Quality parameters of Myrtaceae fruits from Southern of Brazil

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Abstract

The Southern region of Brazilshows great richness in wild fruits, among which the botanical family of Myrtaceae stands out for presenting the greatest number of species with food potential. Setting standards of quality and identity of fruit pulp is essential for the evaluation of its industrial potential. Thus, the aim of this work was the physicochemical characterization ofnative pitanga (Eugenia uniflora L.) fruits with different color and yellow guava (Psidiumcattleyanum Sabine) fruits from the Myrtaceae family. All the analyses were carried out according to AOAC procedures, except for fat content, which was determined as described by Bligh-Dyer. Results were analyzed by analysis of variance (ANOVA) followed by Tukey's test. Concerning to the proximate composition, the three samples presented significant differences ($p \le 0.05$) for the all variables analized, except for the protein (0.79, 0.81 and 0.78g.100g⁻¹ fresh weight for redpitanga, purplepitanga e yellow guava, respectively) and lipid (0.59, 0.49and 0.61g.100g⁻¹, respectively) contents.With respect to ash content, yellow guava showed the higher values $(0.63.100g^{-1}f.w.)$ than red and purple pitanga (0.57)and 0.48g.100g⁻¹f.w., respectively). The moisture content varied significantly among the pitangared and purple (87.34g.100g⁻¹ f.w. and 81.79g.100g⁻¹ f.w. respectively) and the yellow guava (80,68g.100g⁻¹f.w.). The carbohydrate content obtained for red pitanga(10,71g.100g⁻¹ ¹f.w.) was lowerthan found in purplepitanga (17,54g.100g⁻¹f.w.) and yellow guava (17,3g.100g⁻¹f.w.). Purplepitanga had higher TSS and ATT than red fruits (16.1°Brix e 2.81%) citric acid and 13.2°Brix e 1.84% citric acid, respectively, $p \le 0.05$). Purple and red pitangahad pH (3.0 e 2.9) and yellow guava pH (3.3). The quality characteristics of the purple and red pitanga fruits analyzed are within the legal limits established for frozen fruit pulp in Brazil.