

Effects of Temperature and Enzyme Concentration on Quality of Pineapple and Pawpaw Blended Juice

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Abstract : The effects of temperature and enzyme concentration on the quality of mixed pineapple and pawpaw blended fruits juice were studied. Extracts of the two fruit juices were separately treated at 70 °C for 15 min each so as to inactivate micro-organisms. They were analyzed and blended in different proportions of 70% pawpaw and 30% pineapple, 60% pawpaw and 40% pineapple, 50% pineapple and 50% pawpaw, 40% pawpaw and 60% pineapple. The characterization of the fresh pawpaw and pineapple juice before blending showed that the juices have good quality. The high water content of the product may have affected the viscosity, vitamin C content and total soluble solid of the blended juice to be low. The effects of the process parameters on the quality showed that better quality of the blended juice can be obtained within the optimum temperature range of (50-70 °C) and enzyme concentration range (0.12-0.18 w/v). The ratio of mix 60% pineapple juice: 40% pawpaw juice has better quality. This showed that pawpaw and pineapple juices can blend effectively to produce a quality juice.

Keywords : clarification, pawpaw, pineapple, viscosity, vitamin C

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