

CALIFORNIA
OLIVE
PRIMER

PRIMER SERIES
NO. 5

SOUTHERN PACIFIC

California Olive Primer

*Southern Pacific
Primer Series No. 5*

CHAS. S. FEE - - Passenger Traffic Manager
SAN FRANCISCO, CALIFORNIA



A TYPICAL OLIVE BRANCH

CALIFORNIA OLIVE PRIMER

Say, I want to talk olives; I hear they are a good thing. What do you think?

Well, what do you mean by "a good thing?" Good for your health, or a good investment?

My health is better than my bank account. Is an olive grove a good thing to have?

I think it is, and I will tell you why. Olives are a food product when ripe and prepared for the table as pickles. They have a recognized food value. So has pure olive oil, and good things to eat will always have a market.

Yes, but how many people eat pickled olives or use olive oil?

How many? Why, all the top-notchers, all the epicures, the good livers, the club people, the big hotels and restaurants, fraternity people, travelers, tourists, the patrons of the dining-cars on all Southern Pacific trains. And what goes with these people, goes with the crowd. We all fall into line. What is first a luxury, comes quickly to be a necessity, and olives and olive oil are on all our tables.

Oh, I know, but we just play with 'em; they're not food, but a relish, a kind of condiment. Those puckery, green olives on that restaurant table now, did you fancy them at lunch today?

I never touch any but the dark ones, the ripe olive pickles.

Are they better?

Sure. Is a ripe apple better than a green one? Has it a better flavor? Is it more nutritious? A green olive is an unripe olive, and about as nourishing as a pine chip.

And olive oil, is that really palatable? Does it improve a salad, or is it merely a fashion?

Of course it improves it if it is the right kind of oil. You are away behind.

Perhaps I am, but really, now, are enough pickles and oil used to create a market—to make it worth while to plant a grove and wait for it to reach bearing age?

You can answer your own question in two ways: ask your grocer about the demand for ripe California olives and pure California olive oil; then ask a real estate dealer about the price of a good olive grove.

But is not olive culture a new wrinkle in California?

Not at all. We have had some valuable experience. Today we have learned how to plant, where to plant, the kinds to plant, have mastered the difficulties of keeping ripe pickles, the Pure Food Law has shut out competition with adulterated and cheaper grades, and, as a result of time and experience

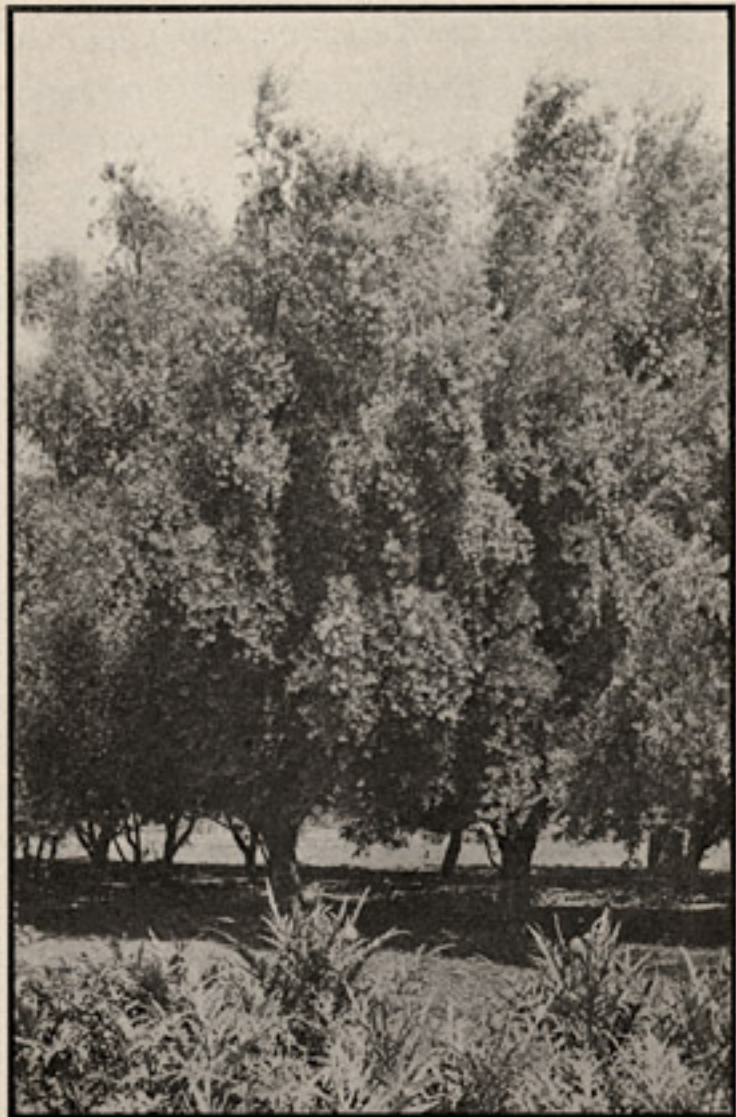
incidental to a new industry, an olive grove today, is one of the best paying investments in California horticultural industries. By the way, one of those early groves has just been sold for \$125,000, a little item of \$700 per acre.

