Historic, Archive Document

Do not assume content reflects current scientific
knowledge, policies, or practices

W. G. Krauss
4/24/93
E. J. ...

Descriptive Catalogue

OF

Fruit and Nut Trees

Ornamental and Shade Trees

Grape Vines

Small Fruits

Roses, Palms, etc., etc.

GROWN AND FOR SALE AT THE

Napa Valley Nurseries

(ESTABLISHED 1878.)

Nurseries less than a quarter of a mile from Napa Railroad Depot, in a southerly direction, on the banks of the Napa River.

SAUSAL FRUIT FARM, residence of the proprietor, four and a half miles north of Napa, where all varieties of fruits are tested, and where buds and grafts for propagating purposes are obtained.

Address:

LEONARD COATES,

NAPA,

CALIFORNIA.

NAPA VALLEY NURSERIES

Customers will please observe carefully the following directions and remarks :

1. Write orders carefully, on separate sheet of paper, and state by what route goods shall be shipped; otherwise the shipper will use his own judgment in the matter. Orders should be sent in as early as possible, which are filled in rotation.

2. State plainly if it is desired that no substitutions shall be made; otherwise, in small, mixed orders, it is customary, at the discretion of the nurseryman, to sometimes make slight changes which he thinks of advantage to his customer.

3. After stock is delivered to the transportation company, I will not be responsible for any damages that may result through delays or accident, from whatever cause. Trees are always packed so that they will reach their destination in good order if forwarded with any reasonable degree of promptness. Claims for damages during transit must be made to the forwarding companies.

Any mistakes made in filling orders will be cheerfully rectified if notification of such error is made on receipt of goods.

4. Packing is done in the best manner, by experienced workmen, for which a small charge is made, to cover the cost of material used. Parties remitting cash with their orders should bear this in mind,—about 25 cents to \$1.00 per bale, according to size.

5. **GUARANTEE.** All trees sold from these Nurseries are guaranteed true to name, and every possible care is taken to keep them so. Should any mistake occur, however, it must be and is hereby agreed upon by both parties, that the shipper will not be held liable for any damages in excess of the first cost of the trees.

6. The terms of payment are invariably cash in advance if the parties are unknown, or satisfactory security. A deposit of 10% is required at the time of ordering. Remittances can be made by Bank Draft, Money Order or Registered Letter. If money is sent by Express, charges must be prepaid.

7. Special prices on large orders can be given at any time. Regular Price List is issued in the fall.

LEONARD COATES,
NAPA, CAL.

RESIDENCE OF LEONARD COATES, AT SAUSAL FRUIT FARM.

PLANTING * AND * CULTURAL * DIRECTIONS,

INSECT * REMEDIES, * ETC.

"CALIFORNIA FRUITS, AND HOW TO GROW THEM," is the title of a practical book by Prof. E. J. Wickson, published by Dewey & Co., San Francisco. It should be in the hands of every fruit-grower in California, whether amateur or professional. The following brief hints are given at the request of a number of customers, and are the outcome of practical experience in the business. The proprietor has been actively engaged in horticulture for over fifteen years in California, and has been for several years a Director of the State Horticultural Society, to any member or officer of which Society reference is respectfully given.

On receipt of trees, the bundles should be opened as soon as trenches are dug in which to cover the roots, if the weather is favorable. If too dry, with a north wind blowing, they can be left in the bales, water being thrown over them occasionally. Let the trenches be large enough to take the roots without crowding; and, if the trees are tied in large bunches, it is best to cut the strings. Let loose earth be sifted all about the roots until completely covered. Roots of trees and plants cannot be exposed to wind and sun without great injury. Carelessness in this particular is the cause of many dead trees, afterwards blamed to the nurseryman.

When the trees are planted, it depends entirely upon the weather how they should be handled. If very dry, with north wind, it is better to defer planting, or keep the trees in a barrel with enough water to cover the roots; this can be placed on a sled or truck and drawn through the orchard.

All bruised portions of the roots must be cut off clean, and the tree planted in a freshly dug hole, large enough to admit of the spreading of all roots without crowding, which must be surrounded and covered with fine, mellow soil, very firmly pressed in, care being taken that the roots are not broken or injured in so doing. Trees must *not* be planted any deeper than they have stood in the nursery; and, if the land is heavy or inclined to be wet, it is better to plant them still shallower. In good land that has been well plowed and harrowed it is a waste of time to dig very large holes. When the trees are set, if one-year-old stock, they should all be cut off to about twenty inches from the ground. If two years old, then the side branches must be shortened to about five or six inches.

Twenty feet apart each way is a good distance for most standard fruit trees in California. Extremes must be avoided; and nothing is gained in endeavoring to get as large a tree as possible by allowing thirty or thirty-five feet. A medium-size tree, pruned to form a compact head, will give the best results, and the crop will be handled much cheaper. Walnuts and figs require more room, and are often planted alternate with other trees.

In planting an orchard of any varieties, it is a good plan to plant the varieties of one kind of fruit in alternate rows. It really makes no difference in harvesting, and will often be the means of producing a full crop where otherwise it would be a partial failure. The pollen of some varieties is stronger than in others; as, for instance, a May Duke cherry will fertilize a Black Tartarian, so that the latter, which is often a shy bearer, will mature a good crop. For this same reason, many orchardists keep bees, that they may act as cross-fertilizing agents.

The after-care of the young orchard must be thorough, whatever method is employed. It is necessary that the ground be well and frequently stirred, and that it be kept free of weeds.

Diseases and Remedies.

If the trees are healthy at the start, and are kept growing vigorously, more than half the battle against insect pests is already won. A tree with a weakened constitution, from whatever cause, is ever liable to attack from insect enemies, or from the more insidious fungoid diseases.

Watch carefully the young trees, and the close observer will readily notice any change in the appearance of the foliage or young growth, thereby indicating the presence of some disease, local or organic. If the grower has not confidence in his own knowledge, let him then call in the aid of some more experienced orchardist, that a correct diagnosis be made and remedy applied.

For Summer Washes,

sulphide of potassium, kerosene emulsion, and various other compounds are all good. Specific directions for preparing and applying can always be obtained at the office of the State Board of Horticulture, 220 Sutter Street, San Francisco. Red Spider and San Jose Scale are very liable to get a start in any orchard, as both are distributed all over the State. These should be watched for carefully, and trees sprayed with any of the above washes as soon as discovered, if in the summer. For the former, follow the spraying with a dusting of dry sulphur. In the winter stronger preparations can be used.

