

## **Report of the Avocado Variety Committee for 1928**

*Rendered to the Annual Meeting of the Avocado Growers' Department of the Ventura County Farm Bureau, on Thursday, December 20, 1928.*

The Avocado Variety Committee, appointed by E. E. Converse, Chairman of the Avocado Growers' Department of the Ventura County Farm Bureau, and composed of Albert J. Thille, Chairman, E. C. Kimball, and C. J. Daily, with a later addition of A. F. Yaggy of Santa Barbara County, selected at a meeting of Santa Barbara County Avocado Growers, and with the cooperation of Vincent F. Blanchard, Farm Advisor for Ventura County, desires to render the following report for its work during 1928:

In determining a plan of work for the Avocado Growers' Committee, it was recognized that:

1. Variety responses vary with differences in climatic influences. Most varieties mature from one to three months later in Ventura and Santa Barbara Counties than in counties further south.
2. Due to these differences in the responses of varieties, Ventura and Santa Barbara County avocado growers should determine what varieties to plant.
3. The Avocado Variety Committee cannot hope to settle the variety problem for these districts in a short period of time and the work of the committee should be continued over a period of several years.

The committee has devoted considerable time to the study of avocado varieties in Ventura and Santa Barbara Counties and in other parts of the State. The Committee and Farm Advisor Vincent F. Blanchard, visited various avocado orchards in Ventura County, studying the responses of the trees as to growth, production, quality and seasonal fruiting and harvesting variations. The orchards visited were: C. J. Daily, Camarillo, E. C. Kimball, .Saticoy; Will Borchard and Andrew Borchard, Oxnard; Mrs. Mary K. Watson, Ventura Avenue; Thatcher School and the Topa Topa Ranch in the Ojai.

A second day was devoted to the study of avocado orchards in Santa Barbara County, visiting the following orchards: J. D. Atkinson, Carpinteria; A. F. Yaggy, Montecito; Mrs. F. C. Hubbard, Carpinteria; Armour Estate, Santa Barbara: and Verhelle Brothers' Nursery, Santa Barbara.

The Chairman of the Committee, in company with J. N. Thille and Farm Advisor Blanchard, made a trip into Los Angeles, Orange and San Diego Counties, studying the responses of avocados. Other members of the committee have made similar excursions at various times during the year.

### **Observations and Recommendations**

In studying the avocado varieties, there are certain facts which should be recognized concerning the avocado in Ventura and Santa Barbara Counties:

1. The price curve for avocados shows an upward movement from July to January, particularly during the months of August, September, October and November.
2. Ventura and Santa Barbara Counties have a distinct advantage over the remainder of the avocado growing sections of California in having the fruit mature one to three months later, thereby making it possible for certain varieties to be harvested during the period mentioned.
3. It should be agreed as to what are the qualifications of a good commercial variety, and in the opinion of the committee, they are as follows:

It should hold up well under severe shipment conditions; it should be of pleasing flavor and texture and appearance when ready for consumption; the trees should be normally healthy and capable of attaining a size sufficiently great to produce large crops; reasonably early bearing is desirable; regularity of bearing is essential and heavy production per tree is necessary for a profitable enterprise; and it should be reasonably resistant to low temperatures. It should be emphasized that heavy and consistent production, with good quality are necessary for success.

4. The committee has considered the characteristics of fruit and has the following observations to offer:

(a) *Color:* Since eighty-five per cent of the Florida fruit is of the Trapp Variety, having a green color, most of the market centers show a preference for the green color. Mr. Joseph Brodkey, Manager of the Avocado Sales Company of Los Angeles, has stated in his report, published in the annual report of the California Avocado Association for 1928, on, "The Avocado Varieties from the Market Standpoint," that the Los Angeles market is partial to green colored fruit. The committee believes that this preference should be recognized; however, that it is possible, with the development of the industry and the production of a larger quantity of high quality fruit that color will cease to be a factor. The committee's of the opinion that if an outstanding variety of high quality and good production characteristics is developed, that it should not be discarded on account of color. From experience with other fruits, color has been a distinct advantage rather than a disadvantage. There are certain varieties, however, that when over-ripened, have the color pigment of the shell distributed into the flesh, providing an undesirable appearance. Varieties which tend to do this, of course, are at a distinct disadvantage.

(b) *Thickness of Shell:* The Calavo Growers' Exchange has found that an avocado that has a very thick shell is unsatisfactory, from a sales stand point, because of the inability of the average salesman to know when it is ready for sale or is sufficiently ripened. Consequently, the fruit might stay on the fruit stands until the flesh is broken down and inedible, still having the shell appear normal. It is not likely, therefore, that the exceptionally thick-shelled varieties will prove very popular to the trade, except in the few places in California where a few individuals have become accustomed to them and understand how to sell and use them.