That talks. Tell me a little about the history of the olive. Where does it come from?

It was brought to California by the Franciscans about one hundred and forty-four years ago. These missionaries came from Spain and they brought seeds of various kinds, green figs, grapes and olives—fruits they were familiar with at home.

But back of that, where did Spain get the olive?

Oh, it was a native of Syria; perhaps was indigenous in Greece, and grew wild over a large area of the Mediterranean countries. For many centuries it has been naturalized in southern Europe. It was held in high esteem by the peoples from whom European civilization has descended.



OLIVE TREES IN BLOSSOM

What use did the Ancients make of the olive?

Oh, the old Romans used olive oil as an adjunct to the bath, and the Greeks olives and oil as a table luxury. The Hebrews anointed their kings with oil, and the sick were rubbed with oil as a remedy. Olives were dried and used as food among various nations, and the Romans seemed to have known how to pickle olives.

Is olive oil of real value in the dietary?

Ancient nations thought so and believed that its use contributed to length of days. The vineyard and the olive grove were evidences of agricultural prosperity. In our own day, ask those who have long used oil. Ask the doctors.

Tell us what they say about it.

Well, they say a good deal. For instance, some of them say that a steady use of pure oil will prevent appendicitis, relieve gall stones, prevent waste of tissue, aid digestion and feed the nerves. French physicians prescribe it

for impaired vigor and low vitality. Many physicians find it valuable in a great variety of human ills. Try a teaspoonful following your grapefruit or pomelo for breakfast.

But the olive itself, why is the ripe olive a good article of food?

Because it is ripe. The chemistry of nature is completed; the salts of the fruit have been turned into oil; it has parted with its acidity and is palatable and nutritious. The green olive is not a food, but a relish and is not digestible. In Italy and other countries of the Mediterranean the dried olive is an article of diet; peasants will make a meal in the field out of a handful of olives and a loaf of black bread. This frugal meal becomes a feast if an onion is added, a little oil to go with the coarse bread and the whole washed down with a little thin red wine.

Isn't this the diet of poverty?

Not always. It is economy; it is the result of experience. It is simple living, but has in



A FAMILIAR SCENE IN CALIFORNIA

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it the needed nourishment. The olive is rich in flesh forming, tissue building qualities. The peasants of the summer countries of Europe say that the olive is both bread and meat.

What are the best varieties for planting?

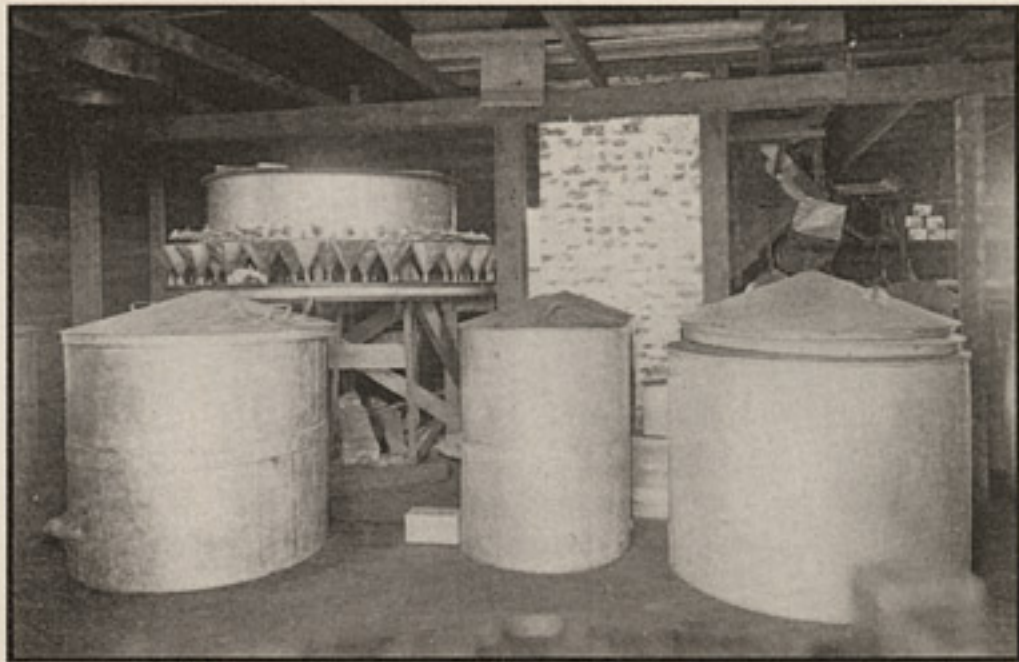
That is a question which the grower can best answer after investigation. Olives vary in size, in oil content, and the market has something to say about sizes for pickling. As a general statement the Mission olive is superior; it is in demand as a ripe pickle.

