SALEM DISTRICT INDUSTRIES

The Statesman will publish and award a prize each week for the best essay submitted by a grade school pupil on the industries scheduled on this page.

SIXTH CONSECUTIVE YEAR

THE DAILY STATESMAN dedicates one full page each week in the interests of one of the fifty-two basic industries of the Salem district. Letters and articles from boosters are solicited. This is your page. Help boost Salem.

For instance: Salem district has two counties growing the sacred myrtle—the only place it grows on this continent. What unique fact do you know about the district? Address articles to Slogan Editor, care Statesman.

RASPBERRIES: SOME SUGGESTIONS FOR BEGINNERS BY HIGH AUTHORITY

Prof. Brown Writes Briefly, But Gives a Lot of Valuable Information—Twice the Tonnage Possible in the East May Be Produced Here—Four Tons of Cuthberts to the Acre Have Been Harvested in This District—Some Timely Warnings

Editor Statesman:

There is not time enough at the disposal of the writer for a long paper on the culture and handling of the red raspberry. Anyone interested in going into this matter more deeply can do so by writing for the Oregon Agricultural college experiment station circular No. 48, entitled "Cane Fruit Industry in Oregon." The idea of this article is to help the man without experience in red raspberry growing to avoid some of the mistakes which are very commonly made and which may be very disastrous in the long run.

The objects a grower has in mind when setting out a patch of red raspberries are, naturally, good yields, berries of high quality and good returns. The beginner, if he is to be successful, must choose carefully climatic conditions which are suitable for growing this fruit, productive soils, varieties which yield well and pay well, must obtain plants free from serious diseases and insect pests, and finally, select a location where either a good market for fresh fruit can be obtained, or where the berries can be canned or shipped in a frozen state. In this connection, a prospective grower will do well to consider the facilities for cooperative marketing which the locality in which he is about to settle, has at its command. Perishable products such as the red raspberry can be shipped to some distance better by a well organized cooperative selling association than by private growers, as a rule. Finally of course, the producer must give careful attention to the growing and the harvesting of fruit. In this article the writer will emphasize the first four of these factors.

Climate.—Generally speaking the climate of western Oregon in particlar is almost ideal for the successful growth of the red raspberry. It has mild winters and rather cool slow growing summers. Under these conditions, the tonnage produced per acre is twice that produced in the eastern part of the United States. So far climatic factors seem to have a very favorable bearing upon the control of some of our most serious diseases.

There are, however, a few dangers encountered in this mild climate. First and most important is the danger of winter injury. The climate is so mild in the autumn that the canes very frequently do not get thoroughly dormant before winter time. In some years such as in December, 1924, the cold is so severe that the canes are seriously injured. If the canes had had time to ripen up properly, they would not have been hurt as they were. What can be done to avoid such injury? The answer comes in the selection of the site for the plantation. It has been noted many times that the worst damage occurs, as a rule, in lower places where the air drainage is not as good as it should be. When cold air settles into a low place and remains stagnant there, the berries growing in that locality are apt to be much more severely injured than those on the hillside where the cold air can flow off. This should be remembered when the site for the berry plantation is chosen.

In the second place, land should be thoroughly well drained, because plants growing upon poorly drained soil are not apt to be so vigorous in their growth and at the same time, they may not be as dormant as they should be due to the presence of water around the roots. In such a case, they are victims of the cold much more quickly than plants on well drained sites.

Soils.—Disappointment in red raspberry growing is, probably, most often traced to a poor selection of soils. The red raspberry loves a soil which is deep, easily worked and retentive of moisture such as sandy loams which are not too light and which contain considerable amount of decayed vegetable matter or humus, and which in addition are underlaid with a retentive subsoil which prevents drying out. The subsoil should not be a clay so heavy as to be impervious to water, and should not be nearer than three feet to the surface. Gravelly subsoil often found along the river bottoms allows a leaching both of moisture and fertility, consequently the yield is cut down and the berries very poor in quality and seedy. The deep friable loamy soils which at one time produced large fit trees, are also very good for the red raspberry, when the fertility and humus supply is properly kept up.