For codlin moth, caterpillars, larvæ of sawfly worm, and all leaf-eating insects, Paris green in the proportion of one pound to two hundred gallons of water is perhaps the most effectual. It must be kept well stirred, however, and cannot be safely used on peach trees unless much weaker still.

A thorough system of annual or biennial spraying should be inaugurated in every orchard from the start, and the trouble and expense will be reduced to a minimum. It is the cleaning of a badly infested orchard that is so discouraging and expensive.

I shall be glad at any time to give my friends and customers the benefit of my experience and knowledge in this or any other matter pertaining to the business.

Pruning.

It is impossible without taking too much space to give directions in detail. A few practical lessons at the orchard of a successful grower will be of more use than the reading of many books. Different varieties need different treatment; but an annual shortening in of current season's growth and thinning out where necessary should always be attended to. Trees must be kept compact, with heads neither too open or too close. The trunks of young trees must be kept well shaded by low heading, and for this purpose a sufficient number of new shoots must be allowed to remain; but those about the base and center of the tree may be thinned out during the summer, if growth is too rank.

Irrigation

is necessary in some parts of California where the rainfall is very light; but even then, if the soil is deep, one good soaking in a year is all that is required, if cultivation afterwards is thorough.

No Irrigation

is used in the Napa Valley Nurseries, the trees being grown on alluvial river soil, giving a perfect root system. Stock thus grown is far less liable to evil effects when transplanted; and, not having been used to water artificially applied, the trees will not feel the need of it in the orchard. From the fact of my trees being so much in demand in large fruit sections where other nurseries abound, and much unsolicited evidence coming in showing their superior growth, it will be seen that this claim is not without good foundation.

Soil and Location.

It is of prime importance that great care be used in this matter. Don't be carried away by any descriptions of the land. See for yourself, both the surface and subsoil; and be sure that the natural drainage is good. The inexperienced will, of course, need the aid of someone better competent to judge of these things than himself.

All fruit trees require well-drained land, but especially the stone fruits. Pears and apples will thrive in a much heavier land, or *adobe*. Plums and prunes on plum root will succeed also in stiff lands.

The Cost of an Orchard.

UP TO FIVE YEARS OLD.

Trees (deciduous) averaging \$15 per 100, and counting everything except the price of the land, will bring it somewhere about \$100 per acre. Add the price of the land and it will be seen that a bearing orchard at \$300 or \$400 an acre is worth what is asked, and more if the buildings and other improvements are first class. The best valley lands sell at about \$150 per acre. Up to five years old these expenses may be considerably reduced. The trees will have borne two light crops, if peaches or apricots, and one crop of other fruits; and root crops, melons, corn, etc., may be raised in the mean time between the trees. After five years the **average gross return** will be about \$150 per acre. At four tons to the acre, and \$30 per ton for the green fruit,—both very low estimates,—it will be seen that \$100 per acre net is a safe figure to estimate.

The reasons

Why Many Orchards Do Not Pay

are various; but generally it is either from bad management, or the soil or locality is unsuitable to the varieties grown, or, which is so often the case, a large proportion of the trees in the orchard are unprofitable. It is necessary to have **every tree yield a return**, which means a very careful selection of varieties, and also that they be not in too large quantities. An orchard of fifty acres should have from five to ten varieties ripening at different times. Individual preference for this or that fruit should cut no figure in one's calculations; and here is a rock on which many stumble. All good standard fruits are equally valuable, taking the average year by year, whether they be cherries, peaches, pears, apricots, prunes, plums, apples or nuts. It must only be decided what succeeds in the land to be planted, then divide it into five to ten acre lots of market fruits. As an example for fifty acres, I suggest :

Cherries, 100 each Early Purple Guigne, Cal. Advance, Republican, Tartarian; 50 each Royal Ann and Centennial	500
Apricots, 300 Royal, 200 Blenheim	500
Early Shipping Plums, 200 Clyman, 100 Tragedy, 100 Simoni.....	400
Early Peaches, 200 Alexander, 200 Hale's.....	400
Mid-Season Peaches, 200 Early Crawford, 400 Muir, 200 McKeivitt Cling, 200 Orange Cling.....	1000
Prunes, 400 French, 400 Robe de Sergent, 200 Silver, or Golden.....	1000
Late Peaches, 200 Salway, 200 Wonderful.....	400
Late and Midseason Plums, 100 Kelsey Japan, 100 Satsuma, 100 Yellow Egg, 50 Coe's Late Red, 50 Grand Duke.....	400
Apples, 200 Alexander, 200 Astrakhan, or } Pears, 400 Bartlett	400
Total, - - -	5,000

This, I believe, minimizes the labor difficulty; for a small force of men, hardly more than is needed for the winter pruning and plowing, will harvest the crop. Of course, if packing is done, or drying, etc., extra help is needed. I refer to the raising and picking of the fruit, and delivery at shipping point. The varieties named would vary with the locality; it is merely intended to make as long a season as possible, without intermission, that, as far as practicable, a regular force of men may be retained throughout. It might have been added that where

Late Planting

is necessary, extra care should be taken. A mulch of rotted manure or litter should be placed around the tree for three or four feet and five or six inches deep. This will prevent the moisture from evaporating so fast; and the tree should be shaded from the hot sun.

The question of roots on which trees are grown should be left to the nurseryman or some intelligent and practical horticulturist. The Myrobolan root, if *grown from seed and not from cuttings*, is the best plum stock for California. Some varieties of plums and prunes will not unite on any but a plum root, while others do better on peach or almond. As a broad proposition, the peach root is the best for peaches, apricots, plums, and prunes, with exceptions as noted, and when planted in good fruit land.

Describe your land fully to your nurseryman; and it is to his interest to send the stock best suited to such a location.

Visit the Nursery

where you intend to buy, and place your orders. The results are always better than when trusting to traveling agents.

Small Fruits,

such as Raspberries, Blackberries, Currants, Gooseberries, are planted about five feet apart. They should be heavily manured every fall, kept pruned low; and the yield will be enormous, if the soil is good and well cultivated.

Strawberries and all vegetables need specially prepared ground, heavily manured. For late summer cropping, they will need water, and plenty of it. To grow early vegetables, the seed should be sown in sheltered beds, where it can have every attention from midsummer to early fall, and transplanted as soon as the first rains wet the ground.