Name some of the approved varieties.

The Mission for flavor, for solidity and for both pickles and oil is a favorite and is most largely planted. The Nevadillo, the Manzanillo, the Columbella or Columella, and Sevillano are widely planted. The Rubra, the Oblonga and the Picholine are also favorites with many.

When do they ripen?

In California, from November to January.



A SMALL FILTERING PLANT

They are harvested with care for pickling, the larger sizes being selected by hand to avoid bruising. For oil, the fruit is stripped from the long, pendent branches and caught on canvas spread under the trees.

Are they difficult to pickle?

No, and yes. It is a matter of care, of patience, of intelligence. Much depends upon the individual. Formulas are carefully worked out and need only be followed with patience and much watchful attention to conditions. One of the foremost producers in California started in a small way on a back porch and made a success of her first attempt.

Does the grower usually pickle his own crop?

No, olives can be sold directly from the orchard, packing-houses making a business of pickling and preparing the fruit for the retail dealer or the large wholesale house. For oil, the smaller growers commonly sell by the ton and ship to factories having facilities for making oil.



AN OLD MISSION OLIVE PRESS

How are olives converted into oil?

In general the process is this: Cleaned of all dust and leaves the fruit is crushed in concrete vats or basins by heavy stone rollers, reducing it to a pulp; this pulp is made up into "cheeses" enclosed in linen or sail cloth or gunny sacking; the cheeses are placed on top of each other to the number of about twenty, separated by boards, and the whole subjected to gentle pressure by a screw or hydraulic press. The first oil that flows out is superior and is sometimes known as "virgin" oil. In the next process, the cakes of pulp are taken out, mixed, thinned with cool water and again pressed, this time more power being applied. In some cases, a third pressure is made, the pulp being heated with hot water and the pressure increased. In California, however, as a rule, but two pressings are made, the oil being rated as first and second grade. In some cases, the oils from the two pressings are



PICKING OLIVES, NOVEMBER TO JANUARY

run together and marketed under one grade. The final process consists of settling, racking and floating, the aim being to remove every atom of pulp or hint of sediment and secure a clear, limpid oil. It is then bottled and ready for the market. Good oil varies from a golden to a delicate pale greenish color.

Is California oil coming into wider use?

Steadily. It is now protected by the Pure Food Law and is commended by its purity, its cleanliness of manufacture, the perfect fruit from which it is made. It is oil apart from animal life, the pure, bland product of a tree, superior to lard for cooking as it is better for a salad than the compounds sold as "salad oil."

Is the olive easily propagated?

It grows readily from cuttings and takes to the soil in transplanting about as vigorously as a willow.

Will it grow anywhere?

Well, about anywhere in California or



SORTING AND WEIGHING OLIVES

Arizona. In irrigated districts Arizona produces good olives. It grows best in good soil, is pushed along by irrigation, but will grow with little moisture and endure neglect and ill-treatment better than most any fruit tree that can be named, but it responds to care and cultivation and appreciates good soil.

How soon does it come into bearing?

In California, the olive bears at seven years. It then bears, if not a full crop, yet a profitable crop. It *begins* to bear much earlier, but the age of bearing depends upon soil and moisture. It becomes a large tree, and will yield much more at seventeen years than at seven years. It is a mistake to think that the olive will flourish on dry hill slopes or in poor soil. It will grow, but you will have to wait.

Would it be commercially wise to plant on good land that cannot be irrigated?