Varieties.—The Cuthbert is the main standby both for fresh and canned fruit. The quality of the berries is excellent and the yield very satisfactory when given good care. Four tons to the acre have been produced on some of the commercial plantings in the state, although from one and one-half to two tons to the acre is more nearly an average yield. By far, the largest per cent of the plantings should be of this variety.

Marlboro ripens earlier in the season and for that reason lengthens and spreads the picking season when planted with Cuthbert. It yields fairly well but does not have the quality of the Cuthbert. It is best adapted for a local market.

The Red Antwerp has been planted in some sections to a limited extent, notably in western Washington. It is a good yielder and excellent for a home market, but does not hold up well in the can. It does make a verysatisfactory berry for shipping in barrels as is being proven at several shipping points.

The King is a prime favorite in the colder climates in the middle west and may give success in some parts of Oregon where the Cuthbert is too tender. It is not such a favorite with the trade, however, as is the Cuthbert.

Disease and Insect Pests.—It is not the purpose of this article to go into detailed descriptions of these troubles. It is realized, however, that a warning must be given against planting stock infested with some of our more serious diseases. The insects can practically all be controlled by spraying or other means.

Some years ago a systematic disease called the raspberry yellows was discovered in the eastern part of the United States. It has been found recently on red raspberry plantings in this state. It is a true mosaic disease affecting not only the red raspberry, but the loganberry, blackberry and the blackcap. There is no known cure for it. As soon as plants are discovered infested with this trouble, they should be immediately pulled out and burned.

The point that the writer wishes to make is that every precaution should be taken against the planting of stock which may be infested with this trouble. It is impossible to tell whether young plants obtained from a nursery have come from older plants which had this disease. If they have, the disease will be transmitted to the young plants because it is carried in the sap from the old plant to the young plant before the young plant is cut off from the roots of the parent plant. It is necessary, therefore, that one should be absolutely certain that these young plants come from a healthy plantation. When old plants are dying out badly or showing poor vigor, it is very poor practice to use suckers from them for planting. It is very much better for the grower in choosing the plants from which suckers are to be taken, to observe the growth and vigor of these plants, and to note any symptoms on the leaves or canes which might indicate the presence of the disease. It is true that many times this disease cannot be recognized by those not familiar with it. In such cases, it is best to get a trained observer to look at the plants. The Oregon Agricultural college experiment station circular No. 49, entitled "Mosaic and other Systematic Diseases of Brambles in Oregon" gives a great deal of valuable information along this line, and will be of great help to anyone who wishes to make careful observation on plants.

It should be remembered that healthy plants grown on good soils will give profitable yields for many years—for a much longer time than in the eastern part of the United States—but plants infested with disease may never bear bear profitable crops. Even a few infested plants will spread the trouble to the whole plantation unless discovered early and rogued out.

The beginner (and frequently the grower of experience) may well remember that a good start is often more than half the battle.

W. S. BROWN.

Corvallis, Or., Nov. 23, 1925.

(Prof. Brown is the chief in horticulture of the Oregon Agricultural college. He is one of the best qualified men in the country in his field.—Ed.)

PERSIST HERE AND IN NO OTHER PLACE

This Gives Us a Virtual Valuable Franchise on Black Raspberries Here

(The Oregon Agricultural college, in a late bulletin (1923), has the following very valuable information affecting the persistence of black raspberries here, since they persist no where else:)

The Black Raspberries

"Plum Farmer and Munger black raspberries are most in demand at this time.

"Most cane fruits are self-fertile under Oregon conditions, and the matter of cross pollination is therefore of little importance.

"New plants of the black raspberry start readily from the tips of the new shoots. For this purpose, the growing tips of the shoots should be imbedded in soil from two and a half to three inches, just before the fall rains begin.