In the following Catalogue, the list is not extensive, my object having been to weed out from time to time all unprofitable or doubtful varieties. New varieties, and those of special merit for the amateur, are retained and added to every season.

Those most in demand for canning, shipping or drying are so designated.

LEONARD COATES.

FRUIT DEPARTMENT.

FOR THE CONVENIENCE OF THOSE UNACQUAINTED WITH ALL THE
VARIETIES, I HAVE NAMED THEM AS NEARLY AS POSSIBLE
IN ROTATION OR IN THEIR ORDER OF RIPENING.

APPLES.

Summer.

Red Astrakhan. Very large, crimson, juicy and acid ; tree a good bearer ; the most profitable and best early variety.

Red June. Small, bright red ; a beautiful early apple ; tree bears young.

Gravenstein. Large, striped, rather flattened in shape ; very fine flavor ; tree prolific, and a good grower ; the best late summer apple, and unsurpassed for drying.

Everbearing. Clear waxen yellow, shaded with red ; fruit continues to ripen for three months, beginning in July.

Autumn.

Alexander. Very large and handsome, nearly covered with bright red stripes ; flesh tender and juicy ; valuable for market.

King of Tompkin's County. A magnificent apple, bright red, and of very fine flavor.

Hoover. Large, rather flattened, very deep crimson, coarse grained, but good flavor ; its deep color makes it extremely valuable in the market ; succeeds best in the bay counties.

Winter.

- Yellow Bellflower.** Large, oblong, pale yellow ; very fine quality ; tree vigorous and of drooping habit.
- Roxbury Russet.** Medium, rough, russety skin ; rich ; should be in every collection.
- Rhode Island Greening.** Large, green : tree a great bearer ; a general favorite.
- Hubbardston Nonsuch.** Very large, striped ; of excellent quality.
- Rambo.** Medium, yellow ground, striped and dotted with red ; tender, crisp, and of excellent quality.
- Jonathan.** Medium, almost covered with bright red ; very valuable market sort.
- Marshall's Red, or Red Bellflower.** Very large, deep crimson, shaped like Yellow Bellflower, of fine quality ; tree productive ; originated near Napa, by J. L. Marshall, being a cross between Yellow Bellflower and Red June ; one of the most valuable market varieties in the list.
- Baldwin.** Large, roundish oblong, bright red ; of fine quality, and tree very prolific.
- Rome Beauty.** Large, yellow, shaded with bright red ; flesh yellowish, tender and good.
- Rawle's Janet.** Large, striped ; of fine quality, and tree a good bearer.
- Winesap.** Medium, bright red ; a great favorite, and valuable for the table or market.
- Ben Davis.** Very large and handsome, striped with bright red ; quality very good.
- Northern Spy.** Large, round ; a beautiful apple, delicately marked with red ; a fine upright grower.
- Swaar.** Large, golden yellow, crisp, and of peculiarly fine flavor.
- Smith's Cider.** Medium, striped with bright red on a pale yellow skin ; very fine quality ; juicy.

- Arkansas Black.** Very large, nearly round, deep crimson, almost purple; a good keeper; very valuable.
- Cook's Sonoma Seedling.** Large to very large, irregular in shape, striped; fine quality; originated in Sonoma Co., Cal.
- Clayton.** Large, nearly covered with dark red; a good keeper, and tree a great bearer.
- Esopus Spitzenberg.** Large, light red; extra quality; a great favorite.
- Yellow Newtown Pippin.** Large, yellow; of fine quality; one of the most popular late varieties.
- Shannon.** Very large; took premium at World's Fair, New Orleans for "*largest and handsomest apples.*"
- Shackleford.** Large, bright red; a very late keeper.
- Lankford.** Large, red; particularly recommended as a very late keeper for a mild climate.
- Mammoth Black Twig.** Very large, but otherwise resembling Winesap, except that it keeps much better.
- Delaware Red Winter, or Lawver.** Large, round, bright red; of extra quality; of remarkable keeping qualities; tree vigorous, and a good bearer.
- Stark.** Large, roundish, yellow, striped with red, and thickly sprinkled with brown dots; a valuable, late-keeping market variety.
- Yellow Transparent.** A new seedling of superior merit, somewhat resembling Maiden's Blush, but larger and of finer quality.

CRAB APPLES.

- Whitney's No. 20.** Large, handsome; good quality, mid-season.
- Hyslop.** Large, deep crimson; very popular: late.
- Transcendent.** Fruit very large; tree productive; one of the best.

PEARS.

NAMED ABOUT IN THEIR ORDER OF RIPENING.

Osband's Summer. Medium size, yellow, with red cheek; fine flavor; productive.

Tyson. Rather large, bright yellow; good; ripening just after the preceding.

Beurre Bosc. A large, handsome, russety pear; flesh white, melting, perfumed.

Clapp's Favorite. Very large; much resembling the Bartlett, but about a week earlier.

Lawson, or Comet. Large, showy; valuable for market; early.

Anne Ogereau. Medium, beautiful crimson color; fair quality.

Bartlett. Very large, rich, buttery, with a delicate flavor; flesh fine grained; tree a fine, upright grower; the most profitable market sort.

Beurre Hardy. Large, pale russet; very fine; tree remarkably vigorous and productive.

Duchess d'Angouleme. Very large, dull yellow; a valuable shipping pear.

De Tongres. Large, long shape; rich russet; excellent quality; tree a fine grower.

Howell. Large, clear yellow; fine quality.

Seckle. Medium, dark-brown color; very sweet, melting and juicy.

Sheldon. Large, russety, with red cheek; a great favorite.

Lawrence. Large, yellow; very productive; quality good.

Mount Vernon. Medium, yellow, slightly russet; vinous and aromatic; tree very vigorous and an early bearer.

Beurre Clairgeau. Very large and handsome; rather coarse grained, but of fine flavor; very valuable shipper; tree an enormous bearer.

- Beurre d'Anjou.** Large, russety, red cheek ; very fine.
- Counseiller de la Cour.** Recommended as a very desirable pear ; tree hardy.
- Cole.** A fine, large pear, without core or seed.
- Beurre de l'Assomption.** The largest of all pears ; quality fair , shape irregular.
- Winter Seckle, or Dana's Hovey.** Medium, extra fine flavor and quality ; best.
- Winter Nelis.** Medium size, mostly covered with russet ; best winter pear ; tree a strong but straggling grower.
- P. Barry.** Very large, deep yellow, nearly covered with russet ; very fine ; originated with the late B. S Fox, of San Jose, Cal.
- Easter Beurre.** Large, greenish yellow ; good quality ; best late keeper.
- Idaho.** New ; very large pear, resembling Duchess in shape but of better quality ; a month later than the Bartlett.

