THE EFFECT OF CROSS-POLLINATION BY NURSE LIMBS A-182 ON HASS AVOCADO PRODUCTION AFTER TOPWORKING

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Thirty 20 year old Bacon avocado trees were topworked by bark-grafting to the more profitable Hass avocado cultivar in May of 1994. Nurse limbs of the Bacon cultivar were left on all of the trees to induce more scion growth. Nurse limbs were removed from half of the trees at random but left on the other half of the trees to observe any benefit by cross-pollination. The first Hass crop (1997) after topworking had significantly more fruit on the trees with Bacon nurse limbs. The sum of the three crop years had slightly greater fruit numbers for nurse limb-treated trees, however this was not significant. The study demonstrated that cross-pollination of Hass avocado trees with nurse limbs of the Bacon avocado can significantly increase fruit numbers in some seasons. Climatic and alternate bearing effects may need to be studied, as well as increased tree size compared to nurse limb size as trees grow.