## ADDENDUM TO REPORT OF THE VARIETY COMMITTEE

January 1979

It has been approximately one month since the freeze of December 6-7-8. Industry estimates place the loss at 10% of what was projected to be California's largest avocado crop. This was our worst freeze since December 21, 1968. The 10 % estimated loss of fruit does not reflect the secondary effects. Many of the freeze-damaged trees will not bloom this spring. There will be reduced blossoming in some orchards that will affect next year's crop. Many areas had young trees killed. A lot of these could have been saved if they would have had a thermal protector extending above the bud union. After ten years of warm winters, developers and new growers tend to plant marginal areas and to plant Hass and other Guatemalan varieties into colder areas.

The growers who were hurt have our sympathy. Those who came through with little or no damage should remember that no two freezes are alike. Any avocado growing area in southern California, under certain weather conditions, could suffer a freeze. However, adverse low ground areas and poor drainage situations are likely to suffer from even minor freezes.

How does all of this affect your Variety Committee? Reading through the revised printing of the C. A. S. brochure dated September 1976, I find little fault with the recommendations of the Variety Committee. What concerns us is that too much acreage is being planted to the frost resistant fall varieties—mainly Zutano, Bacon, Jim, Susan, and the patented Santana.

Growers lucky enough to have fruit at legal maturity the latter part of September and early October often hit a sort of vacuum period when the Hass crop is almost finished and do well pricewise. The bulk of the fall varieties are marketed in November, December, and January with depressed prices. Much of this fruit leaves a lot to be desired so far as customer satisfaction goes. Even the Fuerte variety in warm winter wet years does not perform well.

Some comments follow on our commercial fall varieties, plus some newer ones, with reasons for planting:

*Zutano.* Still being planted, mainly because of heavy, consistent production and frost tolerance plus early maturity.

*Bacon.* Being planted less because of poor production in many areas, late maturity, and bland flavor. However, it is a beautiful hardy tree that stands the cold.

Jim. The only reason for planting is cold resistance (probably equal to Bacon); heavy, consistent production; fairly good flavor; and this year reached maturity ahead of Zutano. In some areas the fruit resembles a crook-necked squash, and late in the season the skin turns purple. However, the flavor remains good. Talk with your packer

before planting.

Susan. Stands the cold; heavy production. Fruit is green, pear shaped; matures early; large seed loose in cavity; bland flavor. Do not plant commercially except in a climatic area where the more acceptable varieties will not produce or survive.

*league (or U.C.R. 1411).* This is a fine green fruit. It was mature in the Fallbrook area in early September. It is a very large tree. Unfortunately, it lacks consistent production and is not recommended for commercial planting. It has good cold resistance.

Covacado. Large, ovoid green thinskin; early maturity; short fruit season; good frost resistance; bland flavor. Planted only as a pollinator for the Fuerte or for early maturity reasons.

Santana (Plant Patent 3703). This is the first year we have had enough production to evaluate this variety. The tree is extremely vigorous, large, and open. The fruit is large, green skinned, and has a necked pear shape. The flavor and medium seed ratio are better than the Zutano, with cold resistance about equal. Indications are it is not the early maturing fruit we had hopes for, or that production will equal Zutano. The fruit season will probably extend into January and February. In some areas, the necked shape is more pronounced and could be a problem. We need several more years' experience to evaluate this variety properly.

Pinkerton (Plant Patent 3712). This appears to be the best variety we have come up with for California since the Hass. The fruit is larger than Hass, green skinned, has a necked pear shape, and has a very small seed. It has a medium pebbly skin. Flavor and flesh quality are the equal of the Hass. It takes more time than the Hass to soften. For shipping long distances, this could be an advantage. The early or off-bloom fruit is mature in the fall season, with the balance of the crop maturing from January to June, depending on location. In some areas, the neck is more pronounced and could be a problem. The tree is moderately spreading (smaller than Hass), with frost resistance about equal to Hass. It is quite precocious and tends to bloom early in the winter and at a young age. Production has been consistently heavy when planted in the same areas as Hass. Considerable acreage has been planted to this variety. Our Avocado Commission will have to work on a produce department and consumer education program to promote the advantages of this fine fruit.

During this past year, Crawford Teague and a committee have worked out a royalty program with the University of California at the C.A.S. Nurseryman's Section, permitting the release of root rot resistant rootstocks to the industry, subject to a fee for each tree sold. This money will help to support continued avocado research by the University of California. It is hoped that the same procedure can be applied to the new varieties being produced under Dr. Bergh's avocado breeding program. Some of these new varieties show promise of being better than many of our existing commercial varieties.

The above comments will be useful to growers planting new acreage, especially in colder areas. As we gather new information and evaluations of new and older varieties, we will update the C.A.S. leaflet on avocado varieties for commercial planting in California.