THE USE OF DIFFERENT COWPEA FLOURS (Vigna unguiculata L. Walp) TO PREPARE PASTRIES


Studies of genetic improvement in commercial and nutritional quality of cowpea have been carried out. For the market and consumption extension it's necessary specific knowledge about the best way of making better use of its properties. The purpose of this research was to obtain cowpea flour from white grains and prepare baked pastries with partial replacement (20%) of wheat flour. The flours were obtained from one lineage (Bulk) and five cultivars (BRS Guariba, BRS Potengi, BRS Tracuateua, BRS Tumucumaque e BRS Xiquexique). The raw grains, flours and pastas (used to prepare the pastries) were physico-chemically analyzed in relation to their moisture contents, water activity and proteins. The pastries made of wheat flour (standard) and the proteic ones (made of Bulk and Tumucumaque beans flour) were submitted to a sensory evaluation. For the raw grains, the protein contents varied from 23,60% to 27,12%, for the flours from 23,36% to 26,70% and for the pasta from 11,70% to 14,23%. The majority of the consumers graded from 7 to 8 for the attribute acceptance aroma, texture, flavor and global acceptance in a 9 points scale and 4 for purchasing intention, in a 5 points scale. Except for colour, there was no significant difference (p>0,05) between the attributes. The results confirm the viability of preparing pastries using white cowpea grains flour, with nutritional quality and satisfactory acceptance.