(c) *Size of Seed:* It is not likely, according to the opinion of the committee, that a

large-seeded variety will prove profitable in years of great competition. The smaller the seed the more flesh there is available for use. We should strive for a small-seeded variety. There are now many of those available for planting.

(d) *Flavor*: The Florida avocados have a very low fat content, and, therefore, are not a very highly flavored fruit. California has a distinct advantage over Florida, in that our fruits are more highly flavored, due to the high fat content. We have some varieties with as high as 25% fat content, and other varieties ranging down to 10% or lower. We should attempt to grow varieties ranging down to 10% or up to 25%, as the case may be that have a sufficient fat content to provide a flavor that is pleasing. We should, at all times, strive for quality, if we expect to compete with the low-priced fruits from Porto Rico and Florida. It should be recognized, however, that there are many people who cannot eat fruits that have as high a fat content as 25% and that some of the varieties with a lower fat content will have a greater appeal.

5. *Varieties*: Since the Committee has only been working on the variety question during a period of a few months, it would be inadvisable to make specific recommendations as to varieties. In most of the avocado districts of California, it has become recognized that the Fuerte is the outstanding variety. In Ventura County, several of our growers having this variety have not had good success, especially from the standpoint of production. Many of the trees have been slow in coming into production and have a tendency towards alternate bearing, or one crop out of about every three. There are, however, orchards in which this variety has fruited fairly satisfactorily, starting early in life and fruiting fairly consistently. It is the opinion of the committee that one of the reasons for the variant responses with this variety is that there are different strains of the Fuerte, some of which are fruitful and others non-fruitful. An illustration of this is at the Thatcher School ranch in the Ojai, where there are two different groups of Fuerte trees coming from different nurseries. One has fruited consistently and the other has been very unfruitful. The committee is of the opinion that if the Fuerte comes from selected trees of known production that we can secure satisfactory results from this variety. Growers, therefore, should when buying the Fuerte variety, as well as all other varieties, purchase or plant only trees derived from trees of known production. Since Ventura and Santa Barbara Counties have not extended the avocado industry to the point where many of the newer varieties have been grown over a sufficient period, it would be inadvisable for the committee to make specific recommendations concerning these varieties for our conditions. It so happens, however, that each member of the Variety Committee in Ventura County is about to plant fairly large acreages of avocados and will have an experimental planting as a part of their avocado enterprise. Rather than offer specific recommendations at this time, the committee would prefer to have as a matter of record what each one is to plant in orchard form and in his experimental planting. These will be given according to the names of each member of the committee, as follows:

### **C. J. Daily's Avocado Orchard, Camarillo, California**

Planting in Orchard Form (*1 row and 33 trees for each variety*)

1. *Fuerte*: green; medium seed; smooth thick skin; 10 to 16 ounces; season, Southern California, January 1 to July; February to September, Ventura County.
2. *Challenge*: purple; large seed; smooth and medium thick skin; 12 to 18 ounces;

season, March to July in Southern California, June 15 to August 1 in Ventura County.

3. *Queen*: purple; small seed; medium thickness of skin; size one and one-half pounds; season, April to September, Southern California; August 1 to November 1 in Ventura County.
4. *Anaheim*: green; medium to small seed; skin rough and medium in thickness; size 18 to 24 ounces; season, June to July in Southern California; estimated July and August in Ventura County.
5. *Miller*: green; large seed; skin rough and thick; size 8 to 12 ounces; season, March to July in Southern California; August 1 to November 1 in Ventura County.
6. *Dickinson*: purple; medium size seed; skin rough and thick; size, 9 to 14 ounces; season, April to September in Southern California; July to October in Ventura County.
7. *Carlsbad*: purple; large seed; skin smooth and medium thickness; size 16 ounces; season, March to May 15 in Southern California.
8. *Nabal*: green; small seed; skin smooth and medium thickness; size 16 to 20 ounces; season, May to June in Southern California; estimated June to August in Ventura County.
9. *Itzamna*: green; seed very small; skin slightly rough and thick, size 16 ounces; season August to November at Carlsbad, estimated August to December in Ventura County.
10. *Panchoy*: green; seed small; skin very thick; size two pounds; season May to July in Southern California.
11. *Dickey A*: reddish purple to black; seed small; skin medium thickness; size 16 ounces; season March to July in Hollywood, May to September in Ventura County.
12. *Prince*: green; small seed; skin smooth and medium thick; size 16 to 21 ounces; season, October to December at Hollywood, October and November in Ventura County.
13. *Benik*: purple; seed small; rough skin; size 20 ounces; season May to June.
14. *Dutton*: black; seed medium to small; skin warty and thick; size 16 ounces; Season December to April.

