

### **Abstract**

The variation in individual seed electrical conductivity (EC) ( $\mu\text{S cm}^{-1} \text{g}^{-1}$ ) of 24 seed lots of two common bean cultivars produced at two locations was quantified using the parameters mean — median, standard deviation (SD), and the range 0–75%. Also coefficient of variation (CV) was tested, which was regarded not to be a good indicator of this type of variation. Bulk seed lot quality of this material with a very high germination percentage was determined using EC and percentage viable seeds. At physiological maturity (PM), a low variation in individual seed EC as quantified by mean — median, SD and the range 0–75% was associated with good quality as measured by a low bulk EC and a high percentage of viable seeds. At harvest maturity, associations were less clear than at PM, partly because individual seed variation was smaller and also because bulk EC values differed only slightly among most seed lots. The relationships between individual seed variation and bulk quality were different for the two sites, as shown by a statistically significant improvement of the adjusted  $R^2$  of the regression when site was included in the regression model, but the relationships were not affected by cultivar. No relationship was found between CV for individual seed EC and bulk quality.