

Title Comparison of the volatile compositions and flavour properties of cantaloupe, Galia and honeydew muskmelons

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Citation Food Chemistry Volume 97, Issue 1, July 2006, Pages 95-102

Keyword Muskmelon; Cantaloupe; Galia; Honeydew; Solid-phase microextraction; Sensory analysis

### **Abstract**

Aroma compounds were extracted from three cultivars of muskmelon (*Cucumis melo* L.) by solid-phase microextraction and analysed by gas chromatography–mass spectrometry. Sulfur-containing esters and compounds containing a straight six-carbon chain were present at high concentrations in cantaloupe melons. Compounds containing a straight nine-carbon chain were at high concentrations in honeydew melons. Methyl esters were present at the highest levels in Galia melons. The sensory properties of the three melons were also compared. Cantaloupe melons were associated with sweet, floral and fruity aromas and a persistent aftertaste. Galia melons possessed the strongest cucumber-like flavours, while cucumber aroma and sweet flavour scored highly in honeydew melons.