DEVELOPMENT OF BREAD ENRICHED WITH "SIRIGUELA FLOUR" (SPONDIAS PURPERA)


Siriguela (Spondias purpera) is a typical fruit of north eastern Brazil, rich in carbohydrates, minerals and vitamins. Its pulp can be used for the development of flour for the preparation of other food, such as breads. The objective of this research was to produce bread replacing part of wheat flour by “siriguela flour” and compare it to the traditional formulation. Two formulations of bread were developed: one with 100% of wheat and another replacing it with 20% “siriguela flour”, which was obtained by drying the pulp (in solar dryer), grinding and screening of the dehydrated material. The breads were submitted to microbiological analysis of Coliforms at 45°C and Salmonella, according to RDC n. 12 (Microbiological Standards for Food, Brazil) and sensory analysis by means of acceptance testing for the attributes of appearance, aroma, taste, tenderness and overall acceptability using a hedonic scale of nine points. The treatments were submitted to ANOVA and Student t-test at the 5% level of significance. All microbiological analysis showed results below the limits set by the RDC n.12. In sensory analysis, only Aroma was no significant difference (p < 0.05) between treatments. Regarding the other attributes, there were significant differences. The traditional bread that obtained the best average, all close to 8.0 (I liked), while the bread with “siriguela flour” averaged for all attributes near 6.0 (I liked lightly). The bread with “siriguela flour” showed lower sensory quality to the traditional, being necessary to study substitutions with lower levels of this flour.

Keywords: Brazilian tropical fruits, Sensory quality, Bakery.