

California Avocado Society 1942 Yearbook 27: 13-18

Report of the Variety Committee - 1942

INTRODUCTION

The work of this Committee has felt the impact of war conditions in much the same measure as has every other phase of American life and endeavor. To satisfactorily follow and check up the development and records of the established varieties and the promising seedlings which are constantly brought to the attention of the Committee, requires a great deal of travel by a large number of individuals and an intensive amount of travel by a few in order to coordinate this work and information. In the past, this travel has been limited only by the enthusiasm of the individuals concerned and their willingness to foot the bills for it. Now, to conserve rubber for the national welfare, such travel has to be severely restricted and in a comparatively short time may have to be given up entirely, due to lack of physical means to carry it on.

Under such circumstances, the type of organization devised to carry on this work during the past few years has and will demonstrate its value. Each of the five avocado-producing counties in Southern California has its own committee under the Avocado Department of its Farm Bureau. These local committees, supplemented by certain active individuals, carry on much of the local field work and check up details which are coordinated through this general Committee. Travel is thus reduced to a minimum. A greatly enlarged field is also very well covered. Greater cooperation along these established lines will enable us to bridge over this difficult period without losing a great deal of ground.

TRIAL PLOTS

In 1939, the trial plots for new and promising varieties and seedlings came into being. These are carried on cooperatively by the Division of Subtropical Horticulture of the University of California and this Committee. The Committee acts as intermediary between the University and the growers in the matter of selections for trial. These plots were established at the Westwood Campus of the University and on the properties of growers in key positions throughout Southern California. Begun with fourteen selections, these groups have been added to from time to time as other promising new seedlings came to the attention of the Committee.

The original selections were: Clifton, Coit, Edranol, Hass, Hazzard, Hellen, Henry's Select, Juan, MacArthur, MacPherson, Middleton, Mundo, Pierce, and Ryan. Eight more have been added since. Some have fruited for one season. Due to the lack of funds, which is a serious factor in a volunteer project of this type, and the expressed desire of some cooperators in certain areas, all trial varieties do not appear in all plots.

The following growers are making a very valuable contribution to the industry by maintaining cooperative plots which help to solve the climatic reaction problem of these varieties:

SANTA BARBARA COUNTY

Bishop Ranch, Goleta—"Rancho Corona Del Mar".

Dr. Horace Pierce, Santa Barbara—"Rancho Vista Del Mundo".

Mr. Tirey C. Abbott, Carpinteria.

Mr. Stanley L. Shepard, Carpinteria.

Mr. C. W. Bradbury, Carpinteria—"Rancho Cuesta." (Partially financed by Farm Bureau.)

VENTURA COUNTY

Mr. J. N. Thille, Santa Paula (Personally financed).

Hardison Ranch Company, Santa Paula. (Not official, but carrying on same type of work).

LOS ANGELES COUNTY

Mr. H. B. Griswold, La Habra Heights. (Personally financed. Some trials on a quantity scale).

University of California at Los Angeles.

ORANGE COUNTY

Mr. C. S. Crawford, Orange. (Personally financed).

SAN DIEGO COUNTY

Mr. A. R. Chenoweth, Fallbrook. (Personally financed).

Messrs. Dean F. Palmer and Elwood E. Trask are carrying on very valuable experiments at Carlsbad, which while not an official part of the project, are closely correlated with it.

RIVERSIDE COUNTY

Mr. Marvin B. Rounds is gradually assembling another group at the Citrus Experiment Station.

The test work going on in these plots will greatly simplify and assure the attainment of progress along these lines during the difficult war days to come.

Particular mention is due the efforts in time, money, and reporting of co-operators Chenoweth, Griswold, Thille, Shepard, and Bradbury. The industry has obtained services of inestimable value, which it has not or could not support directly.

After another season, it may be possible to make a progress report on many of these varieties in the plots.

MARVIN B. ROUNDS

Too much cannot be said in commendation of the quiet, methodical, efficient, and enthusiastic manner in which Mr. Rounds, now Associate at the Citrus Experiment Station, carries on the work of building up a master file of avocado variety information, and of his studies in the field, which have a very wide range, as carried on in connection with Station citrus studies. They have afforded much of the most valuable information and background upon which this report is built. As neither the University nor the industry has any direct provision for carrying on such work, we are all very fortunate that Mr. Rounds' personal enthusiasm and his ideas of recreation lead him to spend his spare time in this manner.

