Sensory Evaluation of Bubble Tea Base Solution from Brown Sugar Cane by Rate-All-That-Apply (RATA) Method

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ABSTRACT

Background: Nowadays, there are numerous bubble tea products made with brown sugar that are extremely popular with the general public. However, the boba drinks were not made from brown sugar cane in Indonesia. The purpose of this study was to characterize the sensory profile of boba base solution and to determine sensory attributes based on consumer preferences in Central Java.

Methods: Sensory evaluation by consumer using the Rate-All-That-Apply (RATA) and hedonic rating tests. This study examined three formulations of bubble tea base solutions made from various brown sugar cane varieties. The Kruskal Wallis test, Principal Component Analysis, and Preference Mapping were used to analyze the data.

Results: Five characteristics of boba base solution products were found to be significantly different (0.05), including milky aroma, vanilla aroma, caramel flavor, and milk mouthfeel. Product L1 has all component attributes similar to the Control product. L2 were identical in terms of fatty aftertaste (2.86). The brown color (3.65) and caramel flavor (3.06) of product L3 are identical. Products receive significantly more preference than the average (40-60 percent). Consumers adore the milky aroma, vanilla aroma, and sweetness, but dislike the caramel flavor slightly.

Conclusion: The area of brown sugar cane production has an effect on the boba base solution's sensory profile. Product L1 have the potential to replace Control products which has a high preference from consumers.

Keyword: brown sugar cane, consumer acceptance, hedonic, Rate-All-That-Apply (RATA)

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