"Red and black raspberries commence fruiting the second year but require three to four years to reach full maturity.

Duration of Plantation

"The factors that determine the number of years a cane fruit plantation will last are not entirely understood, but when given proper attention and kept free from insect pests and diseases the cane fruits in this state seem to be UNUSUALLY LONG LIVED. Black and red raspberry plantings known to be fifteen and twenty years old are still thrifty and productive. Evergreen and Himalaya blackberries seem to last indefinitely. Loganberry plants twenty years old are still producing commercial crops.

(The above is not true as to black raspberries anywhere else. It is not true as to even the Puyallup and Sumner districts in Washington; supposed to be the most extensive red raspberry section of the country, or of the world. Black raspberry plantings persist in the Salem district. They keep right on living and bearing. They do not persist elsewhere. They run out and die out.—Ed.)

(Black raspberries tend to spread out a little more and should be set somewhat farther apart than the reds. The linear system with the rows 7 to 9 feet apart and the plants about 4 feet in the rows is proving satisfactory with the common varieties.

Pruning, Etc.

"As compared to those of other cane fruits pruning and training of black raspberries are comparatively simple operations. Trellises are not necessary and pruning need not be complicated or excessive.

"A very practical method of training black raspberries consists in tying the laterals up in a rather loose bundle. By this method the fruiting area is placed conveniently for picking and is out of the way of tillage implements. The old canes should be taken out as soon as the crop has been removed.

If security comes, can disarmament be far behind?—Providence Journal.

THIS WEEK'S SLOGAN

DID YOU KNOW That Salem is the Oregon raspberry center; that on account of the great demand of the canneries and the coming jelly and jam and preserves plants here, there will not be enough raspberries grown for many years; and the prices will therefore be remunerative; that in the matter of black raspberries, this district has what amounts to a franchise—for the black raspberry grows to perfection here, and the vines persist, bearing year after year; while in the great raspberry district of Washington the black raspberry cannot be successfully grown; that this fact should be heralded to the entire world; that there is sure money in both black and red raspberries, and room for more growers who will raise a large tonnage to the acre of the best berries the world can send to market?

Dates of Slogans in Daily Statesman

(In Twice-a-Week Statesman Following Day)

(With a few possible changes)
Loganberries, October 1
Prunes, October 8
Dairying, October 15
Flax, October 22
Filberts, October 29
Walnuts, November 5
Strawberries, November 12
Apples, November 19
Beans, Etc., November 26
Mint, December 3
Great Cows, Etc., December 10
Blackberries, December 17
Cherries, December 24
Pears, December 31
Gooseberries, January 7, 1925
Corn, January 14
Celery, January 21
Spinach, Etc., January 28
Onions, Etc., February 4
Potatoes, Etc., February 11
Bees, February 18
Poultry and Pet Stock, Feb. 25
City Beautiful, Etc., March 4
Raspberries, March 11
Paved Highways, March 18
Head Lettuce, March 25
Silos, Etc., April 1
Legumes, April 8
Asparagus, Etc., April 15
Grapes, Etc., April 22
Drug Garden, April 29
Sugar Beets, Sorghum, Etc., May 6
Water Powers, May 13
Irrigation, May 20
Mining, May 27
Land, Irrigation, Etc., June 3
Floriculture, June 10
Hops, Cabbage, Etc., June 17
Wholesaling and Jobbing, June 24
Cucumbers, Etc., July 1
Hogs, July 8
Goats, July 15
Schools, Etc., July 22
Sheep, July 29
National Advertising, August 5
Seeds, Etc., August 12
Livestock, August 19
Grain and Grain Products, August 26
Manufacturing, September 2
Automotive Industries, September 9
Woodworking, Etc., September 16
Paper Mills, September 23

(Back copies of the Thursday edition of The Daily Oregon Statesman are on hand. They are for sale at 10 cents each, mailed to any address. Current copies 5 cents).

