**Handling & Processing Section**

**LB8-9 ‘Sugar Belle’ Kombucha: Alternative Citrus Product in the Huanglongbing Era**

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**Abstract**

Huanglongbing (HLB) is a severe citrus greening disease for citrus plants with no cure. Because of HLB, the citrus production in Florida decreased by 69.8% from 2003–2004 to 2019–2020 seasons. Growing HLB-tolerant citrus plants such as LB8-9 ‘Sugar Belle’ (Sugar Belle) is one of the ways to overcome this problem. In this study, Sugar Belle juice was mixed with the initial stage of kombucha and fermented. The chemical changes during Sugar Belle kombucha fermentation were studied and compared with the regular kombucha fermentation. Samples were collected at day 0, 3, 7, and 10 during the fermentation. The amount of volatiles were identified and quantified by GC-MS and sugars, organic acids, tea polyphenols, and citrus flavonoids by LC-MS/MS. Sensory panels were conducted for sensory aspects and the overall liking. The data from the analyses above were combined and analyzed to reveal the relationship between chemical constituents and sensory attributes. This successful production of Sugar Belle kombucha with the beneficial compounds and the comparable consumer’s acceptability will have the potential to increase the demand for the LB8-9 ‘Sugar Belle’. This would get citrus farmers to grow LB8-9 ‘Sugar Belle’ as an alternative variety for the citrus industry in the circumstance of the lack of a cure for HLB.

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