PEACHES.

Freestone.

NAMED ABOUT IN THEIR ORDER OF RIPENING.

- Alexander.** Of good size, nearly covered with deep red ; flesh greenish ; juicy, rich ; the most popular very early variety.
- Ulati.** A seedling of Alexander, ripening at the same time, but of superior quality and firmer ; the best early shipping variety.
- Strawberry.** Medium size, white, striped with crimson ; flesh white, delicious ; good for the table.
- S. G. French.** A new extra early sort from Oregon, said to be much finer than Alexander.

Miss Lola. Described as a perfect freestone of fine quality; the two preceding and Hale's Early are, properly speaking, half-free.

Hale's Early. Large, deep-red skin; flesh greenish, rich; very valuable for market and shipping.

Amelia. Very large, oblong, white flesh; red cheek.

Bishop's Early. Very early freestone; white.

Gov. Briggs. Large, yellow, and said to be both better and earlier than Crawford.

Foster. Very large, rounder than Early Crawford, and of superior quality; shipping and canning.

Early Crawford. Very large, yellow; tree a fine grower and very productive; very extensively planted.

Mary's Choice. Very large, round; yellow, rich; excellent for canning, drying or shipping.

Honest Abe. Similar to above, but of superior quality.

Reeve's Favorite. Large, deep yellow, with crimson cheek, red at the pit; good for drying.

Late Crawford. Resembling Early Crawford, but darker in color and of better quality, but not so good a cropper.

Muir. Large, pale yellow; very firm flesh, very sweet; best for drying.

Susquehanna. Very large, yellow; rich, juicy and sweet; one of the best midseason market peaches.

Newhall. Seedling of above, and claimed to be superior; much esteemed where known.

Wheatland. Large, round, yellow, crimson cheek, red at pit; very firm.

Globe. Very large, yellow, some specimens measuring 15 inches in circumference; flesh very firm.

Ellison. Very large, yellow; flesh firm; reproduces itself from seed; tree vigorous and a great bearer.

Lemon Free. Originated in Ohio; very large, pale yellow; shaped a good deal like a lemon; of extra fine quality; tree very productive; ripens before Salway.

Elberta. Very large, yellow; fine quality; a great bearer.

Columbia. Very large, dull orange yellow, mottled with red.

Scruggs. Very large, resembling Picquet's Late, but earlier.

Picquet's Late. Very large, round, yellow, red cheek; sweet, rich, and perfumed.

Lovell. Large, pale yellow, almost perfectly round; small pit; of unsurpassed quality for canning or drying; a California seedling.

Mrs. Brett. Very large, yellow; good shipper.

Comet. Large, yellow; good quality; tree hardy.

Keyport White. One of the best white-fleshed sorts.

Salway. Large, yellow; very rich; the most popular late free-stone.

Marshall's Late. Very large, yellow; one of the best very late sorts.

Leopard. Very large, dull orange yellow, mottled with red; very prolific.

Chair's Choice. Large, yellow; very fine; from Maryland.

Wonderful. Very large, nearly round; regular in form and size; flesh yellow; pit small; skin almost covered with rich carmine; tree vigorous and prolific; claimed to be the very best very late peach of this class.

Bilyeu's October. Large, greenish white, with pink blush; good quality.

Baldwin's Late. Medium to large, white, with red cheek; very good; the latest of all, hanging on the tree till Thanksgiving.

Perkins. Seedling of Rev. A. T. Perkins, of Alameda, Cal., much recommended.

Clingstone.

McKevitt. Large, pure white, faint blush on side next the sun ; tree very hardy and vigorous, and a good bearer ; unsurpassed for canning.

Tuskena, or Tuscan. Large, yellow ; nearly round ; of good quality and early.

Alpha. Large, rich yellow, with red cheek ; fine quality ; earliest, and very valuable for market and shipping.

Roseville. Very large, round, white, with red cheek.

Seller's. From Orange cling ; larger and finer ; has been more planted than any other clingstone.

Nichols' Orange. Large, rich color ; tree hardy and very productive ; in demand for canning.

Grover Cleveland. Originated with Mr. J. M. Gates, of Vacaville, Cal. Very large, round, rich yellow, with red cheek ; in quality unexcelled.

Mother Porter. Medium size, pale yellow, no color at the pit ; fine grained and very sweet.

Hardy Tuscany. Very large, handsome ; orange, with deep crimson cheek ; from Italy.

Indian Blood. Large, deep crimson ; for sweet pickles or preserves.

Austin. The latest yellow clingstone ; very valuable ; originated near Winters, Cal.

Burke. A magnificent white cling, from the Southern States ; ripens after Orange.

All clingstone peaches are good shippers.

PLUMS.

NAMED ABOUT IN THEIR ORDER OF RIPENING.

Cherry—Early Yellow. Round, yellowish red; of inferior quality, but very early.

Clyman. A seedling of Peach plum, originating in Napa Valley; large, reddish purple; flesh firm; freestone; tree very vigorous, and a great bearer; a very valuable plum, especially for shipping in a fresh state, ripening with the Cherry plum. This variety has far surpassed my expectations; it is far ahead of any other early plum of its class.

Royal Hative. Medium, reddish purple; very largely planted in the early localities, where it is very profitable.

Name changed to SIMON.

Prunus Simoni. Apricot plum, from China; fruit of medium size, bright red; flattened; flesh deep yellow, with peculiar aromatic flavor; tree a very fine grower; of great value as an early shipper.

Peach. Very large, round, reddish purple; one of the most magnificent of plums, and very early; a light bearer, but at only 20 lbs. to the tree would be very profitable.

Prunus Pissardi, or Purple-leaved Plum; fruit of pleasant flavor; tree very ornamental.

Bradshaw. Very large, egg-shaped, purple; a splendid dessert plum.

Hungarian, or Pond's Seedling. Very large and showy, of beautiful crimson color; tree an immense bearer; used very extensively for shipping fresh to Eastern markets.

Yellow Egg. Very large, golden yellow; very popular for table and canning, and is found very profitable dried whole, or shipped green to the East.

