

AVOCADO IRRIGATION/FERTILIZER RESEARCH

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The avocado irrigation fertilizer trial funded from November 1986 through October 1987 (\$47,000) is a five year research project to determine water use/water cost, fertility interactions on five year old avocado trees.

A uniform, 20 acre Hass grove with no root rot or frost damage is needed to demonstrate significant research results. A project site was agreed on by the principal investigators and Avocado Commission members Harry Griffith, Vic Panky, and Len Frances on February 16, 1987.

The project will be sited at Corona Foothill, using a near level 20 acre, six percent slope, five year old grove. A low volume sprinkler system is in place. The committee recognized the disadvantage of deep alluvial soils, however, the cooperater has indicated a strong willingness to help implement the project. Irrigation design began on February 23, 1987. Twelve replicates of 80 percent ET, 100 percent ET, and 120 percent ET will be established with No, N, N2, and Zno, Zn1 factorial plots. The fertilizer and irrigation trials will be established in April. Bender, Meyer, and Arpaia believe a smaller frost free area is available in the Fallbrook/Escondido area with fertilizer replications of NPK and Zn but using the grower's irrigation schedule.

Essentially, two sites will be used for this project.