

# SALEM DISTRICT INDUSTRIES

## 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.

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.

### THE NEW O. A. C. BULLETIN ON PEPPERMINT PRODUCTION FOR OIL

It Was Issued in October of This Year, and Is Intended to Take the Place of All Former Matter of the College on the Industry—The Cost of Production Is Figured at About a Dollar and a Quarter a Pound Here in the Salem District

(There is a new Oregon Agricultural college bulletin on "Peppermint Production for Oil," only a few weeks old, issued in October, 1925. It is Circular 221, the author being Prof. A. G. B. Bouquet, professor of vegetable gardening. The new bulletin is printed in full, as follows:)

This publication supersedes all others previously distributed, and readers should discard all previous issues.

**Present Production and Value**

The production of peppermint for oil in Oregon for the past few years has reached somewhere between eight and ten thousand pounds of peppermint oil, including what is used domestically and the amount exported.

At the present time there is a shortage of peppermint oil in the country, which is responsible for the high prices now existing. The prices now prevailing are unreasonably inflated due to the shortage of the product.

For ten years before the World war, the crude peppermint oil prices in this country averaged about \$2.50 per pound. It went to \$5.00 a pound in 1914 and raised in 1920 to \$10 a pound. It is very probable that the average in the United States for forty years, is about \$2.75 a pound. Contracts are now being made with growers for three years at \$6, \$5, \$4 per pound, respectively.

It is to be noted that Oregon produces very fine quality oil which commands a premium price on the market.

**The Right Variety**

The English variety of black Mitcham is the best commercial sort to be grown. This variety has dark purple stems and deep green broadly lance-shaped leaves, which are slightly toothed. As opposed to the wild mint, it has a very strong odor of the mint oil.

There is a lot of mint growing wild in various places. The majority of this is useless for commercial purposes unless it be some of the commercial mint which has happened to be scattered from commercial plantation. If you are in doubt as to the value of the mint on your farm for commercial purposes, send a sample to the writer, enclosing a stamped envelope for reply. If there is wild mint growing satisfactorily in your section, it may be a suggestion that commercial mint will grow there, but not absolutely so. All wild mint must be eradicated before any commercial mint is planted.

**Climatic Conditions**

The Willamette valley is at the present time producing most of the mint now grown in Oregon. Mint will not do well where the winters are severe, nor where there are possible frozes during harvest time in the late summer. It is doubtful if commercial peppermint can be satisfactorily produced very far east of Portland. The coast counties ordinarily have no trouble in growing mint, and the valleys of north and southwestern Oregon should also prove favorable for this crop.

**Needs Good Care**

Mint is best grown as a community crop by several growers in a section, in order to have a sufficient acreage to warrant re-irrigation of a still, or an individual grower should plant a sufficient amount to support the still equipment. Not fewer than 15 acres should be grown for this purpose. A still suitable for handling the product of 15 acres will handle equally well that from 50 to 75 acres. It is suggested that no individual grower plant more acreage than can be given reasonable good care. A big acreage started with good intentions may eventually lack care, and cause a lot of grief. It is very possible that those who are now figuring on growing mint, do not appreciate the work necessary to keep the plantation in good condition, including proper cultivation,

plowing, harrowing, and the eradication of weeds, etc.

#### Best-Yielding Soils

The soils now yielding the greatest amount of oil per acre are well drained, peat lands. These are capable of yielding up to 80 and 85 pounds of oil to the acre. It has been noticed that those soils that contain an abundance of humus or organic matter, and a high content of nitrogen, are well suited for the growing of mint, providing they are properly drained. Soils of a free nature that are rich and sub-irrigated, grow good mint. Various types of sandy loam are capable of producing a good yield. River bottom soils that are not inundated for an excessive period of time in the winter are capable of growing good mint. Land on which water stands late in the spring is not suitable, because at that time of the year the mint should be growing readily and any set back which it receives at that time is usually disastrous. Water may stand on the land for 14 to 20 days without doing much damage provided it is merely backwater and readily drain off following the lowering of the river or stream.

The crop draws quite heavily on the fertility of the land, and it is therefore advisable to make plantings on soil of good fertility in the first place. Soils which dry out considerably in the summer time are bound to produce a lessened yield of oil.