Purple Duane. Large, roundish oval; freestone; flesh firm.

Jefferson. Very large, roundish oblong; greenish yellow with numerous pink dots on sunny side; excellent; very sweet and rich.

Columbia. Large, round, brownish purple; perfect freestone; flesh very firm; the best for drying.

Satsuma, or Blood Plum. Large, round, deep crimson to the pit; flesh very firm; seed remarkably small; destined to be perhaps the most profitable of all shipping plums; from Japan.

Green Gage. Medium to large; round, rather flattened; color green, with pink flush; the standard of all plums for excellence of quality; much superior to "Imperial Gage," which is erroneously known as Green Gage.

Washington. Very large, round, greenish; flesh firm, sweet and rich; freestone; good for drying or canning.

Shropshire Damson. Size medium; the best for preserving.

Name changed to **MIKADO.**

~~Botan.~~ Japanese; purple, large.

Ogon. Japanese; yellow, very large.

Kelsey. Japanese; very large; rich, reddish purple on yellow ground; tree a prolific and early bearer; very largely planted for shipping East.

Coe's Golden Drop. Large, oval, dull greenish yellow; very rich and sweet; admirable for drying whole as a prune.

Grand Duke. Very large, rich purple, freestone; the best late purple plum.

Reine Claude de Bavay. Large, round, green; resembles the Green Gage; excellent quality.

Ickworth Imperatrice. Medium to large, round; bluish purple, with beautiful bloom; flesh very firm and dry; stands shipping well.

Coe's Late Red. Medium, round, reddish; sweet and good; hangs on the tree till winter.

Uncle Ben. A seedling, originating with B. H. Crow, Esq., in Stanislaus Co., Cal. Fruit large, nearly round, pale yellow, and of excellent quality. It ripens in early winter, keeping till nearly Christmas.

PRUNES.

Elmore. From Shasta Co., Cal.; described as being a month earlier than any other prune.

Golden. From Oregon; a seedling of Fellenberg; very large, oval, deep golden yellow; tree a very strong upright grower and a great bearer; highly recommended.

D'Agen (French). The well-known variety extensively planted all over the State; medium size, egg-shaped, reddish purple, the color varying according to climate, near the bay being much darker than in the interior; very sweet and rich and a great bearer; should only be planted on rich land, and the fruit should be thinned if size is desired.

Tragedy. A seedling from the Sacramento River region; described as being very early; a fine dark prune and tree a good bearer.

Lot d'Ente. Identical with the well-known "French" prune described above.

D'Ente, or sometimes called "Robe de Sergent." Large, roundish, rather enlarged on one side; dark brownish purple; clingstone; apparently identical with "D'Agen" of Downing; makes a magnificent dried prune; larger than "French."

D'Ente de Puymirol. From France; medium, oblong, purple; very sweet and good.

Ruby. From Lake Co., Cal.; described as a large, deep-red prune; very sweet and rich.

Oregon Silver. Closely resembles Coe's Golden Drop; very fine for drying, and one of the most profitable of all.

Bulgarian. Much esteemed in Alameda Co.; large, purple, dry and rich; tree a strong grower.

Fellenberg, or Italian. Large, oval, deep purple with blue bloom; freestone; very firm flesh; excellent for drying or shipping fresh.

Diamond. A large purple prune from England; a great acquisition as a shipping fruit.

APRICOTS.

Newcastle Early. From Newcastle, Cal.; nearly as large as Royal, and by far the best very early apricot.

Royal. Large, deep yellow, with orange cheek; rich and sweet; tree a great bearer; very extensively planted.

Blenheim. Similar to Royal, and especially adapted for the bay counties.

Large Early Montgamet. A large French apricot, of deep, rich color; early.

Hemskirke. Large, of superior quality; tree hardy.

Esperen. A very early French variety.

St. Ambroise. Very large; midseason; somewhat oval in shape; very valuable as a shipper.

Peach. Very large, round; perhaps the most highly flavored of all; propagated from trees in the orchard of R. C. Kells, Sutter Co.; acknowledged to be the best. There are several varieties known as "Peach."

Boulbon. From France; recommended as of a quality suitable for shipping.

Moorpark. The well-known standard variety for table or canning; very large, rich and good; a rather uncertain bearer.

Luizet. From France; said to be superseding all others.

Gooley. New; a seedling; said to be the earliest of all the large varieties; from Solano Co., Cal.

Flickinger. Another seedling; of Hemskirke parentage; from San Jose.

NECTARINES.

New White. Large, roundish; excellent for canning.

Boston. Large, yellow, splashed with red; sweet and good; very productive.

Pitmaston's Orange. Large, orange, with reddish cheek; very sweet and rich; freestone; best for drying.

CHERRIES.

California Advance. A seedling of Early Purple Guigne; large, purple; tree a great bearer; the best early cherry.

Early Lamaurie. Medium, dark purple; a good bearer and very early.

Early Purple Guigne. Medium size, dark purple; a good bearer; extensively planted as one of the best early cherries.

Guigne Marbree. Large, rather conical shape, deep red; quality best; tree a great and early bearer; ripens very early.

Rockport Bigarreau. Very large, light colored; very prolific bearer.

May Duke. Large, dark red; sub-acid.

Purity. Large, almost white, and waxy looking; very fine flavor; tree a great bearer; a seedling of Elton.

Monstrous de Mezel. Very large, obtuse heart shape; dark red; a fine shipper.

Black Mastodon. A seedling of Pontiac; of immense size; black, very rich; rather a shy bearer.

Black Tartarian. Very large, rich, black, juicy; the most popular table cherry.

Thompson's Seedling. A seedling of Tartarian, which it much resembles; tree hardier and a better bearer.

Napolean Bigarreau, or Royal Ann. Very large, light colored, with red cheek, almost covered with light red in the sun; the favorite canning cherry; tree vigorous and a prolific but not early bearer.

Centennial. Seedling of above; larger, more obtuse, and more beautifully marbled and splashed with red; very firm and sweet; perhaps no fruit has achieved a wider reputation in so short a time; tree a stocky grower; the best shipper. First introduced by the proprietor of these nurseries.

Black Republican. Medium, black; flesh remarkably firm and solid; a fine shipper.

Oregon. New; from Oregon; a seedling of Royal Ann; very large, color reddish purple; flesh very firm and sweet; very late; a great acquisition.

