

Studies on aroma volatile constituents from four varieties of ripe mango in China

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Abstract

The aroma volatiles of four varieties of mango (*Mangifera indica* L.) ('Guire 82', 'Tainong 1', 'Mallika' and 'Hongmang 9') cultivated in Zhanjiang, Guangdong province were obtained by solid-phase microextraction (SPME) and analyzed by GC/MS in the skin and pulp at the fully ripe stage. The Total Soluble Solid (TSS) and color of skin and pulp were also studied. The aroma volatiles with the highest content in the four varieties were: (*Z*)- β -ocimene (43.02%), Terpinolene (68.37%), D-Limonene (54.91%) and 3-Carene (49.951%) in the skin and (*Z*)- β -ocimene (82.32%), Terpinolene (67.84%), Cinene (68.33%) and 3-Carene (67.86%) in the pulp. There were 22 and 7 volatiles detected in the skin and pulp of 'Guire 82', respectively. The numbers of volatiles obtained from the skin and pulp of 'Mallika' and 'Hongmang 9' were (30, 32) and (12, 10), respectively.