Experimental Varieties  
(Two or more trees for each Variety)

- |                       |                    |
|-----------------------|--------------------|
| 1. Ishim              | 14. Schilor        |
| 2. Kashlan            | 15. Golden Summer  |
| 3. Stephens Choice    | 16. Premier        |
| 4. Taft "A"           | 17. Mary Garden    |
| 5. Murrietta Green    | 18. Topa Topa      |
| 6. Nimlioh            | 19. Murrieta 2 lb. |
| 7. Duke               | 20. Thompson No. 5 |
| 8. Lyon               | 21. Butter Cup     |
| 9. Cantel             | 22. Puebla         |
| 10. Colorado          | 23. Ganter         |
| 11. Jessie (Thompson) | 24. Linda          |

- 12. Tiger
- 13. Sinaloa
- 25. Coban

NOTE: These trees were planted as seedlings and were budded either in the fall of 1928 or spring of 1929.

**E. C. Kimball's Avocado Orchard, Saticoy**

Planting in Orchard Form

- |         |                |
|---------|----------------|
| Fuerte  | Nabal          |
| Puebla  | Thompson No. 8 |
| Mayapan | Itzamna        |
| Panchoy |                |

Experimental Varieties  
(Two or more trees for each Variety)

- |                                  |             |
|----------------------------------|-------------|
| Dutton                           | Anaheim     |
| Thompson No. 20                  | Benik       |
| Taft No. 3                       | Nimlioh     |
| Cantel                           | Mary Garden |
| Dorothea                         | Butter Cup  |
| Fuerte (Special Strain Thompson) | Linda       |

NOTE: These trees are now in the nursery and will be planted in the spring of 1929.

**A. J. Thille and J. N. Thille Avocado Orchard, Santa Paula (15 acres)**

Planted in Orchard Form

Fuerte (Planted as the main set 40 feet apart). Intersets of:

- Nabal – One-fourth of acreage
- Queen – One-eighth of acreage
- Dickinson – One-eighth of acreage
- Itzamna – One-fourth of acreage
- Miscellaneous – One-fourth acreage as follows

- |             |               |
|-------------|---------------|
| 1. Carlsbad | 7. Anaheim    |
| 2. Kashlan  | 8. Benik      |
| 3. Linda    | 9. Sharpless  |
| 4. Dorothea | 10. Challenge |
| 5. Ishim    | 11. Puebla    |
| 6. Premier  |               |

NOTE: These trees are now in the nursery and will be planted in the spring of 1929.

**Outstanding Varieties of Merit**

The following varieties seem to be specially worthy of trial in Ventura and Santa Barbara Counties: Fuerte, Queen, Nabal and Itzamna. The last three varieties mature within the

period mentioned as a desirable time. The Fuerte matures from one to two months later here than in counties further south, and would, therefore, not have the competition of that fruit. The Dickinson has performed very well in production and quality. It, however, has the objection of a thick skin and some report that the pigment tends to enter the flesh when over-ripe. Education of the trade and consumer might correct this fault in this variety and similar varieties. It, however, is an objection that should be recognized.

Submitted by:

Albert J. Thille, Chairman  
C. J. Daily  
E. C. Kimball  
F. Yaggy  
Avocado Variety Committee.

Mr. Albert Thille  
Chairman Avocado Variety Committee,  
Santa Paula, California

Dear Mr. Thille:

I have read with a great deal of interest the report of your Variety Committee. It seems to me that the committee has done a most excellent job and I trust that they will continue bringing in additional reports from year to year.

I should like to suggest that you warn prospective planters against the very great danger of having too many varieties planted commercially and urge them to do their experimenting on an experimental rather than commercial scale.

I notice that very few are planting Tafts and that very little is said regarding the desirability of the Taft. Tafts are at the present time the easiest seller we have during the late summer and fall months and I believe commercially they have done at least as well as any other variety grown in your district.

It would be interesting to know what was the real cause of the rather heavy production of off-bloom fruit on the Fuerte trees of Mrs. Hubbard of Carpinteria. These fruits were harvested in September and returned the producer more money probably per pound than anything we have ever handled through the Calavo Growers. If it were possible to consistently throw the Fuerte out of stride in Ventura and Santa Barbara counties and so secure an early off-bloom, it would be certainly worth considering.

Also I am of the opinion that as time goes on, and the Fuerte becomes more and more established on the markets, that the late Fuertes from Santa Barbara and Ventura counties will command a premium over other late varieties. In this connection, it is worthy of note that although some of the Fuertes in your district may be late, they can be picked earlier in case we find that competition from Florida and Cuba proves to be too great for us whereas some of the strictly late varieties would not have reached maturity in time to be harvested before the Cuban and Florida fruit is on the market.

Sincerely yours,

CALAVO GROWERS OF CALIFORNIA

By Geo. B. Hodgkin, Manager.