**About Fertilizers**

Land to which stable manure has previously been applied is in a better condition to produce a heavy yield of oil than otherwise. It is also possible that application of commercial fertilizer may be beneficial, depending upon the type of land that is being used, and the method of previously farming the soil. Growers who are interested in applying commercial fertilizer should make some trial applications up to four and five hundred pounds per acre of a complete or incomplete fertilizer, depending upon the soil. This is best applied in the early part of the spring.

**As to the Planting**

The planting should be done in the early spring, about March if possible or even a little earlier. It is not advisable to plant later than April 15.

The roots should be obtained from fields of known pedigree. The soil should have been previously deeply plowed and worked down well, then furrows made six inches deep and thirty-six inches apart. The root stocks are carried in a sack on the back of the setter and are scattered in the furrow in front of him. They should be planted in rows about 36 inches apart, laying the roots in a continuous row. When the grower can provide his own roots it is possible to practice slightly thicker planting than when the roots are purchased. It is customary to give a good stand of plants.

Roots can be purchased from nearly any grower of peppermint at an average price of \$1 per sack. This would be the f. o. b. price at shipping point.

The roots should be covered with three or four inches of soil by sliding the feet as the grower walks on the row, or the roots can be covered with a harrow or leveler.

**Cultivate Frequently**

The crop should be cultivated frequently and thoroughly, the object being to conserve the moisture and keep down weed growth. Fine toothed cultivators and weeder are used after the crop is six or more inches high, and up to that height a field can be gone over with a fine tooth harrow. Cultivation normally will cease about June 15, and if after this time any weeds appear, they must be pulled by hand, as it is imperative not to have weeds in the hay. The most noxious weeds are fennel, smart weed and lamb-quarter. Care should be taken in

cultivation to leave the ground as level as possible, as if there are too many ridges left in cultivating it will cause trouble in cutting.

#### Fall Plowing

After harvesting the first year's crop and succeeding crops the plantation is fall plowed, usually five to seven inches deep. This is ordinarily done some time late in the fall before the ground gets too wet to be worked nicely. This renews the plantation by stimulating the roots, and it also thins the plants, and provides a method for setting roots for new plantings. If the land is liable to wash it is best to do this plowing in the spring.

#### Harvesting the Mint

The proper time to cut mint is when it is two-thirds in bloom. It is not advisable to wait too long for it to bloom, as oftentimes the season for distilling would be too late if you waited for the blooms. The time for cutting is usually about the 1st to the 15th of August, so that it may be cured before the fall rains start. The crop can be most easily cut with a mower and bunched into small, loose bunches before it is cured. It is not advisable to cut the mint faster than the crop can be distilled, since shattering of the leaves and hard rains lessens the yield of oil. The mint should be about two-thirds dry to properly distilled.

#### The Yields Vary

Yields will vary considerably depending upon the type of soil on which the crop is being grown and the attention which has been given to it. On some of the organic or peat types of soils, yields may be up to 80 and 85 pounds per acre. This is probably the maximum, whereas the average on these types of soil may be between 50 and 75 pounds per acre. On lands of normal fertility yields will vary from 25 to 35 pounds per acre.

**Cost of Production**

Growers of mint figure that \$1.25 per pound is the approximate expense of the cost of producing the crop. It is ordinarily estimated that the oil can be distilled for from 25 cents to 30 cents per pound.

#### Cost of the Still

A still which will take care of 50 to 75 acres will cost about \$500, this expense often times being distributed among several growers producing mint in a certain community. It will pay a grower to put up a small still if the acreage is 15 or in excess of this amount.

#### Miscellaneous Suggestions

It is suggested to new growers that it would be well for them to visit the plantations of old growers and to note general conditions under which the crop is being produced, also to observe the types of soils, and the general layout of the means of distillation. It is also advised that these same growers proceed somewhat slowly until they get acquainted with the business, especially in communities where no mint is now being grown.

Possible failures are due to locating the mint on improper type of soil, to lack of care of the plantation and to insufficient interest to back the equipment for a still.

New growers should not expect the present high prices to continue for an indefinite period. It has already been mentioned that contracts are being made with growers for three years for lesser prices than have prevailed during 1925.

The secretary of the Mint Growers association, G. J. Moisan of Gervais, Oregon, can no doubt furnish names of growers who are in a position to supply plants. Literature on mint culture is as follows:

Farmers' Bulletin, 694, U. S. D. A., Washington, D. C., "Culture of Peppermint and Spearmint."

