

Continuation of the Slogan Page: Subject this Week, the Mint Industry

FROM THE LARGEST MINT DISTRICT IN THE STATE, IN LABISH SECTION

After Much Experimenting, The Growers Around Brooks Have Found the Best Methods—Labor Figures Less in the Mint Crop Than in Most of Other Crops Raised on the Available Land There

Editor Statesman: The unusual high price paid for mint oil years ago, was directly responsible for the stimulation of this industry which although begun around 1917 on the low lands of this country, had up to then been but partly successful.

Complete crop failures in the large areas given over exclusively to mint raising and from whence the bulk of the oil consumed throughout the country is obtained, caused unheard of prices to be offered for the essence; and those who had held on year after year, although often at a loss, reaped the benefit.

As is usual in such cases, other crops were replaced with acres of mint, and now as the prices are about normal there is not the profit obtained from the valuable land given over to its culture that some other crops might give. A few were fortunate enough to have contracts, however, and those still have a good thing.

Is Easy to Raise
Mint is a comparatively easy crop to raise: the one requisite being cool, moist ground. The roots, dropped in shallow furrows, readily take hold and spread rapidly. They may be cut the first year, though the plants will not be at their best until the second year. Once a good stand is secured, the crop may be harvested year after year. The lowlands present one serious disadvantage to any crop that may be given them, namely, the rapid and luxuriant growth of weeds and grasses that are also native to this soil.

Present Approved Methods
To combat this, it is found that cultivation, which, seeming to destroy much of the cultivated crop, really in the long run, aids its growth and keeps down the vagrant growths. Those who have tried both methods, find that in a few seasons the grasses and weeds will eventually crowd out the mint crop and make the hay, or cut of such poor quality that there is no money in handling it. The better method, and the one that is being adopted by those who have made a study of mint, is to keep the crop in well defined rows where small plows are used for the cultivation. Another method, and one that has proved its worth, is to clip off the tops by mowing late early, or before the mint has reached its height. This has two advantages: it helps kill weeds back the way and tends to make a thicker growth to the mint plants. The season just past was a very poor one for the harvesting of the crop. Early rains wet the ground so thoroughly that it was difficult to dry the cut mint and much of it was put through the stills practically green. Authorities claim that by so doing, some 20 per cent of the oil was lost.

Two By-Products
Besides the oil there are two other products or by-products that are obtained from the crop. One is the hay or refuse after the oil is still. This makes a very good forage, and animals seem to eat it readily. The other is the root crop, which, when the prices of the oil were high, was a lucrative part of the industry, as every one wanted roots for starting a patch of mint. A field of mint could be stripped of its roots, and yet there would be abundance left in the soil to make a crop of such thick growth that the roots dug and sold would never be missed. In fact, many claim that the stirring of the ground to get the roots is beneficial to the next crop. There is estimated to be about 25 acres now in mint in this neighborhood, meaning the Labish section and tributary. The yield runs from 25 to 100 pounds of oil per acre, while the price ranges from \$2 to \$2.75 the pound. Labor figures less in the mint crop than in most of the other crops raised on this valuable land, bringing the net profit a little higher than would appear from these figures. The quality of the soil is exceedingly good. This is based on the menthol content,

which tests much higher in this district than the average. A great deal of the mint oil goes into the manufacture of chewing gum, that great American institution, while confections and drugs come in for their share. As a little bit of this essence goes a long way, it is easy to overload the market, while on the other hand, as it is raised in few localities, a little bad luck would again make prices soar.

CECIL VERE ASHBAUGH, Brooks, Ore., Dec. 5, 1927.

