



## SENSORY ANALYSIS OF FRUITS FROM OF TANGERINE AND ORANGE HYBRIDS

Castro, D.B.A.<sup>1</sup>, Maurício, F.N.<sup>2</sup>, Cristofani-Yaly, M.<sup>3</sup>, Bastianel, M.<sup>3</sup>, Schinor, E.H.<sup>4</sup>,  
Verruma-Bernardi, M.R.<sup>5</sup>

<sup>1</sup>UFSCar/CCA – Bacharelado em Biotecnologia (em andamento) – Via Anhanguera, Km 174, CP. 153, CEP 13600-970 – Araras, SP – Brasil, e-mail: [dan.castro@iq.com.br](mailto:dan.castro@iq.com.br)

<sup>2</sup>UFSCar/CCA – Bacharel em Biotecnologia. Pós-Graduação em Agricultura e Ambiente (em andamento - CCA) – Via Anhanguera, Km 174, CP. 153, CEP 13600-970 – Araras, SP – Brasil.

<sup>3</sup>Centro APTA Citros Sylvio Moreira– IAC – Pesquisador Científico- Via Anhanguera, Km 158. CP. 04, CEP 13490-970 – Cordeirópolis, SP – Brasil.

<sup>4</sup>Centro APTA Citros Sylvio Moreira– IAC- Pós-Doutorando (Fapesp). Via Anhanguera, Km 158. CP. 04, CEP 13490-970, Cordeirópolis, SP, Brasil.

<sup>5</sup>UFSCar/CCA – Departamento de Tecnologia Agroindustrial e Sócio Economia Rural – Via Anhanguera, Km 174. CP. 153, CEP 13600-970 – Araras, SP – Brasil.

Brazil is one of the most important producer country of oranges and tangerines, in addition to research cross hybrids to become new varieties, however none sensory analysis are normally made to see the acceptance of potential consumers. This study evaluates physical-chemical characteristics and the sensory response of provers to hybrids of the crossing between orange and tangerine. Mass (g), % juice yield, acidity ( $\text{g } 100^{-1} \text{ mL}^{-1}$ ), total dissolved solids (TDS) and ratio were measured for eight hybrids. Sixty two volunteers proved its juice to evaluate color, aroma, texture, flavor, and analyzed overall appearance of the fruits in a nine-point hedonic scale. Sensory data were treated with analysis of variance and Tukey's Honestly Significant Difference procedure (HSD). SisMapp was used to produce internal mappings with the five attributes, besides a sixth attribute result of the sum of the five attributes, named overall acceptance. Physical-chemical analysis approached hybrids to their parental, showing that there were fruits not mature and some with good quality for juice industry. Sensory data had significance on HSD test, not being informative, whereas did not allow to encounter clusters. Alternatively internal mapping were informative to attributes like color, texture and taste of juice, besides the overall acceptance. Not orange like nor tangerine like hybrids were more accepted by the provers, featuring three hybrids as potential varieties. Too two hybrids were less accepted, probably because of the ratio presented.