PUBLICITY MAN OF THE O. A. C. HAS A RASPBERRY PATCH OF HIS OWN

He Tells How He Grows One of Nature's Most Luscious Fruits, and Gets the Berries While They Are Clean, Fresh, Good, Wholesome and Nutritious—Uses Irrigation When Needed

BY C. J. McINTOSH

CORVALLIS, Or., Nov. 23.—(Special to The Statesman).—The raspberry patch in our garden is a small but tremendously important one. Small because in a small garden the space available for any one of several dozen delicious small fruits and vegetables is strictly limited; important, because the fruit is unsurpassed for table use when fresh, and "not half bad" in some of the by-product forms.

The raspberry depends more upon quality than most other cane or even tree fruits. Like "Mary" when good it is very, very good, and when bad it is horrid. So unless the home-lot grower deliberately faces the problem of growing the raspberry wisely or not at all, and accepts the implication of special care a certain stages of production, he does well to reject it from his list of home-garden small fruits.

The berry needs to grow rapidly bear rather heavily, attain good size and maturity, and ripen up in sound condition. And that means that several things need to be done that will not do themselves.

Rapid growth calls for good soil—right mechanical condition with plenty of available plant food and plenty of water. Good exposure for air and sunshine are likewise required. Then of course the newly developed strength of cane of much sizeable fruit must be preserved against attacks of insects and diseases, where these or either of them exist.

Deep working at some time or other is a condition of good soils that I depend upon very largely. Every foot of my home garden plot has been spaded up three feet deep, but of course that might not be at all necessary on many types of land. Every bit of this little tract as well as several thousand acres in the district did need such heroic treatment in order to break up an almost impenetrable subsoil and open up possible channels for drainage and root penetration, even though many plants are shallow rooted. Ashes lime, leaves and manure, intermingled with the subsoil, give ideal conditions for easy culture.

Water is generally ample in well-prepared and handled soil during a large part of the growing period of the raspberry, but if and when the natural supply begins to fail irrigation is highly profitable and can always be supplied in town home gardens. Wisely handled it is worth in yield and quality of raspberries many times its cost. Likewise the canes may be allowed less room per cane if the grower knows he can give them all the plant food, water, air and sunlight they need as they develop and mature their fruits.

The best insect and disease protection is sanitation and isolation. Cleaned up ground thoroughly worked over in the fall to destroy all vegetable growth in and nearby the canes, and to destroy and expose to the rigors of weather and the rapacious appetite of birds insects and their eggs, gives the canes a good chance to get under way the following spring without hindrance by nagging of pests. It always seemed to me that there is damage to canes much greater than the loss of tissues can explain or account for. Drainage of strength here and interruption of food elaboration there, as leaves are gnawed away, seem to upset the entire plant and stunt its load of fruit. So a good start means a great deal.

Then such infestations as must

(Continued on page 11)

SEND A COPY EAST!

THIS DISTRICT GETS LARGE YIELDS IN BOTH RED AND BLACK RASPBERRIES

The Reds Run From a Ton to Five Tons, and the Blacks From One to Four Tons to the Acre—Some Irrigation Would Be a Good Thing in Most Seasons—Maximum Yields Make Profits

Editor Statesman:

Raspberries are in demand at the present time and indications are that the present acreage of this fruit can be increased somewhat without danger of over production. It must be borne in mind, however, that a considerable area in western Oregon, as well as in neighboring states, is adapted to the culture of raspberries and that potential production is far in excess of present market demands. Future plantings of raspberries, therefore, should be guided by future market demands, rather than by the acreage suitable to their culture.

Oregon Obtains Large Yields

Statistics of the comparative production of raspberries show that Oregon is especially favored in regard to yield, the average per acre production here being considerable greater than the avrage for the United States. The yield of raspberries here, however, varies greatly between individual yards and between localities. In the case of red raspberries it varies between one and five tons per acre, while with black raspberries it varies between one and four tons. These differences in yields are due not so much to natural advantages as to the personal element in the management of the yards. It is not difficult to find within a given locality growers who habitually obtain large yield while others obtain uniformly low yields under similar conditions of soil and climate.