PIONEER GROWER GERVAIS SECTION

G. J. Moisan Tells of Difficulties In Starting In the Business

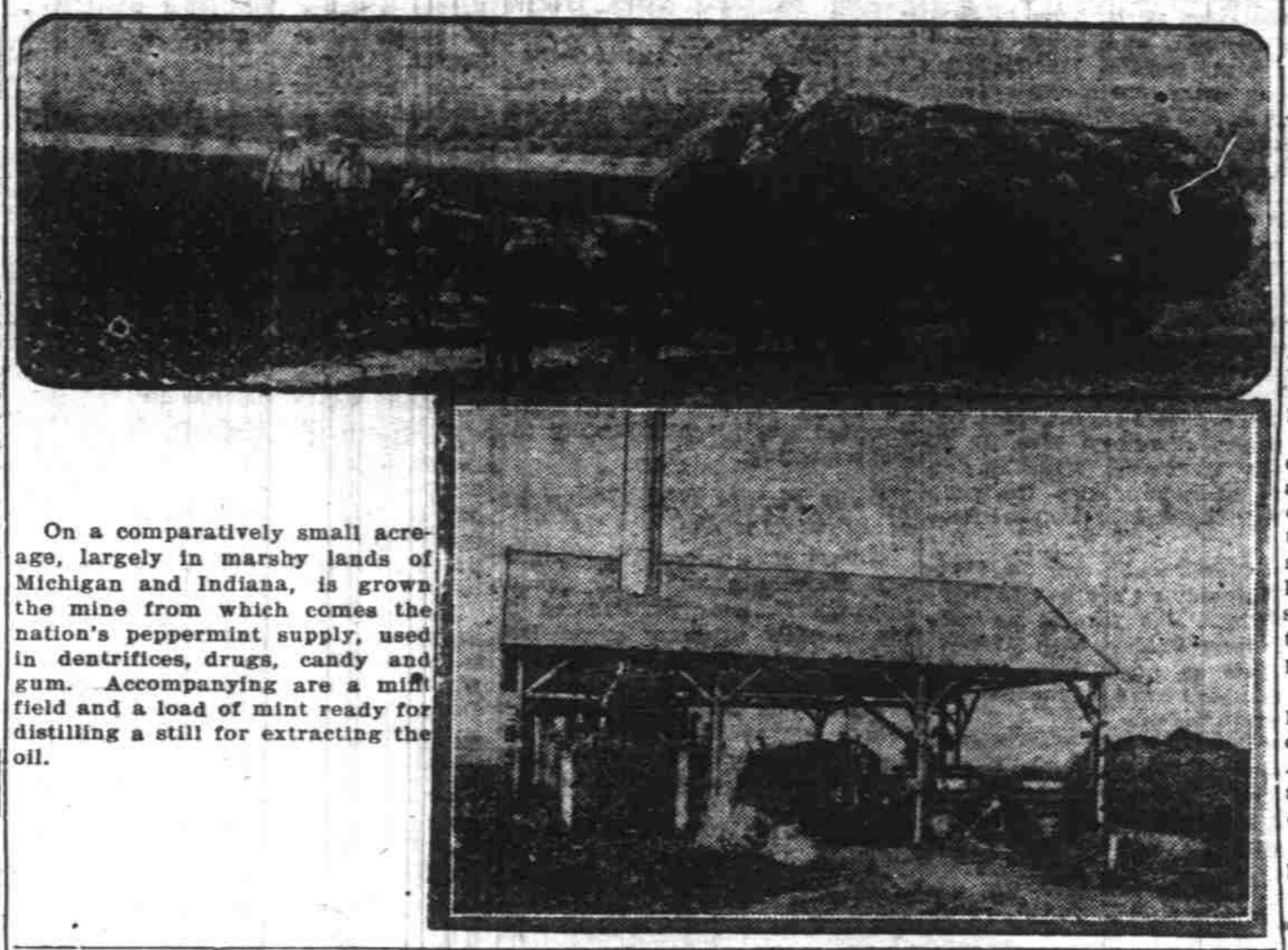
Editor Statesman: During the spring of 1913 I contracted for mint roots from a grower near Albany, Oregon. These were the first mint roots that came near Gervais. S. D. Manning, John Kuschnick and Fred Manning took these roots and planted them on a basis of 50-50 for oil and roots. The roots were badly damaged on account of being dug and sacked long before they were planted, and from these roots and from the plantings and acreage that have come from them, the first three years of growing mint here was discouraging. Then the world war came on and mint growing was neglected, so plowing their fields up to grow food stuff.

