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TEXTURE OF RED GUAVAS 'PALUMA' CULTIVAR TREATED WITH EDIBLE COATINGS OF ZEIN

Carolina Ibelli Bianco¹, Jéssica Adriana de Jesus¹, Odílio Benedito Garrido de Assis², Douglas Britto², Luís Fernando Polesi³, Marta Helena Fillet Spoto⁴, Marta Regina Verruma-Bernardi⁵

¹Course of Bachelor's degree in Biotechnology - Federal University of São Carlos - UFSCar, Rodovia Anhanguera, Km 174 – SP 330, 13600-970, Araras, São Paulo, Brazil; ²Embrapa Agricultural Instrumentation - São Carlos, São Paulo, Brazil; ³Center of Nuclear Energy in Agriculture - ESALQ/USP, Piracicaba, São Paulo, Brazil; ⁴Department of Agribusiness, Food and Nutrition - ESALQ/USP, Piracicaba, São Paulo, Brazil; ⁵Department of Agro-industrial Technology and Socio-economics Rural - Federal University of São Carlos – UFSCar, Araras, São Paulo, Brazil; E-mail: carol.biancco@hotmail.com

The softening of fruits is the second transformation more relevant to indicate maturity, being a qualitative parameter for the consumer. This study evaluated the effect of edible coatings of zein (corn proteins) at concentrations of 1 and 2% of oleic acid (plasticizer) in the conservation of red guava. Guavas coated and uncoated (control) were stored under refrigeration (5°C) for five weeks, performing analysis of rupture strength of the peel and firmness of the fruit every seven days, and sensory tests (triangular and ordering) for the visual texture every twelve days. The first to the fifth week, there was a decrease of the initial force applied to the rupture of the peel in: 54,47%-fruits to 1%; 41,14%-control fruits; 39,63%-fruits to 2%. Mean values of fruit firmness of the three treatments also reduced from first to fifth week: 80,12%-fruits to 1%; 56,43%-control fruits; 51,75%-fruits to 2%. The triangular test revealed significant differences ($p \leq 0,05$) in the visual texture of fruits to 1% and control fruits after 24 days of storage and between fruits to 1% and fruits to 2% after 36 days. For the ordering test, at 24th day of analysis, control fruits had visual texture more homogeneous than the treatments with cover, and after 36 days, control fruits and fruits to 2% had visual texture more homogeneous than fruits to 1%. Red guavas treated with the edible coating of zein to 2% had better texture than the other treatments, possibly because it provides greater stiffness of the tissue surface of the fruit.