

Sensory profiling of apple cultivars

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Sensory quality of apples, recognised as a key factor driving consumer choice, is frequently indirectly measured using basic instrumental or pomological descriptors. Several studies so far investigated the correlations between instrumental measurements and sensory properties, these latter not always analysed by trained panel according to proper sensory science principles.

Here, we present the setting up and the application of a trained panel sensory evaluation tool for the characterization of apple. Fruit physical and chemical parameters related to sensory descriptors of flavour and texture (basic composition, volatile metabolite profiling and texture profiling) were instrumentally measured as well.

The proposed methodology, validated on a wide selection of apple cultivars (more than 20 commercial varieties and 11 new FEM accessions) over 2 years of production, allows to discriminate among different cultivars and highlights the perceivable changes developed during postharvest. Multivariate regression models show that it is possible to predict by instrumental measurements most of the textural sensory properties together with some flavour attributes.

The opportunity to monitor several important sensory attributes makes the proposed sensory/instrumental approach a valuable tool for cultivar evaluation in breeding programs to assist the genetic improvement of new apple accession characterised by a better fruit quality, oriented towards the consumer preferences.

Agrimoniin the most important ellagitannin in human diet: elucidation of its identity in strawberry fruits and the influence of fruit ripening on its concentration

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Of the most commonly consumed berries, strawberries (*Fragaria ananassa* Duch.) are the most popular choice with consumers, being eaten both fresh and frozen, as well as in different processed products. Although the composition of strawberry fruit has been extensively studied, especially for the most abundant phenolic compounds, agrimoniin