

[Abstract:](#)

Pear fruit are graded on external appearance factors which are currently determined by machine on a limited number of fruit. Other parameters which could better meet consumer expectations such as sugar content, acidity, flesh firmness, internal quality, etc. are traditionally determined with destructive techniques on a fruit sample which is conventionally considered representative of all the harvested fruit. Currently, non-destructive evaluation methods using near-infrared spectroscopy (NIRs) are being tested on several fruit and vegetables, with the aim of identifying parameters which could estimate maturity more properly. The present study reports the initial results obtained with an NIRs instrument used to estimate soluble solids content, flesh firmness, acidity and dry weight in several pear cultivars.