Professional Paper, No. 454, Bureau of Plant Industry, U. S. D. A., Washington, D. C., "The Effects of Soil and Climatic Conditions on the Yield and Quality of Peppermint Oil."

Any further questions will be gladly answered by the writer of this circular.

**French Stenographers Should Live Freely on \$26**

PARIS.—Stenographers and typists in Paris, "to live freely and in a manner worthy of their profession," are eligible to a union that claims \$26 a month as a minimum wage for its members.

### THIS WEEK'S SLOGAN

**DID YOU KNOW** that in the raising of mint for the manufacturing of oil of peppermint there are decided advantages to the growers of the Salem district; that our farmers have what amounts to a franchise, because they produce the best mint oil in the world, besides the highest in percentage of menthol and the best and purest in quality, consequently the highest in price; that this industry has already assumed considerable proportions and is growing fast and will without doubt grow here much faster from now on, and be better organized and stabilized; and that there is a great field here for new people wishing to engage in a profitable line of production?

### Dates of Slogans in Daily Statesman

(In Twice-a-Week Statesman Following Day)

- (With a few possible changes)
- Loganberries, October 1
- Prairie, October 8
- Dairying, October 15
- Flax, October 22
- Elberts, October 29
- Walnuts, November 5
- Strawberries, November 12
- Apples, November 19
- Raspberries, November 26
- Mint, December 3
- Beans, 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
- Beets, February 18
- Poultry and Pet Stock, Feb. 25
- City Beautiful, etc., March 4
- Great Cows, 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
- Cents, 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 25 cents. They are for sale at 10 cents each, mailed to any address, current copies 5 cents.)

**\$27 TO \$30 A POUND IS PRESENT PRICE OF PEPPERMINT OIL IN EAST**

Most of the Oregon Crop for the Present Year Was Sold at \$11 to \$14 a Pound—For 20 Year Period Before 1925 the Average Price Was \$2.98 a Pound, With \$1.50 Lowest Price

Dan J. Fry of Salem again bought the peppermint oil of the Oregon Mint Growers Cooperative association this year. He paid \$11 to \$14 a pound for the best of the oil. He paid for the same quality last year \$4.10 a pound. This means that the trade calls for "water white" oil, which is clear like pure water. Nearly all of the peppermint oil produced here, especially in the Labish district, is of that high quality. Some dark and darker grades run somewhat lower in price—as low as \$3.75 a pound last year. Mr. Fry also bought some lots of growers outside of the association, both years.

**The Finest Oil**

Mr. Fry says the Labish district produces a very high quality of peppermint oil, and so do several other districts in Marion, Linn, Lane and other valley counties. The distilled oil turned out here is called the "natural oil" by the trade. Part of the oil bought by Mr. Fry goes to New York, where it is refined. Some of it is held here in the Salem warehouse of Mr. Fry for sale to other wholesale druggists and manufacturers throughout the country. Peppermint oil goes into candies, gums, tooth paste, perfumes, toilet articles, etc., and the demand for it is steadily growing.

The natural oil comes to Mr. Fry from the growers in 20-pound galvanized iron cans. The ships it out in barrels, in order to prevent waste from leakage or evaporation. It is very volatile, and subject to waste.

**A Runaway Market**

Peppermint oil was quoted in New York yesterday at \$27 to \$30 a pound. The Oregon oil is all sold, and most of the eastern oil, too. On the same date last year it was \$7.50 a pound. In 1923 it was \$3.15 a pound, and the year before \$2.55. The war peak price was

\$9 to \$9.50, and before the war it ran around \$2.25.

The abnormal prices now prevailing are due mostly to the scarcity in the east, owing to drought conditions in growing time, in the Michigan, Indiana and New York mint districts. The normal annual yield of the east is 350,000 to 400,000 pounds. The production of this year was only 200,000 to 250,000. That explains the runaway market; or is the principal explanation. The destruction of stocks by the Japanese earthquake helped make a world scarcity.

The eastern price of peppermint oil for the 20 year period, up to the present year, averaged \$2.98 a pound. The lowest price in the 20 years was \$1.50 a pound.

As most readers know, Mr. Fry is a large buyer of crude drugs, including Oregon ginseng root, chittam bark, Oregon balsam fir, and when there have been markets for them, wild cherry bark, skunk cabbage, fox glove, etc. When labor conditions adjust themselves all over the world, Mr. Fry expects to see a large crude drug business grow up here in western Oregon.