Chapman. A seedling of Black Tartarian; larger and finer; a better bearer, and, what constitutes its great value, *much earlier*; ripens immediately after Early Purple Guigne.

FIGS.

California Black. Large, deep purple; very good; tree hardy and a strong grower.

Adriatic. Large, white; pulp red; very fine quality; largely planted for drying.

San Pedro. Very large, light color; best dessert fig.

Smyrna. Large, light brown; very sweet; adapts itself to different climates.

Bulletin Smyrna. From bearing trees of the lot imported by the San Francisco *Bulletin*. Promises to be the best white fig for drying.

QUINCES.

Champion. Very large; good flavor.

Orange. Large, rich yellow; very popular.

NUT TREES.

ALMONDS.

I X L. Large, generally single kernels; hulls easily; soft shell; tree a strong, upright grower.

Nonpareil. Large, full kernel, thin shell; tree of a weeping habit, and a strong grower.

Ne Plus Ultra. Similar to above, but of different habit of growth.

Lewelling's Prolific. Originated in Napa County with the late John Lewelling; fine, soft-shell nut; tree an enormous bearer.

Drake's. Resembles Nonpareil, but tree more upright.

Commercial. From Tulare County; a seedling of distinct type; nut very large, thin shell; tree a great bearer, and stands frost well; very thrifty and sturdy, rarely losing all its leaves.

Wolfskill. An excellent nut, paper shell; a good amateur variety.

Sultana. A Spanish variety; soft shell.

Golden State. From Yolo County; described as a great and regular bearer; quality good; soft shell.

Routier's Twin. From Senator Routier, Sacramento Co.; highly recommended.

WALNUTS.

Præparturiens. Rather dwarf growing; bears early; excellent nut; this is about the best variety to plant.

À Bijou. Very large nut; a French variety.

Persian. Fine nut; tree a good and regular bearer; should be planted alternate with Præparturiens.

Eastern Black, or **American Black.** The well-known variety from the Eastern States; succeeds well here.

California Black. A native species; tree a vigorous grower, and very ornamental.

Talcoa. Apparently a cross between the two preceding; tree an immense grower; nuts very large; a splendid avenue tree.

Santa Barbara Paper Shell. Seedling of English Walnut; very thin shell; bears early.

Juglans Sieboldii. Japanese walnut; tree a most rapid grower, with very large leaves; nuts good, borne in clusters; will become very popular.

PECAN.

A beautiful growing, symmetrical tree, with glossy foliage; nut long, thin, and of excellent quality.

CHESTNUTS.

Italian. Nut large, good; tree very ornamental.

American Sweet. Smaller nut than the above, but sweeter.

Japan Mammoth. Nut of immense size and good quality; tree bears young.

Spanish.

Miscellaneous Fruits.

MULBERRIES.

Russian. Fruit large, black ; tree very vigorous.

Downing's Everbearing. A great favorite ; heavy bearer.

English or Persian. Very large, fine fruit ; tree of slow but sturdy growth, leaves large and thick ; the best.

ORANGES.

Oonshiu. A small, seedless Japanese variety ; very sweet ; of dwarf habit ; quite hardy.

Washington Navel. The largest and finest variety.

LEMONS.

Villa Franca ; Lisbon. The two hardiest, and of extra quality.

PERSIMMONS.

Among, or Yemon. Round, flattened, deeply ribbed, dark orange red ; very large, edible, while still solid.

Haycheya. Oblong, or roundish ; orange red ; keeps late.

Hyakume, or Dai-Dai-Maru. Large, nearly globular, seedless ; late ; good.

The Japanese Persimmon makes one of the most ornamental of trees ; and the fruit is becoming to be very highly esteemed, and valuable as a market fruit.

OLIVES.

Picholine. Best growing variety, and makes fine oil.

Mission. Makes good oil.

Other varieties are being tested at Sausal Fruit Farm, and propagated in nursery to a more or less limited extent.

GRAPES.

- Sweetwater.** Very early, white.
- Rose of Peru.** Bunches very large, berries nearly round; color purple.
- Muscat of Alexandria.** The great raisin grape.
- Huasco.** Similar to above, but said to be a better bearer; from Chile.
- Black Hamburg.** Black, large berries and bunches; very fine quality.
- Black Malvaisia.** Berries oval, black, large bunches; very good.
- Flame Tokay.** Berries and bunches very large; light red color; best shipper.
- Malaga.** Very large, oblong; white; fine.
- Sultana.** Seedless raisin grape.
- Emperor.** Very large, late, rose color; good shipper.
- Mission.** Large bunches, medium berries, very sweet, black; a great favorite.
- Verdel.** One of the best very late grapes; bunches greenish; very large.

NATIVE AMERICAN GRAPES.

- Isabella.** Large, black, musky.
- Catawba.** Large, red, sweet and musky.
- Agawam.** Very large berries, red.
- Martha.** Large, white, very sweet.
- Concord.** Black; bunches large; very popular.

These varieties are recommended for arbors and trellises.

WINE VARIETIES.

Cuttings furnished of all known varieties from the best Napa Valley Vineyards.

WILD PHYLLOXERA-PROOF STOCK.

Riparia. Best suited as a grafting stock for valley lands, or shallow soil with clay subsoil.

SMALL FRUITS.**GOOSEBERRIES.**

Champion. From Oregon; berries large; free from mildew.

Industry. Large berries; deep red when ripe; productive, and said to be free from mildew.

Houghton. Small, good quality; sweet; quite healthy.

Crystal. New; from Oregon.

CURRANTS.

Cherry. Very large, red; the best.

Lee's Prolific. Black; good for jellies.

White Grape. Best white currant.

Black Naples.

RASPBERRIES.

Cuthbert. Large, red, good shipper; bears nearly all the year.

Hansell. The best early red raspberry.

Brinckle's Orange. The best white or golden raspberry.

Gregg. Fine large black-cap variety.

BLACKBERRIES.

Crandall's Early. Very early.

Evergreen. From Oregon; bears a delicious fruit until late in the fall or winter.

Lawton. Best and largest; midseason.

Kittatinny. Large; good quality; very extensively planted.

Wilson's Early.

STRAWBERRIES.

Sharpless. Very large and productive; good.

Longworth's Prolific. Very popular; long season.

Monarch of the West. One of the best; productive.

Captain Jack. Very productive; for heavy land.

Wilson's Albany. One of the greatest favorites; succeeds well everywhere.

ORNAMENTAL DEPARTMENT.

