Cempedak Jam Production

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ABSTRACT

The cempedak (*Artocarpus Integer*) is a local fruit that is available throughout the year in Malaysia. It has a strong and sweet smell that is suitable for jam making. Jam, mainly made from fruits, pectin and acid, is a good way to preserve perishable fruits. The objectives of this research were to formulate an acceptable cempedak jam and to study the quality of the jam through microbiological, physiochemical and sensory evaluation. A ranking test and 9-point hedonic scale were used to assess the sensory acceptability of four different cempedak jam formulations that were added with either pure sugar, honey, cinnamon, or both honey and cinnamon. Sensory evaluation was tested by 60 panelists that were randomly picked from University College Sedaya International (UCSI). Formulation 1 that contained pure sugar obtained the highest sensory mean score at 5.88 on the acceptability of the jam. This formulation was also ranked as the most preferred formulation, where 62% of the panelists were willing to buy the jam. The other formulations with the addition of cinnamon, honey, or both, were less favourable, with mean score ranging from 4.12 to 5.35. Overall, the pH, water activity and total soluble solid content of the four jam formulations were slightly higher than the ideal value. The physicochemical values of the different jam formulations ranged between pH 3.59 - 3.74, 0.786 - 0.862 (water activity) and 65±0.5 $^{\circ}$Brix. In terms of microbiological evaluation, no microorganisms were detected during 8 weeks of storage period. Thus, it is recommended that further study should be carried out to improve the pure sugar formulation in order to increase the acceptance level for cempedak jam.