ABSTRACT

This work sought to determine the effect of freezing on the sensory qualities of slices of Roundleaf Yellow yam (D. cayenensis) prepared in different ways.

Half-inch thick slices of the raw, pre-cooked, peeled, unpeeled, sulphite treated and non-sulphite treated samples, obtained from different sections (head, middle, tail) of the fully mature tuber, were frozen within 30 minutes at -40°C to -46°C and stored at -5°C to -5°C for periods of one to three months. Evaluation of the colour, texture and flavour of the samples was then determined.

It was found that:

freezing did not significantly affect the sensory qualities of the yam slices, but that the method of preparation can have significant, negative effect on sensory qualities;

where the fresh tuber is not severely discoloured on injury, a 1% sodium metabisulphite solution can prevent discolouration of the frozen product and that the frozen product can be stored at -3°C to -5°C for up to three months without any significant change in quality.