

Title Authentication of whole and ground coffee beans by near infrared reflectance
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Abstract

The potential of NIR reflectance spectroscopy for discriminating between pure Arabica and pure Robusta coffee and blends of these two was investigated. Studies were performed on whole and ground beans using a factorial discriminant procedure. For whole beans, in the absence of blended samples, a correct classification rate of 96.2% was achieved. Inclusion of blended samples reduced his figure to between 82.9% and 87.6%. In the case of ground samples, including blends, a correct identification rate of 83.02% was achieved. The molecular basis for discrimination is discussed.