were not partitioned.