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EFFECT OF FOLIAR APPLICATION OF AUXYM OLIGO ON FRUIT SET, DIAMETER, YIELD AND SHOOT BUD SIZE IN AVOCADO VARIETY HASS (*PERSEA AMERICANA* MILL)

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In avocado worldwide producing areas, it is known that this species shows a low rate of fruit set and a low potential yield when compared to other fruit crops.

Whiley and Wolstenholme (1995), indicate that the low yields are due to genetic and climatic causes, moreover, the limited fruit set could be due not only to temperature and hydric stress but to a reduction in the photosynthetic efficiency of older leaves and the lack of root nutrients during flowering. Moreover, Whiley (1990) points out that fruit abscission in summer would depend on a stress due to the lack of carbohydrates, joint to high temperatures and high evapotranspiration.

In the present work, we have evaluated, during 3 growing seasons, the effects of the application of Auxym oligo (a biological stimulant of vegetal origin) to avocado, at different dosages and time periods, on fruit set, fruit diameter, growth of vegetative shoot buds and yield in kgs per hectare.

The dosages applied were: 4 cc of commercial product / l water; 6 cc / l water; 8 cc / l water (three treatments plus a control). Every treatment was applied three times, during flower anthesis (first application), expanding red shoot bud (second application), and 1 month after the second application (third application). Therefore, T1 12 cc.; T2 18 cc and T3 a total of 24 cc.

Concerning fruit set, a statistically significant increment in the high Auxym treatment (8 cc /lt) was observed. The other treatments do not show statistically significant differences, although fruit set has a tendency to increase at low Auxym oligo dosages.

In the case of shoot bud growth, the treatments of 6 cc and 8 cc per liter of water are statistically different to the control, being favourable to the treatments. Moreover, fruit size was increased in the treatments with Auxym.

Finally, fruit yield per hectare increased in all the treatments where the biostimulant was applied.