MEXICAN AVOCADO EXPEDITION

While this project was not organized by this Committee or Society, it received its blessing in a general way and the organizers were members of or closely connected with this Committee. Because of these facts and because the industry as a whole was solicited for funds to further one line of investigation in which this Committee is interested, a short statement would seem to be indicated. The views expressed are those of the Chairman, alone.

Because of the insufficient funds raised, it became impossible to carry out the project as originally planned. It still seemed to the organizers that there was sufficient value to be gained to proceed on such basis as was feasible and with that conclusion, it was arranged to send Mr. Albert C. Adams, who is reporting in full on the program of this Annual Meeting. Due to illness and the early outbreak of war, he was not able to secure tangible results for us. Intangibly, much was accomplished in maintaining contacts formerly established by this group, making new ones, and broadening the foundation upon which future efforts in this area may be productive of results. Such studies and investigations should cover much more than searches for new varieties, and need to be well financed. They should be spread over a series of years so that observations can be taken at different seasons.

STATUS OF VARIETIES

INTRODUCTION—As stressed in the 1941 report, the great need of the industry is high tonnage per acre, if we are to have a major fruit crop. Proper varieties for given locations is one of the two main considerations, but this cannot afford a full solution unless its corollary is also observed. Such varieties must be planted on deep, rich, well-drained soil, where the frost hazard will probably be moderate. There must be an abundance of water of good quality and the trees must be of good stock, well fertilized and intelligently handled. A very, very small percentage of our present plantings meets these conditions, but those that do are the real commercial successes.

In listing the varieties to be discussed in detail in this report, no description of the fruit or tree will be given where they are well known or such descriptions are easily obtainable in other places.

Those new varieties with which most growers have only slight or no familiarity will be described first and then commented upon.

ANAHEIM—While this variety is still being planted to a limited extent, especially in sections of San Diego County, further extension of acreage is to be discouraged as the fruit is too large and of poor quality, and the tree very susceptible to frost damage.

FUERTE—For the first time in history, we are experiencing two large crops of Fuerte in succession. Many growers feel more encouraged than for some time, but this should be tempered by the fact that two such warm winters in succession are rare. Climatic reactions of the variety are more sharply defined. It seems to be shown that commercial success can be attained if the requirements outlined in the introduction are met.

NABAL—Last season also saw the largest crop in history of this variety. Apparently in many places, it is being followed by another good crop. While the quality of this fruit is very high, the facts enumerated in past reports still cause the Committee to feel that further extension of acreage in the variety should not be encouraged. Alternate bearing, excessive breakage of the trees, too large size for consumer acceptance, and great susceptibility to frost damage militate against it.

PARTIALLY ESTABLISHED EXPERIMENTAL VARIETIES

EDRANOL—Tree—Tall, slender, vigorous, grafts readily, but does not bud so easily. Not patented. Fairly resistant to frost for Guatemalan. Bears heavily.

Fruit—Green, pyriform, often too necked. Inclined to be too woody on exterior in transitional zone. Season early summer. Fruit of high quality and excellent flavor, with small seed.

Comment—Rapidly becoming very popular in coastal areas of Santa Barbara and Ventura Counties, where its exterior is smooth and attractive. Not so popular in south coastal belt. Bears well in transitional areas such as La Habra, but exterior inclined to be woody.

HASS—Tree—Somewhat slender, vigorous, propagates readily, patented. Rather more frost-resistant than most Guatemalans.

Fruit—Small, black, rough, summer season. Handles well. Seed small, often too tight. Little fibre. Fine quality and flavor.

Comment—Last season saw the first crop of any volume. Its black, rough appearance was against it on the local markets, but it did better in other markets where the public is

not prejudiced so greatly against black fruits. Where its quality was learned and appreciated, its small size for the summer season gradually built considerable consumer acceptance. The young trees and grafts have a record, in nearly all districts, of being both precocious and prolific, yet maintaining vigor. Considering consumer resistance to rough, black fruits, growers should be cautious in making heavy new plantings, until it can be determined whether the quality and size of the variety will offset this liability.