**Did Not Get All Oil**

Mr. Fry did not get all the Oregon oil this year or last. Mr. Todd, the Michigan oil king, who is a refiner as well as a grower, got some of it. Mr. Fry got a footy portion of it each year, however.

The Oregon crop for this year has been estimated all the way from 10,000 to 20,000 pounds. Mr. Fry thinks it did not far exceed 12,000 pounds.

**Should Have Refinery**

Mr. Fry thinks Salem should have a refinery for peppermint oil. Every grower should be in the association. If this condition can be brought about, and with even

(Continued on page 12)

**SEND A COPY EAST**

### ASSOCIATION HAS PLACED OREGON AS A MINT GROWING STATE ON THE MAP

The Price Is Now More Than Twenty Dollars a Pound, But Such an Abnormal Figure Cannot Be Expected to Hold—Some Timely Warnings From the Secretary of the Association

Editor Statesman:

The growing of peppermint is now past the experimental stage in the Willamette valley. Up until the past year it was generally thought by the majority of land owners, that peppermint growing was a small thing and good land for the growing of this commodity was hard to get, but the past season has convinced many that it is a profitable crop, and now many are making preparations to plant acreages in the spring.

#### A Timely Warning

I do not want to give the impression that the peppermint business can be overdone or that it is too much for a poor man to tackle but I do want to impress upon all those who contemplate planting peppermint to look twice before they leap, for already many growers have failed in this production on account of undertaking too great an acreage and not being able to give their fields the proper care and cultivation at the right time. It is very essential that all weeds be pulled and cleaned and pulled from the field, and to do this at the right time it will necessitate much labor, plus the cost of roots and preparing the soil and planting.

**The Costs Explained**

The cost of roots to plant one acre will be \$25, besides transporting roots from our field, or some other field to your land. Ordinarily it will require two men one day to plant one acre; however, we have had men who planted one acre per day alone. Then there is the cultivating, weeding, cutting, shocking and distilling. If all this labor had to be hired it would run about \$75 per acre for the first year. The second year will cost about \$50 per acre; costs, however, vary largely depending upon conditions of soil and weeds, and again a grower who has the help of several in his family will reduce the cost very much.

A field of mint averaging 50 pounds per acre, at \$5 per pound, if handled conservatively, gives good returns, but to get the 50 pounds per acre one must do much labor, and do it at the right time.

#### Very High Prices Now

At this writing mint oil is selling for more than \$20 per pound, and most of the oil produced in the Willamette valley the past season sold from \$11 to \$15 per pound. These prices cannot be expected again soon, for the reason that Michigan, Indiana, New York and other states that produce mint will increase acreages the coming year, and we cannot expect Michigan and Indiana, the two largest producing states in the Union, to have another failure again soon as they had last year. However, we are never sure.

#### Oregon on the Map

There is one thing positive, Oregon prime oil of peppermint for 1926 will all be sold regardless of price, for we do produce an exceptional quality of oil, and the Oregon Cooperative Mint Growers have proved that beyond a doubt and have placed Oregon as a mint growing state on the map.

I have been informed that mint contracts are about ready with reliable people to be signed at \$6 per pound for the first year, \$5 for second year and \$4 per pound for the third year. This report has not yet been confirmed, but I rather think there is real foundation to it.

Any one contemplating planting mint and who has not already done so should write Paul V. Maris, director extension service, Corvallis, Oregon, and ask for Circular 221, "Peppermint Production for Oil."

G. J. MOISAN  
Gervais, Ore., Dec. 1, 1925

(Mr. Moisan is secretary-treasurer of the Oregon Mint Growers Cooperative association. E. B. Wallace, Albany, Rt. 6, is president, and T. Q. Queen, Eugene, is vice president. Mr. Moisan informs the Slogan editor that the association has completed its five year contracts and has not organized for the coming year. It should certainly do so, and every grower of mint in this section ought to join.—Ed.)

### MINT ALL RIGHT FOR A ROTATION CROP IN THE WILLAMETTE VALLEY

Suggested That There Should Be a Change Every Five Years, and Five Years Mint, Two Years Clover and One Year Potatoes Mentioned as One Rotation That Would Work All Right

(By C. J. McINTOSH)

O. A. C., Corvallis, Dec. 2.—(Special to The Statesman.)—The introduction of mint growing into Willamette valley farming systems, now that the possibility of profitable production under some conditions, prevailing has been definitely established, of necessity directs attention to an important change in the farm management system. What crops shall it displace and to what extent will its introduction affect the rotation plans of the farm?

