

FRUIT SET OF 'HASS' AVOCADO WITH GA_3 , N APPLICATIONS AND GIRDLING

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The aim of this study was to evaluate the effect of girdling and foliar applications of GA_3 and N on fruit set in avocado trees (*Persea americana* Mill.). We worked with 8-year-old 'Hass' avocado trees grafted on Mexican rootstocks. The factors evaluated were N (160 g and 0 g per tree), GA_3 (25 and 0 $mg\cdot L^{-1}$) and with girdling and without girdling. A completely randomized experimental design was used with a factorial arrangement, with six replications per treatment and a single tree per experimental unit. GA_3 and N were applied during the eight stage of the inflorescence development - known as the "cauliflower" stage -, and girdling was performed at the time of full bloom. In the "Off" crop year, the treatments of N or girdling increased initial and final fruit set; the combinations of N (160 $g\cdot tree^{-1}$) + GA_3 (25 $mg\cdot L^{-1}$) + girdling and N (160 $g\cdot tree^{-1}$) + girdling increased the initial and final fruit set, respectively. In the "On" crop year, the initial fruit set was increased with the application of N or GA_3 , and the final fruit set with girdling and combination of N (160 $g\cdot tree^{-1}$) + GA_3 (25 $mg\cdot L^{-1}$) + girdling. The application of N promoted the accumulation of glucose and fructose in leaves and panicles in developing fruits. The combinations of treatments showed an additive effect of girdling on the accumulation of glucose, and sucrose and fructose in panicles and leaves, respectively.