## 1987 Summary of Avocado Research, page 12 Avocado Research Advisory Committee University of California, Riverside

## **AVOCADO BREEDING**

## Bob Bergh

Intensive testing of the Gwen and Whitesell patents continues. The major replicated comparison is of spring 1984 topworks at the South Coast Field Station. Results to date are as follows:

	<u>Hass</u>	Gwen	Whitsell
Mean # fruits harvested 1986:	4	93	8
Mean # fruits harvested 1987:	133	248	182
Calculated total produce, lbs/acre:	7,700	42,100	31,600
Mean tree volume, cubic feet:	1,023	355	161

Thus, by two years from topworking, Gwen set at a rate that would mature over 30,000 pounds of fruit per acre the upcoming season. Compared with Hass, Gwen has produced 2 1/2 times as many (slightly larger) fruits, on trees that average just over 1/3 as large, for a remarkable 7 times greater indicated tree "efficiency." Surely this great an advantage will become less with time. The dwarf Whitsell tree size gives it an even greater fruit yield "efficiency" advantage; however, the irregular Whitsell tree contour makes it harder to realize this advantage with preferred tree spacing.

New selections for commercial promise continue. And a final major planting of raw seedlings is being made this spring.

Major revamping of isolation plots for breeding resistance to rootrot was carried out this past year. A major expansion of these plots is planned beginning this spring.