There is a growing demand amongst my customers for Ornamental trees and shrubs, roses, palms, etc. To meet this demand, I am now propagating a more extensive variety than formerly; and anything not named in this list will be furnished at lowest market rates.

Having made somewhat of a study of landscape gardening, I shall be pleased to make any suggestions towards the ornamentation or beautifying of grounds, etc. Apart from the esthetic and home-like aspects, the utilitarian spirit of this 19th century should at once grasp the more practical view, the money side of the question. For how much is the value of a property enhanced when tastefully laid out and beautified with trees and shrubs! A fine avenue, a clump of palms, or even a rosebed, will often be the means of consummating a sale, when the property is on the market.

For avenue trees bearing profitable crops, nothing is better than the walnut as a deciduous tree, and the picholine olive as an evergreen. Or, for a more tropical effect, an avenue of palms is always imposing. *Pritchardia filifera* (Cal. fan-palm), *chamærops excelsa*, and *phenix canariensis* are the most desirable for this purpose.

The following list comprises varieties that are so well known to every one that they do not need description :

American Beech,	Sugar Maple,
American Birch,	Tulip Tree (<i>Liriodendron</i>),
American Larch,	White Ash,
Balm of Gilead,	Catalpa,
English Elm,	Mountain Ash,
Rock Elm,	Texas Umbrella Tree,
Sycamore Maple,	Hickory.

NATIVE CALIFORNIA TREES.

Tan Oak,	Redwood,
Laurel,	Manzanita,
Fir,	Madrone.

MISCELLANEOUS.

Monterey Cypress. Balled or in boxes; for hedges.

Monterey Pine.

Eucalyptus. Several varieties.

Magnolia Grandiflora. The large, evergreen, white-flowered variety of the Southern States; perhaps the handsomest of all evergreens.

Loquat. Evergreen; sometimes called Japanese Plum; a very handsome and rapid-growing tree; generally grown in the form of a large shrub; fruit is edible and becoming to be valuable commercially.

PALMS.

Pritchardia Filifera. Cal. Fan-Palm.

Chamærops Excelsa. Rapid growing, and the hardiest of all.

Phoenix Canariensis. Similar to the Date-Palm in appearance, but a much better grower.

White and Purple Lilac, etc., etc.

Ornamental Stock is being constantly added to; therefore the above list is of necessity but a partial one.

ROSES.

My stock of Roses comprises all the most satisfactory varieties, with the frequent addition of new introductions. The bushes and standards will all be found to be unusually strong, grown in the open ground, with no irrigation.

Tea Roses.

This group is the most desirable and popular of all the families of roses. As a class they are sensitive of any neglect; the soil can

scarcely be made too rich, but it must be *light, warm* and *well-drained*. Most varieties require rather close pruning.

Bon Silenc. Deep rose color, sometimes bright rosy crimson; noted for the size and beauty of its buds.

Baron de St. Threviers. Soft rose, full and good shape.

Bougere. Flowers extra large and double; color bronze.

Catherine Mermet. Clear shining pink; delicately shaded amber and fawn center; large globular flowers.

Claudius Levet. Carmine rose, salmon center; large and full.

Countesse Riza du Parc. Bright coppery rose, tinged and shaded with violet crimson; fine quality; good bloomer.

Cornelia Cook. Creamy white; large fine buds.

Compte de Taverna. Pure white, lemon center, large and full.

Countesse Labertha. Soft silvery rose, shaded salmon.

Countess of Pembroke. Soft satiny pink, elegantly shaded with rosy peach; large and finely formed; free bloomer.

Cloth of Gold (Climbing). Deep yellow center, sulphur edges; good.

Cheshunt Hybrid. Red, shaded with violet, large and fine.

Duchess of Edinburgh. Deep rosy crimson; very good.

Devoniensis. Creamy white and rosy center; full and double; one of the finest; very fragrant.

Duke of Connaught. Rosy crimson, large and full.

Distinction. Color mauve, shaded with reddish amber; good.

Duchess de Brabant. Soft silvery flush, changing to deep rose edged with silver.

Etoile de Lyon. Beautiful chrome yellow, deepening at center to pure golden yellow; flowers large and double; very fragrant; one of the best.

Gen. de Tartas. Brilliant carmine, shaded with violet purple; large and fragrant.

Gloire de Dijon (Climbing). Fawn, tinted with salmon and rose; very popular.

Grace Darling. Color, porcelain rose, elegantly shaded with crimson ; medium size ; very sweet.

Homere. Rosy pink with salmon shade.

Jean Pernet. Beautiful canary yellow ; large and double.

Jules Finger. Extra large and finely formed ; color, bright rosy scarlet, shaded with intense crimson.

Jean Sisley. Flowers large and double ; color outside petals, rosy lilac ; center bright pink ; flowers remain in perfection a long time.

La Sulphide. Blush with fawn center ; very large and fine ; good bloomer.

Letty Coles. One of the finest of its color ; soft rosy pink, shaded with deep crimson ; very large and fragrant.

La France. Silvery Rose, changing to pink ; very large ; a constant bloomer and the sweetest of all roses.

Luciole. Carmine rose, tinted with saffron yellow ; base of petals coppery yellow ; good bud ; very fragrant.

Madame Chedanne Guinoisseau. Clear golden yellow ; large, very full and sweet ; first class.

Madame Cusin. Crimson with light center ; slightly tinted with yellowish white ; good and quite distinct.

Madame de Vatry. Rich crimson scarlet ; large, full form, very sweet ; a splendid rose.

Madame Falcot. Nankeen, changing to yellow ; very pretty both in bud and flower.

Madame Lambard. Beautiful shade of rosy bronze, passing to salmon and fawn, shaded with carmine ; extra.

Madame Welch. Pale yellow, deep orange center ; flowers large, well formed and very double.

Madame de Watteville. A remarkable shade of creamy yellow, richly tinged with carmine ; large and full.

Maréchal Niel (Climbing). Deep golden yellow ; buds and flowers of immense size ; one of the best.

Madame Joseph Schwartz. A lovely new rose ; color pure white, elegantly tinged with pale yellow and rosy blush ; extra large globular flowers.

Madame Pauline Labonte. Salmon rose, large and full.

Marie Guillott. White, faintly tinged with yellow ; large.

Marie Van Houtte. White, slightly tinted with yellow ; border of petals tipped with rose ; a superb rose.

