Title Quality assessment of 'Pinova' apples by optical methods

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Abstract

The optimum picking date for apple fruit is normally determined by destructive method such as the Streif index. However, clear decisions made in the orchard on the ripeness stage and quality level are not always possible and a new optical procedure may help to recognize quality differences and thus enable an optimized decision on the picking date. In 2005 and 2006 at the Ahrweiler fruit research orchard ‘Pinova’ trees were strip-picked at different picking dates and sorted into four quality categories based on their internal and external fruit quality. A colour card was established to help fruit growers determine the optimum picking date. The chlorophyll decrease and anthocyanin synthesis was recorded by spectrophotometric methods during the ripening time. In order to introduce spectral-optical methods in practise further tests are necessary.