

A B S T R A C T

The main purpose of this study is to extract and characterise the pectin from yellow passion fruit and to determine whether the rind could be used as a commercial source of pectin.

Yellow passion fruit rind was comminuted and heated with four times its weight (wet) of water containing 0.50 per cent (V/V) hydrochloric acid for 60 minutes.

The mixture was filtered and the resulting pectin extract was precipitated with 1.5 volumes of 95 per cent ethanol containing 0.05N hydrochloric acid. The precipitated pectin was washed with 70 per cent ethanol until it was free of chloride ions and finally dried at 60°C for 16 hours.

The recovery of the pectin varied from 14 to 22 per cent on a dry weight basis. Analysis of the pectin recovered, revealed that it had a methoxyl content of 8.7 to 10.7 per cent, an anhydrouronic acid content of 76.2 to 80.0 per cent and the degree of esterification varied between 64.8 and 75.9 per cent. The non-uronide matter found associated with the pectin included arabinose and galactose. The jelly grade of the pectin varied from 195 to 227 (SAG method).

These results indicate that pectin from yellow passion fruit is of a good quality and at least comparable with commercial pectin obtained from citrus waste and apple pomace.