Figures on the cost of production indicate quite clearly that financial returns from raspberries are directly associated with yields. Figures on red raspberry production in the Puyallup valley of Washington show that in cases wherein yields are 3000 pounds per acre, the cost of production is slightly more than twice as high as in cases where a yield of 8000 pounds is obtained.

The lesson here is clear. Maximum yields reduce the cost per unit and may result in a profitable margin below sales prices, while a low yield may actually show a loss at the same sales figures. Overhead expenses such as taxes, interested on investment, spraying pruning, training and cultivation, are practically the same regardless of whether the yields are high or low and it is false reasoning to assume that low yields can be counterbalanced by merely increasing the acreage.

Matter of Location

It is obvious that in the selection of the location for a raspberry plantation such factors as the distance to market or processing plants, the nature of the roads, the climatic conditions, the labor problem, the financial situation, the possibility for irrigation, the prevalence of insects and diseases and the general status of the industry in the locality, must be taken into account. Raspberries are extremely perishable products. They must be handled with care and in within a comparatively short period of time. Consequently the matter of sufficient labor, transportation, and general facilities for handling and disposal of the crop should be investigated. In this respect, an older locality where the industry is established and where good reliable processing plants exist, is to be preferred.

Site of the Plantation

In the selection of the plantation site, such factors as soil type, moisture supply, temperature and drainage must be taken into account.

Raspberries are naturally sensitive to the dry, warm heat of summer. Considerable of the trouble known as "seediness" can be ascribed to excessive temperature and low humidity. Cool and rather moist situation, therefore, should be selected whenever possible. River bottoms and north slopes are naturally cooler and more moist during the growing season. A little care in the selection of the site may do much to increase the yield and improve the quality of the later picking in particular.

The matter of air drainage is not as vital with the raspberry as with the tree fruits. Raspberries are comparatively late bloomers and their blossoms are not so apt to suffer from frost. It is a poor policy, however, to plant raspberries in places that are known to be frosty, for the new cane growth often suffers from cold. Situation that are exposed to cold, drying winds are unfavorable for raspberries.

The matter of water drainage should also receive attention. Due primarily to the mild winters of western Oregon, the roots of cane fruits in general are more or less active during the entire winter, and consequently cannot be submerged for any great length of time without injury. Artificial drainage has been successful in some cases, but, whenever possible it is best to select land that drains of its own accord.

Soils for Raspberrie

A survey of plantings of raspberries rather wide range of soils, but while this is true, the successful culture of raspberries in this state is confined to certain rather definite types of soil. Red hill land which has proved to be so well suited to many of the tree fruits does not seem to be adapted to the raspberry. This is true also of the flat, white land common to certain parts of western Oregon. Raspberries should never be attempted in tight, poorly drained, clay loams. This fruit, in general, does well in soil that is deep, cool, rich, friable, well drained and at the same time retentive of moisture. Sandy river bottom loam is especially well adapted to the red raspberry. The black raspberry may be grown on a soil that is generally heavier than that recommended for the reds.

As to Varieties

Cuthbert seems to be the only variety of red raspberry that has stood the test of time in Oregon. This variety, while not a real heavy producer, is admirably adapted to both the canning and fresh fruit trades. Marlboro, while a thrifty grower and a heavy yielder, does not have sufficient quality to compete with Cuthbert. King seems to be fairly well suited to the heavier types of land but is not a favorite with the trade. Antwerp is a heavy yielder but lacks in carrying quality. The so-called everbearing raspberries, berries, while perhaps of some value for home planting, are not suited to commercial culture.

