

## California Avocado association 1940 Yearbook 25: 62-67

### Romance of the Avocado in Obera, Misiones, Argentina

#### Dr. Constantin Issacovich

Six years ago I saw a small plantation of avocados in Misiones, the trees having been grown from seeds of fruits eaten in Buenos Aires restaurants. I could get but little information on avocado culture from our State Secretary of Agriculture. I found some articles on the subject in the files of our own agricultural magazine "Chacra," but these gave very little information. So I decided to develop information on my own account. I heard that scattering avocado trees were growing in different parts of Misiones, and so I began to travel around to see them, eat the fruits, and bring home any information together with some seeds, some fruits, grafting twigs; to start a collection for my own study. I wrote letters to different states of South America where avocados had long been grown.

I found beautiful seedling avocados in many parts of Misiones, with good fruit, and noted the conditions under which they were growing. In no case could I get reliable information as to their origin or classification. I was told that the trees bore quantities of fruits, some of them every year, and that they did well under temperature conditions suitable for lemons, ananas, and other subtropical fruits.

I found out also that in Buenos Aires the fruit was quite expensive, that the demand was good, and that any quantity of fruit could be sold. It was consumed by the rich people. Such a delicious fruit is worthy of being grown in commercial quantities. I remembered that I first tasted the avocado in New York in 1924 and liked it.

I started to look up the literature and read about avocados in Wilson Popenoe's book on tropical and sub-tropical fruits, and admired his great scientific work in introducing many avocado varieties to the United States, and the part he took in helping start the avocado industry. For many years of my life I have been busy with fruit culture in Misiones. We had very few kinds of fruits aside from the ordinary citrus, bananas, guavas, ananas and some other sub-tropicals. We had some few apple, peach, pear and plum but I learned that these deciduous fruits are not well acclimated to Misiones and they do not do as well at Misiones as in the south of Argentina or in the mountains where it is colder. I have now a large collection of fruits in our **Los Frutales** where I am experimenting with root-stocks, propagation, pollination and many other things.

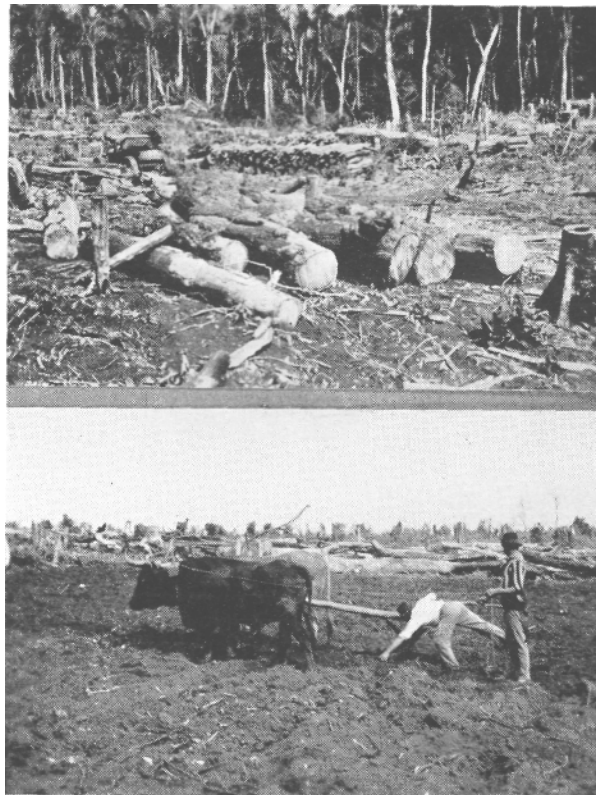
Our population consists of immigrants from the Big World. On one holiday we counted at the dance representatives from twenty-eight countries. Many of them brought plants and seeds of trees and they are continually experimenting to find the right culture for this new country.

The goodwill trip of the California Avocado Association to Mexico repaid Mr. Le Blanc a hundred times for his generosity in giving the Fuerte variety. And now you freely give all varieties to anybody who wants to cultivate avocados. Your example inspires love and

admiration for this noble and important fruit. What I have received from the generous people of California obliges me to follow the same unselfish way for the good of South America and any people in the world who may some day come to my place of experimentation for advice and help. Therefore I solemnly promise to cultivate the avocado in the very best possible scientific way and teach our people the best I can.