HELLEN—Tree—Very vigorous. Large and spreading grower. Young trees quite precocious. Grafts on large roots are much slower in coming into heavy bearing. Apparently looked upon with favor in all coastal areas. Fairly resistant to frost for Guatemalan. Not patented. Propagates very readily by any method.

Fruit—Older grafted trees at Santa Monica average about twelve ounces, but fruit on most of the young trees and grafts in most areas runs from twelve ounces to well over a pound. Size may be reduced as heavy bearing is attained. Inclined to some woodiness in transitional zones on fruit exterior, but clear at coast. A green fruit, somewhat heavily pebbled, varying in shape from oval to pyriform with a small seed and leathery glovelike skin, which peels perfectly. Quality and flavor good.

Comment—One of the more promising varieties for coastal areas, except for size of fruit on young trees. Bears heavily in all areas, apparently, but may not be attractive to consumers where raised under transitional conditions.

HENRY'S SELECT—Tree—Vigorous, large grower with foliage somewhat similar to Puebla. Somewhat open in growth. Propagates easily. Patented. Cold resistant in older trees. Mexican or thinskin type.

Fruit—Medium size, oval, black with glossy skin. Seeds are medium and many are loose. Season not established for many districts. Early fall at Escondido. Flavor and quality good on trees at Escondido.

Comment—Has made excellent showing at Escondido. Reports from young trees and grafts in other districts vary quite widely. Some districts complain of poor bearing, others of cracked fruit, others of too late season which conflicts with Fuerte. At Lemon Heights, near Tustin, it seems to be earlier and of as good quality as at Escondido, and the trees are bearing well at early age. It will take several more seasons to determine its adaptation to many areas and in the meantime the growers are cautioned not to plunge.

RYAN—Tree—Moderately vigorous, somewhat open type and will probably be medium in size when full grown. There is quite an observed tendency for most of the ordinary rootstocks to grow faster than the Ryan top. Propagates well. Not patented. The most frost resistant of any summer variety. About same as Fuerte. Most young trees have been consistently heavy bearers.

Fruit—Green, pyriform, of medium size. Leathery skin. Usually quite large seed. Quality and flavor have been debatable over several seasons. Short maturity season in

summer.

Comment—Has had very good market acceptance, where picked at proper period. More plantings are being made, particularly in colder districts, such as Rivera.

EXPERIMENTAL VARIETIES

ENCANADA—Tree—Very vigorous, uncertain as to size and shape at present. Fairly frost resistant for Guatemalan. Not patented.

Fruit—Small (8 ounces), pyriform, green, bearing heavy consistent crops in late summer. Has a record of not missing heavy crop on parent graft for at least six years. Seed from small to small-medium, on average. Quality and flavor good.

Comment—The size and type and season that we have looked for in a late summer fruit for a long time. May be excellent in transitional zones. A limited number of young trees have already been distributed for trial.

MACPHERSON—Tree—A very vigorous, large tree of beautiful appearance. Propagates readily. Patented. Fairly frost resistant for Guatemalan or hybrid. Tremendous grower.

Fruit—First attracted attention because of its remarkable similarity to the Fuerte in external appearance. About same size. Seed is smaller and flesh of deep, golden color with striking, wide band of dark green just under skin. Excellent flavor. Season late December or early January to April.

Comment—First grafts have fruited at Fallbrook this year and are the same quality as those from parent. A very promising variety for the Fuerte season. Volume of bearing unknown at present. Trees bloom rather lightly, which may be favorable sign for good sets.

NOWELS—Tree—Very vigorous, rapid grower. Probably large, balanced tree. Does not bear until third year, as so far observed. Very frost resistant. Blooms late and not too heavily. Parent has been fairly consistent. Propagates readily by any method. Not patented.

Fruit—Small (8 ounces). Very much like Fuerte in appearance. Small seed. Fine quality and good flavor. High oil content. Season late September to December.

Comment—Attracted much attention by Fuerte-like appearance, early season and lack of damage from the 1937 freeze in a cold location. May have particular value in offsetting the sale of immature Fuertes. No second generation tree has yet borne.

OTHER VARIETIES AND SEEDLINGS

There are certain other varieties or seedlings which will receive brief comment.

CLIFTON—A green thinskin for fall season and home plantings. Has done very well for Mr. A. R. Chenoweth at Fallbrook. Often checks transversely when over-mature.

