

ABSTRACT

In the process of manufacturing lemon juice, a significant proportion of the byproduct, specifically 83%, is discarded. Fruit leftovers are biodegradable and potentially harm the environment due to their high moisture and microbial load. A product was developed out of citrus peels in an effort to utilize lemon waste during the production of “Maha lemon” in order to increase the value of lemon byproduct. The objective of this study is to evaluate the processing method toward sensory and physicochemical properties of candied lemon peel. The method employed to evaluate the acceptability of the candied lemon peel involves the application of sensory analysis techniques, particularly the Hedonic test and CATA (Check All That Applies). The sensory analysis data was supported by physicochemical analysis. According to the analysis conducted, the candied lemon peel that utilizes the boiling and freezing is deemed the most suitable method. The processing methods have a notable impact on several key characteristics, including the visual attribute of a yellow outer layer appearance, the transparency of the inner layer, the toughness of the product, and the lower level of bitterness. Therefore, candied lemon peel can be produced to make sustainable product and increase company’s revenue.

Keywords: Waste, candied lemon peel, sensory properties, physicochemical properties