### **Climate and Soil of Misiones**

Misiones is a small province in the northeast corner of Argentina, extending as an arm between Paraguay on the west and Uruguay on the east. It is a subtropical country, similar in many ways to California. The winters are mild and summers not too hot. The total rainfall is heavy and is distributed fairly evenly throughout the year. The relative humidity of the air is high. There are seldom long periods of dry time. We have no need for any artificial irrigation for any field or orchard cultures. In Misiones there are 7,500,000 acres of land, only 1,500,000 acres of which are in farms and the rest heavy forest, mostly jungle. Of 375,000 acres under cultivation, one-half is in yerba mate, our principal crop. The rest is in tung, fruits, corn, mandioca, beans, and pasture for cattle. The cultivation of tung is recently started and is so successful, it will soon be second to yerba mate. Our highest elevation above the sea is 2300 feet. The elevation of my garden is about 650 feet. It is 250 miles from our town of Obera to the famous Iguazu Falls. There is plenty of game in our forest; tiger, tapir, deer, bear, fox, etc.



Clearing the Forest in Misiones, Argentina.

Anyone can get government land cheap on time payments, clear the forest and start farming. Professor Home gave me the biggest tip when he said the best avocado soil is in Cuba, the red soil, five to 10 feet deep. Here we have the same red soil up to 20 feet deep. Any quantity of this soil is ready for the culture of avocados and other subtropical fruits. We have also other soils, some black and sticky. This country is hilly and soil and climate differ according to elevations as in California. Prevailing winds from the north bring heat and rains. South wind is cold and brings frost in winter. We have enough frost to damage subtropical trees in the low flat places about one winter in seven.

All kinds of people poured in here after the catastrophe of the first World War; doctors, professors, engineers, business men, farmers and others; all to start life anew in this hospitable country. After this present war is over, we will have many more of these useful people. They all will need help to get oriented and established. Many of them will wish to grow avocados. We can produce an avocado nursery tree in five months. Many of the seedlings begin to flower in the nursery row. We certainly have good conditions for unlimited avocado production as far as natural conditions are concerned, but how about the varieties and the markets? We have much to learn and much hard work to do.

### **The Variety Question**

Who can tell what variety will be best for us? From your experience we see that even the Fuerte, your leading variety, does not do equally well under all of your California conditions. The avocado has been grown in Brazil and Paraguay much longer than in Argentina. They have already started commercial avocado production in a big way in Brazil. We have gotten the best varieties from Brazil: Taft, Edranol, Dickinson, Winslowson, Fuerte, Linda, Gloria and some others. From California we have Fuerte, Linda, Puebla, Edranol, Duke, Nabal, Leucadia, and others. We have ordered some of the new California varieties recommended by your Variety Committee. We have many seedlings from seeds collected in Central and South America. We have on our "ranch" about 20 acres planted out to these avocado varieties as well as a windbreak, set close together of miscellaneous seedlings. We hope to select just a few kinds for commercial planting. We will save many seeds from the cross-pollination of all these varieties grown together and plant them in the hope that some hybrid may appear which may fit our climatic conditions even better than any of the introduced kinds.

We have not yet a single nursery of avocados where good budded trees may be had. I am planting rows of seedlings between our permanent trees and will soon have good stock. We take advantage of the pioneer work done by the California Avocado Association, study the Yearbooks and bulletins, and will get good results in a much shorter time. We are grateful for all the help and assistance.

The popularity of the avocado is already established in Buenos Aires, our Capital. Every other place will imitate the big city. Avocados are sold at very high prices in Buenos Aires where there is not enough supply for the hundredth part of the population. The fruit is much more expensive than in California when you compare our relative ability to pay. Soon we will grow enough so the price can be lower for the consumer. This will greatly increase consumption. But we have the problem of teaching these new consumers how to prepare them in different ways, how to tell when the different

varieties are ready to eat, etc. When we see what you Californians have accomplished, we realize what a tremendous job we have ahead.

### **Rootstocks**

We are glad we already have the proper rootstock here in Misiones. We have Mexicola, Hunter, Ganter, Topa Topa, and sonic Mexican seedlings which appear to be excellent rootstock for our conditions. Some of our best Mexican seedlings came from Chile and are now large trees producing up to 3000 fruits each. We now have 5000 of these seedlings in our nursery to be budded this season. Trees from this nursery will be the first distribution of budded avocados for Misiones. Some will be named varieties and some will be budded from our best unclassified seedlings.

Before I started with avocados I asked Mr. Wilson Popenoe, Cartel-Barrett and Geo. Hodgkin what was most important; and they all agreed that the selection of the right variety for commercial production was the corner stone.

We are not now concerned so much with the commercial side of our program. That will come when we get volume production. I know that it is best solved by cooperative packing and marketing. We are starting a cooperative organization known as the "Cooperativa Agricola de Obera" of which I have the honor to be president with 400 members. We have organized the Association of Cooperatives of Misiones and in this organization I am vice-president. We have already started to sell our citrus through the cooperative and expect to sell our avocados in the same way when we get volume production.

