EVALUATION OF THE VARIABILITY IN PRODUCTION OF AVOCADO TREES, CV HASS, GRAFTED ON MEXICAN SEEDLING ROOTSTOCKS IN CHILE

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The productivity of avocado orchards is highly variable, probably the highest among fruit crops. The main explanation is the variability in the rootstocks used, since most of them are obtained from seeds with a high level of heterozygosis. Most of the rootstocks used in Chile belong to seedlings of the Mexican race and, moreover, the orchards where those trees are obtained lack the isolation required. In the frame of a program devoted to identify outstanding trees, the range of variability in the production of the main avocado cultivar grown in Chile (Hass) was evaluated in a 14 ha commercial orchard with known annual records of production per tree. Three different productivity parameters were analyzed: The cumulative production over 10 years (Kg/tree), the tree efficiency (Kg per tree projected area) and level of alternance (deviation from the annual average production). The results obtained show high levels of variability pointing out to the need to identify "outstanding producing trees" to be evaluated and cloned.

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