Much land in California cannot be irrigated, but could be planted to olives more profitably than to any other crop. In such a case, the



A HAND PRESS IN ACTION

tree would have to be well cultivated, the principles of dry farming applied and the trees spaced more widely than under irrigation. Large areas in Spain and in the Mediterranean countries produce fruitful groves of olives where irrigation is impossible. The olive is profitably cultivated in Northern Africa, where the rainfall does not exceed nine inches, and where water cannot be obtained for irrigation. The Romans grew olives in that region two thousand years ago.

What would you advise?

Good land that can be irrigated. The gain would be in the more rapid growth, the earlier bearing age, and the more vigorous life of the tree. But where one wishes to make dry land productive, the olive will serve well and, if the ground were broken up by dynamite, there would be no gain in very wide spacing. "Dry Land Olive Culture," from the Department of Agriculture, will show methods in Northern Africa.



AN OLIVE DRIVEWAY IN CALIFORNIA

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What will it cost to produce an olive orchard of bearing age?

Probably \$250 an acre. This is ample and may be reduced largely where the owner will plant and care for his trees. Stock can be bought for from \$25 to \$50 an acre.

What will an acre yield?

From one to five tons, this wide range depending on the variety, the soil, the season and whether irrigated or not.

What is the selling value of the crop?

Olives are contracted for in advance for five and ten years, at prices which will net the grower not less than two hundred dollars an acre, and from that to five hundred dollars, depending on the age of the trees. They can be shipped to factories at current rates per ton, this being, for several years past from \$80 to \$100.

What is the outlook for the future?

One of the largest factories in California says the demand for ripe olives is increasing



A FOOTHILL OLIVE GROVE

at such a rate that in six or seven years, California will not be able to supply one-half of the world's demand. The business will never be overdone. Once trees have come into bearing, there is the assurance of an income for a lifetime.

How much oil is imported?

Into the United States from Europe, for 1911, 4,555,075 gallons of olives, and 3,702,210 gallons of oil. The bulk of the olives came from Spain and the oil chiefly from Italy. The oil imported for manufacturing and mechanical uses adds 578,477 gallons more.

Compared with this, how large is the California product?

In 1910 the crop was a light one, amounting to about six hundred thousand gallons of green and ripe olives. The output in 1911 is believed by the State Board of Agriculture to have more than doubled this amount. The report of the State Board for 1911 says: "The culture of the olive for commercial

purposes forms an industry that should be regarded as *one of the safest in the State*, and under favorable conditions, *one of the most profitable of all branches of horticulture.*" The report adds: "That there is a ready market for olive oil in this country, is proved by the quality and value of foreign oil and olives imported." The great consumption of oil in the world today is suggested by the output of European growers, 213,325,000 gallons. Add to this the cotton-seed oil that goes into domestic use as salad oil, and about one-third of a total product of over 225,500,000 gallons that goes to Europe to mix with olive oil, and you can see how large a field there is for the olive grower in California. The fact is apparent that the business here is in its infancy, and that there is plenty of room for expansion.

Is there an olive belt in California?

No; olives are grown in thirty-eight counties, ranging from Shasta in the north to San Diego and Imperial counties in the southwest.

In large regions the tree does well near the sea and it grows to perfection in the foothills of the Sierra and the Coast mountains up to 1000 feet or more. The fruit is equally fine in the warm valleys of northern and central California and in similiar localities in southern California. Not only is there no olive belt here, but California herself is one of the great "olive belts" of the world.

But there are "best" localities for the olive even in California?

Oh, yes; we had to find that out by costly experiment. We said too often that the olive would "grow anywhere" and we had to learn that the tree would grow slowly on dry lands; would not be vigorous in poor soil and in ocean winds and fogs would not produce fruit of the same quality as that grown in the dry, sunny air of the interior. The tree suffers from attacks of scale (*Lecanium*) where fogs are frequent, or the air is humid. There are large areas where the scale is not known.

Does the olive want fertilizing?

All fruit-bearing trees do. Feed the soil that it may feed the tree. In Italy they say: "no manure, no oil." Take care of an olive grove when it comes to full bearing and it will prove "a gold mine on top of the ground."

Will the use of olives do more than follow the increase of population?

Yes, it will outrun it. The habit of using ripe pickles and pure oil will increase. It will increase as a relish, as a substitute for meat at high prices, as a result of conviction as to food values involved, and of growing convictions of the medicinal value of both the ripe fruit and the oil.

California can immensely expand her olive area to meet increasing demand. France cannot, nor Spain; Italy suffers in many sections from frost and lands of the best sort are no longer available. Here the olive grove is foreordained. Nature determines where the olive, as well as the orange, shall grow. It is limited to a few favored regions of the world and in California the industry is profitable enough to take away the tragedy of toil, because the climate is behind the business.

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