

## HIGH DENSITY ORCHARDS: EFFECT OF PRODUCTION ON TREE GROWTH, FLOWERING AND CROP OF HASS AVOCADOS (*Persea americana* Mill.) FOR THE YEAR FOLLOWING

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Over the last years, not only Chile has showed a great growth of areas planted with Hass avocados (*Persea americana* Mill.), but also planting densities have also increased, reaching up to 1,111 trees ha<sup>-1</sup>. In this planting system, constant fruit load is necessary to control the vigour of trees and avoid excessive growth in years with low crop yields.

In a high density orchard (3 x 3 m) planted in Llay-Llay, high, medium and low production trees were tagged. During two seasons these trees were measured. Parameters such as production, fruit size, trunk circumference, number and average size of leaves, and number of fruits for the next harvest season were recorded and analysed.

Results showed a clear effect of fruit number over several production parameters, such as fruit size, number of inflorescences, and therefore, flowering and number of fruits for next season production. In this type of orchards, whose tree size allows working on ground level, manual thinning may be very useful to avoid alternate bearing problems. Fruit amounts per tree not causing alternate bearing problems are shown in this paper.