

Title Volatile constituents and pear aroma studied by dynamic headspace technique
Authors F. Rapparini, E. Gatti and S. Predieri
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Abstract

The headspace profile and emission of aroma volatiles from the whole unpeeled fruit, the flesh, and the peel of 'Harrow Sweet' pears were analyzed by GC-MS. Although the differences in qualitative composition were slight, significant quantitative differences were found depending on the specific fruit tissues analyzed. Skin tissue samples had a considerably higher emission rate of volatiles than was observed for whole unpeeled and peeled fruits. Acetate, particularly butyl and hexyl acetate, formate, butanoate and hexanoate esters were emitted at higher rates from the excised peel than from the intact fruit and the pear flesh. The importance of fruit structure in the aroma formation is discussed.