

Title Identification of asparagus seed lots by the distribution of the percentage of seed in uniform seed diameter categories

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Citation ISHS Acta Horticulturae 776:305-312. 2008.

Keywords *Asparagus officinalis* L.; seed; diameter distribution

Abstract

The goal of this investigation was to develop a statistically reliable and easy method to identify an asparagus seed sample by the distribution of the percentage of the sampled seed in each of six seed diameter categories. A set of five, round holed, seed sieves were used to separate 100 g. seed samples into six uniform seed diameter categories to identify the seed samples. Statistically significant differences were found in the distribution of the percentages of seed in the seed diameter categories between cultivars and also between years of seed production within the asparagus cultivars of UC 157, Atlas, Grande, Apollo, Purple Passion and Dulce Verde. The identification of a seed sample in this manner can provide asparagus growers or grower organizations with an inexpensive, fast and easy method of determining if a questionable seed sample is from the original seed source or from a counterfeit source by comparing the distribution of the percentages of seed in the seed diameter categories data of a questionable seed sample to the official seed lot data of the original seed producer.