SAMPLE SIZE DETERMINATION BY BOOTSTRAP OF AVOCADO SHOOT XYLEM CHARACTERISTICS

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The sample size was determined in order to estimate precisely and practically population parameters having xylem in annual shoots of avocado trees, where 3 avocado trees with contrasting height were studied. For this, nonparametric bootstrap method was applied, as from 60 observations: frequency, area, perimeter and diameter of xylem vessels, from 9 year-old trees of a segregant population of 'Colín V-33', established in Coatepec Harinas, State of Mexico, Mexico. To use a test that could reflect the importance of differences among the genotypes, the following were determined: average and standard deviation from the mean, coefficient of variation, genotype mean square, error mean square and *F* calculated for a completely randomized design through 5000 bootstrapping, with sample sizes of 2, 5, 10, 15, 20, 30, 40 and 50 repetitions of microscopic fields (approximately 1 mm^2). The results suggest that as from a sample size of 15 repetitions, the deviations in the five statistical estimates are minimal; therefore, a sample size of 20 microscopic fields is proposed.