A comparison of mintculture with culture of other crops commonly grown must include several factors such as kind of soil, kind and extent of plant food consumption in the soils, the physiology and pathological effects on soil. While mint does not seem to correspond very closely with other crops commonly grown in the region, its culture has enough points of similarity to hop culture to warrant a comparison. Another point in favor of this comparison is the fact that some hop growers for various reasons, desire to reduce or discontinue production and such are likely to find that mint may frequently be made to fill the gap.

In length of time that mint may occupy the ground without rotation and new plantings it does not equal the length of time com-

monly given to hop production without rotation, but more nearly equals the time than any other crop generally grown. Hop culture often runs continuously for a dozen years. The mint is likewise a rather heavier feeder of nitrogenous plant foods than hops, and demands for best production a bountiful supply of humus.

These facts suggest profitable rotation for mint—a rotation that includes clover or other legumes. Use of an cultivated crop is also indicated, as a means of both getting rid of undesirable plant growth such as weeds and wild grasses, and of freshening and clearing up the soils of whatever toxic elements may be engendered by long continued mint production.

With clover for the legume potatoes naturally suggest themselves as the most promising cultivated crop. They not only profit by clean cultivation but really need long intermission periods to avert spread of disease by the soil contamination. Growers of potatoes, particularly for seed or interstate shipments, will hardly take chances on disease by planting oftener than four to five years on the same ground. Longer periods will not hurt, and a rotation of five years mint, two years clover and one year potatoes has proved highly successful un-

#### der otherwise favorable Willamette valley conditions.

Because of the soil requirements mint is not likely to prove much of a roving crop, but better confined to rather narrow limits particularly on mixed river bottom and upland soils. It cannot be expected to follow all over the general farm as one element in a regular rotation system. It does, however, fit in well with most hop lands and is for this reason well suited to being worked into discontinued or reduced hop acreage.

The best type of soil for mint is according to H. D. Scudder, chief of farm management of the experiment station a fairly light loam, rather than a sandy loam as for hops. It does well, however, other things being favorable, on average good hop land.

Growers who have more mint land than they care to put into that crop, may find the following plan, recommended by Professor Scudder, a satisfactory management system:

Divide the tract on which mint is to be grown into two or three sub tracts, only one of which is put into mint the first year. When this tract is to be plowed, at the end of the five years, it is seeded to clover and another sub tract put into mint. The first mint tract is not again planted to mint until it has borne at least two years in clover and one year in potatoes.

In such way as this the mint crop may be introduced into the farm management system without disrupting the well settled management practices, and the acreage in the new crop expanded or reduced as it returns or fails to return additional prosperity to the farm on which it is grown.

(Mr. McIntosh has charge of the publicity department of the Oregon Agricultural college.—Ed.)

### MINT PROFITABLE HERE AT \$3 A POUND

With Conditions Favorable It Can Go Sixty Pounds of Oil to the Acre

Editor Statesman:

The mint industry has been a very paying proposition the last two years. My observation is that it can be grown on most any wet ground. It takes more cultivation and weeding to keep it clean, but otherwise seems to grow better where the drainage is poorest, as it takes lots of water in the dry season.

#### Very Profitable at \$3

On our Labish beaver dam land mint can be grown very profitably at \$3 a pound and when the price gets over this it is indeed a very profitable crop.

We have only about thirty acres of mint, and we find that the greatest trouble is in keeping the grass out of it. We figure on at least 40 pounds of mint oil to the acre on an average stand of mint; and good crops with weather conditions favorable can easily go 60 pounds to the acre.

R. E. JONES

("Labish Meadows Farm" is the way the letter head reads, with the names, M. L. Jones and R. E. Jones. They are bonanza farmers, with many kinds of crops.—Ed.)

### Southern States to Buy Mountains for Parks

ASHEVILLE, N. C.—North Carolina, Tennessee and Virginia are out to buy mountains.

The states want the first two great national parks to be established in the Southeast and now are engaged in the task of raising funds for the acquisition of a section of the Great Smoky Mountains of Western North Carolina and Eastern Tennessee, and part of the Blue Ridge, in the Shenandoah region of Virginia.

After the purchase have been made, the mountains will be presented to the government, which, through Secretary of Interior Work and the Federal park commission, has sanctioned the project. The state legislatures have passed measures to assist the campaigns for funds.