Plum Farmer and Munger are perhaps the best of the black raspberries. At least they are in most demand. Plum Farmer is a vigorous and productive sort. Munger seems to be only moderately thrifty, but is fairly productive. Cumberland is a fairly strong grower, does fairly well for canning and is receiving attention in some quarters. Gregg is a late season variety which bears well but which seems to be rather tender to cold. The fruit of this variety is excellent for home use and for local markets, but lacks somewhat in carrying quality.

Irrigation Beneficial

Thus far irrigation has not been a standard practice in this section. There is but little doubt, however, that both the yield and quality of raspberries would be benefitted by irrigation, especially in dry seasons. One good irrigation about the time the fruit begins to ripen would do much to prolong the season and increase the yield, especially of the later pickings. Most of the soil now given over to raspberry culture takes water very nicely. Water, in most cases, can be obtained without a great deal of difficulty.

HENRY HARTMAN.

Corvallis, Or., Nov. 25, 1925.

(Mr. Hartman is associate professor of pomology of the Oregon Agricultural college. What he says on raspberries, or other fruits is authoritative.—Ed.)

1000 ACRES OF RED RASPBERRIES REQUIRE 5000 PEOPLE TO HARVEST

The Berry Growers Packing Company, Cooperative, at Gresham Performs a Work Valuable Alike to the Producers and the Canners, and to the Industry as a Whole—Find Good Market for Soft Berries

Editor Statesman:

In response to request for a short article on the red raspberry industry, will say while the past two seasons have been unfavorable owing to winter damage and dry summers, resulting in only half crops which of course showed no profit but did cover the labor cost and taxes and other current expenses, a better showing has been made on red raspberries than on other berries—except strawberries, which have proved the most profitable berry for the past two years.

One result of the short crop has been the cleaning up of all surplus stocks at fair prices, and the future outlook for value is better—which is heartening to the grower.

The Cuthbert red raspberry is a very popular fruit with the consumer, but owing to the high cost of production will probably always remain in the luxury class, as there is no hope of applying labor saving machinery in the production. There is little hope of this becoming a poor man's fruit.

Employ 5000 In Harvest

The industry locally fits in nicely, as the soil and climate seem to be peculiarly adapted for the production of this fruit, and there are probably 1000 acres in bearing affording seasonal employment for probably 5000 harvesters and provides a harvest pay roll of about $75,000 and affords an opportunity for school boys and girls to pick up pin money, and is a general benefit to the whole community.

430 Grower Members

Values are higher in all berries, and the producers are encouraged. Our cooperative association has made good growth since organization seven years ago. We have 430 local members who are quite enthusiastic over the cooperative plan and our canner friends are willing to pay us a premium of from ten to fifteen per cent for the service rendered by us, as it enables them to get a graded product, which is more profitable, and in quantities that enables them to reduce the factory costs of manufacture. We have the accounts of four or five of the largest canners in the state and our good roads make it possible to deliver the fresh berries in good condition to their canneries, some of them 60 and 90 miles distant. While there was a prejudice against the growers' cooperatives, as the years pass this has faded away and all concede that there is a real service rendered that is appreciated and is expressed in the premium paid for the high grade product that team work makes possible.

The soft berries find a ready market in the 50-gallon parrafine lined fir barrel in the frozen state with the jam, jelly, preserve and syrup makers, at a price nearly as high as the canning grade. This, to the grower, is very important, as the profit in the industry is received from what otherwise would be wasted, and must be given credit for 51 per cent of our success.

—D. E. TOWLE.

Gresham, Ore., Nov. 21, 1025.

(Mr. Towle is manager-treasurer of the Berry Growers Packing company, with headquarters at Gresham, Oregon. "Eastern Multnomah count, the home of our specialty, the Cuthbert red raspberry," appears on the letterhead of the company. The directors of the association are W. D. Fraley, C. M. LaFollette, D. E. Towle, E. P. Schedeen and C. T. Ryan. The Gresham district has gone far in the raspberry industry, under the direction of these men.—Ed.)