EFFECT OF FERTILIZATION WITH NITRIFICATION INHIBITORS (ENTEC® SOLUB 21) IN HASS AVOCADO TREES (Persea americana Mill)

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The present work was carried out in the locality of Los Molinos, Cabildo, V Region, regarding Hass avocado trees on Mexicola rootstocks planted in 1999 at 6 x 4 m, during 4 years (2002-03 to 2006-07). It was conducted in order to evaluate the effect of fertilizer applications with nitrification inhibitors (ENTEC ®) on vegetative growth, fruit size, alternate bearing and post-harvest of avocado, comparing the results with a program in which urea was the main source of nitrogen.

Both treatments were annually applied in three periods: *i)* spring, full bloom (late October, early November), *ii)* summer, fast growth of fruits (January) and *iii)* autumn, floral induction and floral differentiation (late April, early May).

In year 2002, the same nitrogen units were added in both treatments, generating an excessive growth in trees treated with ENTEC. This caused that 2003 and 2004 harvests were statistically lower in this treatment; then in year 2003, fertilisation was conducted with only 75% ENTEC; 2005 and 2006 harvests were statistically equal between treatments.

Regarding foliar analysis, differences were detected in years 2003 and 2006. In the SPAD, ABI and dry matter index no differences were not found. The difference in the perimeter of trunks continued since the first year, in contrast with annual growth. Regarding the evolution of post-harvest fruit, no differences were observed, evaluating the following: pulp pressure, colour, vascular browning and pulp at 20, 30 and 40 days of refrigeration.