

Pineapple juice production using ultraviolet pasteurisation: potential cost implications.

ABSTRACT

Urban lifestyles have contributed to consumers' need for convenient and nutritious food products. This study is aimed at determining the cost implications of pineapple juice production using ultraviolet (UV) as an alternative (non-thermal technology) to the conventional pasteurisation methods used in small-medium scale juice facilities in Malaysia. The financial analysis involved Contribution Margin, Net Present Value, Payback, Period, and Profitability Index of the UV and heat treated pineapple juices. Ultraviolet pasteurisation has relatively lower initial capital development cost than heat pasteurisation. Thus, implementation of UV technology can be more profitable than heat treatment when applied in a small-medium scale pineapple juice processing plant.

Keyword: Cost implications; Heat treatment; Pasteurisation; Pineapple juice; Ultraviolet.