OPTIMIZATION OF BRAZILIAN CERRADO MIXED FRUITS JAM

Vanessa Rios de Souza, Patrícia Aparecida Pimenta Pereira, Ana Carla Marques Pinheiro, Cleiton Antônio Nunes, Soraia Vilela Borges, Fabiana Queiroz. Department of Food Science, Federal University of Lavras – UFLA, Caixa Postal 3037, Lavras, Minas Gerais, Brazil.

The Brazilian Cerrado is a cradle of great biodiversity, with many species of fruits that are still unknown or rarely found on the market. These fruits have exotic flavors and high nutrient content, and thus great economic potential. One way of increasing availability and adding value to the fruits of the Brazilian cerrado is the creation of new products such as jams and jellies. The aim of this study was to determine the optimum proportion of the fruits murici (Byrsonima crassifólia L. RICH), marolo (Annona crassiflora Mart.), jenipapo (Genipa americana L.), sweet passion fruit (Passiflora alata Dryand) and soursop (Annona muricata L.) in the formulation of cerrado Brazilian mixed fruit jam through the sensory evaluation of the jams’ formulations. The Parallel Factor Analysis (PARAFAC) and response surface methodology using mixture design were utilized. The best formulations contained the following proportions of fruit: 50% marolo and 50% soursop; 33.33% marolo, 33.33% sweet passion fruit and 33.33% soursop; and 60% marolo and 10% each of murici, jenipapo, soursop and sweet passion fruit. The use of PARAFAC in conjunction with the modeling of mixtures is useful in elucidating the effects of foods’ components on sensory attributes, especially in mixtures with more than three components, in which the graphic analysis is difficult.

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