The avocado is a dandy fruit, the aristocrat of all salad fruits, a fruit of exceptional quality. But in this big world of sinners, not everybody has the right to all the good things. Up to now those good things are available to the privileged, the rich. Our chief problem is to democratize the avocado, to produce it so economically that the farmer can afford to sell it so cheaply that everyone, even the poor in the great cities may have and enjoy it. We can produce the fruit very cheaply and in enormous quantities. So I write you about our culture of avocados in the form of a romance because we are in love with this fruit. It makes everybody happy and romantic. I hope that old Mayan god Itzamna, deity of abundance, will reward our just aspirations.



Seedling avocados for root-stock, one year old.

## Propagation

We plant the seeds in beds without stratification much the same as you do, and later transplant to nursery rows. We find buds take best in small rather than large seedlings. We tie the buds with raffia and get very good results.

Grafting is done in the middle of July. We have used many different types of graft. We usually tie the grafts with raffia and cover the whole with hot liquid wax. We have a specialized box for containing all tools and a small charcoal heater for the wax. Some of our tools are home-made out of the spring of an old automobile. Our results with grafting are not so good as with budding, especially on large old seedlings, but not too bad for beginners. I have had long experience in grafting apples and pears, but have to adapt the methods to the avocado. Some grafted trees fruit in one year and most of them fruit the second year.

The Mexican rootstock is best for our conditions as it is in California, because it is most frost resistant. We have tried Guatemalan stocks. They are more strong growing, but we are not sure they are any better than Mexican. This question of the effect of rootstock on bearing concerns me very much. I am afraid we may be long finding out, but we have done our best and will continue.



Upper: Young avocado orchard.  
Lower: School children brought to avocado nursery by their teacher for instruction—Obera, Misiones, Argentina.

## Marketing

The oil content of our avocados is good, but as we do not have the necessary instruments to measure it, we can only judge by flavor which is certainly very good as compared with the best from Brazil. We have not yet any market specifications. In Buenos Aires they simply sell avocados, large, small, green, black, any shape, just "Paltas." We have already thought of grading our fruit and marking it with a brand name in the manner of your "Calavos." We cannot use the word avocado because in Spanish its most commonly used meaning is that of a little lawyer or as you say shyster, and they are not so popular in Argentina. So "Palta" sounds very much better to the Latin ear than avocado. You have combined the words California and avocado into "Calavo." So we will combine the words Misiones and Palta into "Mispalter," or at any rate this is one idea. Certainly this name should be considered by the interested people when the time comes to grade and standardize our production. We fully appreciate the value to both consumer and producer of standard grades and brand names by which the grades may be identified. This is to say nothing of advertising or as -we say "propaganda."

Among subtropical fruits here the only serious competition with the avocado is citrus which is not yet overdone, as we have little more than enough for local use. There are many of the cold south sections of Argentina where the people want citrus, but little is yet available and at too high prices to the consumer.

I am absolutely of the opinion that it will be good business to establish a low price on

avocados for the average consumer. Then we can grow them cheaply and sell a very large volume at a modest profit per case. I hope to see avocados in time selling at same price as citrus. The present price in Buenos Aires is so high as to be very bad propaganda for avocado culture. The plain people think they are for the rich only. I believe Misiones is the best place in all Argentina for growing good avocados cheaply. Our citizens' pocketbook is small in comparison to yours, and so I hope that even with these low prices, the planters will have enough profits to live. I know of a ranch in Misiones where there are two dozen bearing avocado seedlings and everybody is enjoying them; the people, the children, the neighbors, the horses, the cows, the pigs, the hens, the dogs and even the cats eat them. Everybody around is happy and contented, yet their trees grow with no especial care whatever. This fruit should be on every market in Argentina.

How much will it cost to produce good avocados in commercial quantities? Well we are just beginning and I believe we can do it very cheaply, but plenty of water will run over our dam before we can answer that question honestly and truthfully.

I agree with Mr. Carl Newman that the most important part of the orchard business is the marketing of the good crop. Our problems are complicated but we will market cooperatively, and from the beginning we will carry on the educational program. In our town of Obera we see a greatly increasing interest in avocado culture now that it is no longer regarded as a secret. Our next door neighbor Brazil started avocado production in a big way on a commercial basis. In Paraguay they are known everywhere, and so living between these two Palta inclined countries we must follow the line.

For my part, I am working hard to establish avocado culture in Misiones which is the California of Argentina. We will elaborate here the bases for the future of this culture. I am proud for Misiones which is inspired by your unselfish work.

North and South America belong to the same continent. We are now stretching hands toward one another, the single persons, the organizations, the governments, to find the better way to live; to fight for a better future; to bring to humanity more freedom, liberty and happiness.