

DEVELOPMENT OF DRAGON FRUIT JAM

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ABSTRACT

Dragon fruit (*Hylocereus sp.*) belongs to the Cactus family and is native to arid and semiarid regions. The fruit is a berry like, with a thick peel enclosing a delicately flavoured seedy pulp. Because the dragon fruit plant can withstand prolonged drought, it is considered as a potential alternative crop for drier regions. The highly nutritious juicy ripe fruits are consumed fresh and are also suitable for processing into jams. Moreover, dragon fruit containing betalain pigment which is red-violet betacyanins is a good potential for use as a natural food colourant for jam. The primary aim of this study was to formulate the dragon fruit jam that can be acceptable to consumers. The biological and chemical compositions of the jam were analysed. The second aim was to study the acceptance level of the dragon fruit jam formulated. Other analyses that have been carried out were sensory evaluation by fifty panelists, moisture content, pH, total soluble solids and total plate count for microorganisms in the jam for food safety purpose. The arrangements of scores for overall acceptability of dragon fruit jam were colour> flavour> appearance> texture> odour. The water activity of the jam was found to be 0.848 and the °Brix was 65%. The pH of the jam was 3.28, which was the pH requirements for good setting. All the analyses results obtained met the FAO and FDA requirements for jam. In conclusion, dragon fruit can be a good source for jam manufacturing, and has the possibility of creating a great business opportunity that has high market potential locally and internationally.

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