COIT—A vigorous, but sprawling grower. Reports on the fruit are not encouraging as to quality or quantity.

IRVING—A variety producing well at Carlsbad, somewhat like the Fuerte in appearance, which Mr. Rounds feels should have more widespread trial.

JUAN—A green, pyriform Guatemalan of good quality. The trees are not happy on the ordinary root and are being tried next season on Guatemalan roots.

MIDDLETON—A black, fall thinskin of rich flavor but a bad habit of transverse checking.

ZUTANO—A tremendous producer of early green fall fruit at Fallbrook, but rather insipid as to quality. Attractive in appearance.

A seedling grown by Stanley L. Shepard at Carpinteria which is somewhat like the Fuerte in appearance and is producing in quantity there.

A seedling on the bluff above Ventura, first called to the attention of the Committee by E. Domingo Hardison. In spite of being exposed to the full effects of the ocean wind at a distance of a little more than a mile, the tree has consistently borne green, medium sized fruit of excellent flavor but quite thin skin, in large quantities. It may be the answer to the need for a hardy, heavy bearing thinskin for coastal exposures. The tree is very vigorous and beautiful in appearance. A limited number of budded trees have been distributed for trial in difficult locations.

CONCLUSION

The Committee, and particularly its Chairman, wish to most gratefully thank all those whose contributions to the year's study have made this report possible.

With the same enthusiastic devotion to this necessary work, we will be enabled to advance, in spite of the difficulties of the war years ahead.

Respectfully submitted,

THE COMMITTEE ON VARIETIES.

Carter Barrett, Chairman California Avocado Society

Registration of Seedling Avocados

One of the most promising methods of acquiring new and improved varieties of avocados by means of which the industry may be advanced, is by finding, testing, and promoting new seedlings of promise. Inasmuch as our check-list now contains the names of over 450 different varieties, it is evident that some system is needed by which the use of the same or similar names for different seedlings may be avoided. Without some established system, utter confusion is bound to result.

In 1931, this Society began the registration of the names of new seedlings as a service to growers. To date some 75 distinct names have been registered and the number is increasing. It is highly important that no fruiting seedling of apparent value be destroyed or topworked before experienced judges have had an opportunity to examine the fruit and report their opinions.

PROCEDURE FOR REGISTRATION

Persons desiring to register a seedling should notify this Society. An application blank for each seedling will be mailed them. After filling it out to the best of their ability, including the name by which they wish the seedling to be known, they should return it to the Society, together with three good, average sample fruits. It often happens that the name of the grower is quite suitable, but if more than one seedling is submitted by the same grower, other names should be short, euphonious, and neither an adjective nor a verb. Fuerte, Puebla and Benik are examples of excellent names as are also Ganter, Button, and Lyon.

The Variety Committee will have a careful study and analysis made of worthy seedlings, and later mail to the grower a report of its findings with a Certificate of Registration if the seedling is considered sufficiently promising to warrant propagation and trial.

If the name submitted is found not to have been used before for an avocado, and if it conforms to the rules of horticultural nomenclature, it will be registered for permanent and exclusive application to this seedling as far as the activities of this Society are concerned.

It should be distinctly understood that registration of the name by this Society involves no legal rights and is voluntarily carried on purely for the assistance of growers and the good of the industry in general. There is no charge for registration and all growers are urged to bear in mind its advantages and avail themselves of it. If the seedling is really good, the Variety Committee will so report. Publication of the description in the Yearbook will serve to bring it to the attention of nurserymen and growers who may be interested in its propagation and trial.

PROTECTS NAME ONLY

Registration of a seedling does not make it a variety or qualify it for commercial planting. All new seedlings should be tested for several years in different locations and climatic conditions before being propagated on a commercial scale. Later, if of sufficient merit, propagation and distribution under the name will qualify it as a new variety. At that time,

it will be included in the variety check-list. It is expected, of course, that many seedlings which at first appear to have promise will prove later to be unworthy of further propagation.

When the Certificate of Registration is sent to the grower, a good, permanent metal label, showing the name, will be included. It is intended that the owner shall immediately attach the label to the tree. The proper method is to drive a small nail into the main trunk about five feet from the ground, and wire the label securely to the nail. In this way there will be no injury, as often occurs when the wire is wrapped around a limb. This will identify the tree for many years and is most important where there are several seedlings near together.