RESÚMENES DE LA LVI REUNIÓN ANUAL DE SOCIEDAD INTERAMERICANA DE HORTICULTURA TROPICAL SANTIAGO, CHILE, 2010

RESUMOS DA LVI REUNIÃO ANUAL DA SOCIEDADE INTERAMERICANA DE HORTICULTURA TROPICAL SANTIAGO, CHILE, 2010

ABSTRACTS OF THE LVI ANNUAL MEETING OF INTERAMERICAN SOCIETY FOR TROPICAL HORTICULTURE SANTIAGO, CHILE, 2010



## CORRELATION BETWEEN THE TOTAL CAROTENOIDS CONTENT AND CHROMATIC CHARACTERISTICS OF DIFFERENT PEQUI GENOTYPES

Maria Elisabeth Barros de Oliveira<sup>1</sup>, Nonete Barbosa Guerra<sup>2</sup>, Aline de Holanda Nunes Maia<sup>3</sup>, Nádia Maria dos Santos Matos<sup>4</sup>, Ricardo Elesbão Alves

¹Embrapa Agroindústria Tropical. Rua: Dra Sara Mesquita, 2270. CEP: 60511-110, Fortaleza, CE, Brasil, E-mail: elisabeth@cnpat.embrapa.br; Elesbão@cnpat.embrapa.br; ²Universidade Federal de Pernambuco, PE, Brasil, E-mail: nonete@globo.com; ³Embrapa Meio Ambiente, CEP: 13820-000, Jaguariúna, SP, Brasil, E-mail: ahmaia@cnpma.embrapa.br; ⁴Universidade Federal do Ceará, CEP: 60021-970, Fortaleza, CE, Brasil, E-mail: nadykamattos@gmail.com

"Pequi" pulps (*Caryocar coriaceum* Wittm.) obtained from mature fruits of thirty five different genotypes were evaluated for total carotenoids content and chromatic characteristics in order to establish their correlations. Pigments were extracted in cooled acetone and quantified by absorptivity coefficient of 2500 at 450 nm. The colorimetric analysis was done in the CIELAB system (L\*, a\*, b\*; C\*, H; L\*: luminosity; a\*: red/green; b\*: yellow/blue; C<sub>ab</sub>\*: chroma; H<sub>ab</sub>: hue angle). Data was submitted to Pearson's correlation analysis and presented as average ± standard deviation. The total carotenoids content of the samples ranged from 3.5 µg/g to 16.3 µg/g, values obtained from genotypes 06 and 21, respectively. Genotypes with highest levels of carotenoids content (20 and 21) were characterized by pulps with an intense yellow color in contrast with the lightest ones, almost white from genotypes 02 and 03. Considerable variation in total carotenoids content among the genotypes was found, perhaps due to the fact that pequi is a native fruit, with a great intrinsic variability. L\* component was the parameter with lowest variability among samples (6.7%) while a\* showed the largest ones (65.1%). About 90% of the samples presented negative values for the a\* component, revealing a light green color interference (average = -1.3). The total carotenoids content showed a low positive correlation to the component L\* and to the components b\* and H (°), moderate correlation with the parameters a\* and C\*, which can be explained by the interference of other pigments, that were not determined in this study.