Niphetos. Pure white ; very large and globular ; best white tea rose.

Papa Gontier. Extra large finely formed buds and flowers ; color brilliant carmine, changing to pale rose.

Perle des Jardins. Best yellow tea rose ; flowers deepest yellow ; buds large ; very fragrant :

President. Soft rosy crimson, changing to brilliant carmine ; shaded purplish red ; fragrant and fine.

Reine Marie Henriette (Climbing). Large compact flowers ; borne in clusters ; color cherry red ; very fine.

Shirley Hibberd. Beautiful nankeen yellow ; small flowers ; desirable.

Souvenir d'un Ami. Pale rose, slightly suffused with salmon ; very large, full, globular and fragrant.

Souvenir de Paul Neyron. White, beautifully tinged with clear golden yellow ; petals edged with rosy crimson.

Sombrieul. Pure white, edged with silvery rose ; very fine.

Souvenir de la Malmaison. Delicate flesh color, tinted with fawn ; very large and double.

Safrano. Buff, shaded yellow ; good bloomer ; fine buds.

Sunset. Sport of *Perle des Jardin* ; flowers large, deliciously perfumed ; color, remarkable shade of golden amber.

The Bride. Pure white, of large size and perfect form ; buds pointed ; free bloomer and very fragrant.

Triomphe de Luxembourg. Rosy blush on a coppery ground; flowers large, full and fragrant; very good.

Viscountess Falmouth. Flowers extra large, splendid form; color bright shining rose; back of petals carmine; very fine.

W. F. Bennett. Brilliant crimson; profuse bloomer; buds extra fine with delicious fragrance.

Hybrid Perpetual.

Anna de Diesbach. Lovely shade of carmine; very large and double.

Black Prince. Very dark velvety crimson; nearly black.

Baron Nathan de Rothschild. Extra large and double; bright carmine, center clear pink; petals edged with white; highly perfumed.

Cardinal Patrizzi. Dark velvety crimson, very good.

Capt. Christy. Delicate flesh color; very desirable.

Empereur du Maroc. Deep velvety maroon; small size; fine.

Empress of India. Dark crimson; flowers round and full.

Fisher Holmes. Bright scarlet; one of the best.

Gen. Jacqueminot. Brilliant crimson scarlet.

Gen. Washington. Brilliant rosy crimson.

John Hopper. Deep rose, crimson center; fine form.

Mabel Morrison. White, faintly flushed with pink; extra fine.

Merveille de Lyon. Pure white, shaded and marked with satiny rose; flowers large, double and very fine.

Marie Baumann. Crimson vermilion, suffused with carmine; very fragrant and of highest quality.

Paul Neyron. Dark rose; very large and of good habit.

Prince Camille de Rohan. Dark crimson maroon; superb.

Paul Verdier. Carmine red; large globular flowers.

Rosy Morn. Extra large and very fine; color salmon rose, shaded with delicate peachy red; very fragrant.

Ulrich Brunner. Cherry red; globular flowers; very vigorous.

Moss Roses.

Mousseline. Extra fine; pure white, sometimes delicately shaded with rosy blush; elegantly mossed.

Prolific or Perpetual White. White; very fine bud.

Gloire de Mezel. Pale rose and very large.

Bourbon Roses.

Most varieties of this class are of vigorous habit, and have dark lustrous foliage. The flowers are generally of light shades and found in clusters. They require rich soil and close pruning.

Hermosa. Bright rose color; a constant bloomer.

Mrs. Bosanquet. Pale flesh color; large, double, fine.

Queen of the Bourbons. Fawn and rose; very fragrant.

Bengal or China Roses.

These are natives of China, and are of moderate, branching growth, with flowers and foliage both small. They require rich soil and close pruning.

Agrippina. Rich velvety crimson; moderately double; fine bud; one of the best.

Coupe d'Hebe. Deep pink; medium size and cup form.

Magna Charta (Climbing). Pink, suffused with carmine; large, full and fragrant; an excellent variety.

James Sprunt (Climbing). A sport from *Agrippina*; same color as the parent; but flowers are fuller and larger.

Polyantha Roses.

A group from Japan, distinguished by its panicked blooms. They are profuse bloomers, and exceedingly beautiful and fragrant. Growth low and compact; thornless.

Mademoiselle Cecile Bruner. Clear rosy pink; passing to white; perfectly double and fragrant.

Mignonette. A lovely miniature rose; borne in clusters; clear pink, changing to white, tinged with pale rose; vigorous grower and bloomer.

Perle d'Or. Coppery gold, changing to fawn and salmon; double and elegantly perfumed; very distinct.

Noisette or Champney Roses.

Of American origin. They produce large clusters of delicate colored flowers during the greater part of the season. Nearly all are fine climbers, require very little pruning and will grow in nearly any soil.

Claire Carnot. Yellow, bordered with white and carmine; full and well-formed; vigorous growth.

Lamarque. White; excellent climber; the best climber.

Reve d'Or. Deep yellow; large and full.

Hybrid Noisette Roses.

Baron de Maynard. White; edges of petals tipped with pink; small size.

Cherokee. White; single.

Coquette des Alps. White; slightly shaded with carmine.

New Roses.

Rainbow. A California sport from Papa Gontier.

Waban. Resembling Cath. Mermet, but of a beautiful rosy pink color.

Write for Prices. Regular Price List issued in the Fall.

LEONARD COATES,

NAPA, CALIFORNIA.

VIEW IN NAPA VALLEY NURSERIES, SHOWING PORTIONS OF NURSERY ON EACH SIDE OF RAILROAD, WITH PACKING HOUSES
IN THE DISTANCE.

NUMBER OF TREES OR PLANTS ON AN ACRE

AT GIVEN DISTANCES APART.

DISTANCES APART EACH WAY.	NUMBER OF PLANTS.
1 foot	43,560
2 feet	10,560
3 "	4,830
4 "	2,722
5 "	1,742
6 "	1,210
7 "	888
8 "	680
9 "	537
10 "	435
12 "	302
14 "	222
15 "	193
16 "	170
18 "	134
20 "	108
25 "	69
30 "	48
35 "	35
40 "	27

RULE TO FIND NUMBER OF TREES TO AN ACRE.

Multiply the distance in feet between the rows by the distance the plants are apart in the rows, and the product will be the number of square feet for each plant, which, divided into the number of feet in an acre (43,560), will give the number of trees to the acre.

NAPA VALLEY

NURSERIES