Abstract

In oats (*Avena sativa* L.), groat percentage (GP) is defined as the amount of hull-less darnels obtained after de-hulling, expressed as a percentage of the weight of the sample. GP is considered a good marker of milling yield in oats, but so far a quick and reliable method to define it has been lacking. In the present study, a group of oat cultivars, grown in Italy in 1998-2000, was used to develop near infrared (NIR) spectroscopy calibration equations for this parameter. The material for the analysis was represented by whole kernels. The coefficient of determination R^2c was 0.80. The ability of the equation to predict GP was then verified using a separate set of oat samples. These preliminary results indicated hat NIR spectroscopy could be considered a good tool to predict GP in oat cultivars; analysis of whole kernels allowed time to be saved by avoiding the grinding stage in sample preparation.