

Title Determining Soya Bean Seed Size Uniformity with Image Analysis
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Abstract

Seed-size uniformity is an important grading factor in soya beans affecting value. Currently, it is determined by visual inspection. Image analysis-based seed-size measurements were used to predict size uniformity of soya bean samples. Linear discriminant function models and artificial neural network classifiers were developed to classify samples in two uniformity classes (uniform or not uniform in size) using various size distribution parameters as measures of size uniformity. Both methods of classification performed equally well with an agreement in excess of 84% with the visual assessment of samples.