

Title The effect of light scattering on NIR reflectance and transmittance spectra of wheat
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Citation J. Near Infrared Spectrosc. 2, 93-99 (1994)
Keywords Near infrared; reflectance; transmittance; whole grain; scattering

Abstract

An NIR hardness score based on the reflectance of ground wheat is available (AACC Method 39-70A). However, it is desirable to derive an analogous score applicable to whole wheat so that an on-line measurement of hardness could be used in wheat blending. The intention was to use an algorithm based on the multiplicative effect of scatter on NIR spectra and so an experiment was carried out to determine whether or not the effect of scatter on reflectance and transmittance spectra of whole grain is multiplicative. As no evidence was found to support this model, a different approach will be needed. However, these studies have brought a new insight into the effect of scatter on the NIR spectra of whole grain.