EVALUATION OF MINIMALLY PROCESSED PAPAYA FORMOSA, COATED WITH WHITEMOUTH CROAKER (Micropogonias furnieri) PROTEIN ISOLATE AND MONTMORILLONITE


Processed fruits show several problems of preservation, making them more perishable than fresh fruits. The objective of this study was to apply coatings of Whitemouth croaker (CPI) protein isolate and montmorillonite (MMT) for coverage in minimally processed papaya Formosa, and to analyze pH, titratable acidity, soluble solids (°Brix) and weight loss in the products. Papaya was peeled and seeds were removed and finally cut into cubes. The coatings were prepared by dissolving CPI in water, adjusted to pH 11.2, then added MMT 5 g controlling the temperature at 80°C; after complete dissolution of the CPI and MMT, glycerol was added. For the preparation of the coatings, CPI was accomplished the same process without addition of MMT, with three treatments: Treatment T1 (control film), Treatment T2 (film with CPI), Treatment T3 (film with CPI and MMT). The samples were packaged in PET, and stored at 4±1 °C. These were analyzed for 1, 3, 5, 7, 9 and 12 storage days. The pH values decreased over the storage day is that the T1 had lower pH value in 12 storage days. Acidity increase during the storage time, where T2 and T3 not showed significant difference until the end of storage. The °Brix increased until the last storage day for all treatments. Treatment T1 showed the greatest weight loss. Treatment T3 showed the best results in coverage of minimally processed papaya when compared with other treatments at 12 days of storage.