Title Factors affecting storability in apples

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Abstract

The flavor of apples after storage is important to the consumers. Most often factors like decay, firmness and the contents of soluble solids and acidity are regarded as the limiting factors for storability of apples. The amount of volatile aroma compounds is less studied. Using head space analyses the amounts of 8 compounds known to be important to aroma of apples were studied during storage. Some compounds increased while others decreased during storage. Apples of three cultivars and from trees treated with foliar fertilization with nitrogen and calcium were included. The early ripening cultivar 'Discovery' had more aroma compounds in November and less in February. In the late ripening cultivar 'Elstar' the content of aroma compounds was low in November. However, the amounts were more than doubled in February. The foliar fertilization with nitrogen tended to reduce the amount of aroma compounds while the highest content was found in apples from trees treated with calcium. However, these tendencies were not statistically significant. In 'Discovery' the content of aroma compounds may be a limiting factor to the storability of this cultivar.