After the War
After the war was over S. D. Manning and Fred Manning picked up roots from ditches, fence lines and anywhere they could get sprouts and started new fields. In 1919 they had a sufficient amount of roots to plant many acres, which was divided among many growers, from three to five acres each. S. D. Manning and myself planted this year (1919) 40 acres on the Hayes estate, three miles east of Brooks. The spring was late, and after planting we waited for the rows to be visible before cultivating. In experienced in the growing and cultivating of mint. We allowed the rows to become a green field of pigweed, and of course the mint would not come through to show us the rows. We then employed help, which consisted of boys and girls from 12 to 16 years and men and women at 50 cents per hour. The work was very tedious as well as expensive. We managed to get clean enough to distinguish rows. We then began to cultivate with single horse cultivators and ridged the ground so that when we tried to cut with a mower we could not do it, owing to the deep ridges in rows. We then secured the help of six to eight men to cut with scythes. This was very expensive, as mint had grown quick and heavy and men with scythes had to cut up one side of the row and back on the other.

More Trouble
Before we finished distilling rain and wet weather were so bad that we were compelled to leave about one-third of the mint at ready cut on the field. We had several hundred pounds of oil and sold it for \$1.25 to \$1.75 per pound—not very profitable that year. The next year or spring, time for plowing and cultivating was so wet we could not get on that ground, so we let it go as meadow, not plowing at all; only doing some hand weeding such as dock, smart weed and pigweed. We received this second year about 40 pounds per acre, and handled more than three tons of herb per acre, on account of it being very thick mint. It grew thick and late, and no leaves on the bottoms of the stems.

The third year on this 40 acres Sentinel.

MINT HARVEST SCENES



On a comparatively small acreage, largely in marshy lands of Michigan and Indiana, is grown the mine from which comes the nation's peppermint supply, used in dentrifices, drugs, candy and gum. Accompanying are a mill field and a load of mint ready for distilling a still for extracting the oil.

we plowed late, about May 1, and did not rake or roll for about 10 days after being plowed—and consequently all roots died, owing to the fact that the ground when plowed was left loose and air pockets dried all roots before we packed the ground.

With all this practical experience, we are in a good way to advise any new grower.

Now Growing Successfully
We are now growing mint successfully; have found out the best tools to work with and the best time to work the mint. There is no reason why the growing of mint cannot, even on small acreage, be as profitable as any other commodity grown in the valley. We bar speculators, but if a man who grows mint will sell when there is a profit, he will have little trouble and expense after his oil is distilled.

G. J. MOISAN, Gervais, Or., Dec. 3, 1927.

MINT INDUSTRY HELPS FACTORY

And the Factory of Eastman Bros., Silverton, Helps the Mint Industry

One thing brings another. The mint industry has brought the necessity of mint stills. The right kind, for the success of the industry.

So Eastman Bros., Silverton, Oregon, with one of the largest sheet metal plants in the west, have been making mint stills. The mint industry has helped them, and they have helped the mint industry, by making a superior still. One that sells at a reasonable price, and one that does the work thoroughly and economically.

VIEW POINT OF INDIANA ASSOCIATED PRESS MAN CONCERNING MINT INDUSTRY

Says Current Sales In East Hover Around \$3 a Pound, and That It Costs \$2.50 a Pound to Produce It—Says Observers Predict an Increasing Demand for Peppermint Oil

(The following Associated Press item, under current date, originated at South Bend, Indiana, and comes in the special illustrated news service of that news agency.) "Peppermint oil, once so precious that dealers kept it stored in bank vaults, has built and shattered dreams of wealth in shorter time almost than any other farm crop. Two years ago a pound of it brought almost \$30, buyers fought to contract all the growers had and muck fields reached a premium in Michigan and Indiana.

"As quickly as it rose the price decreased. Current sales hover around \$3 for a pound, and producers say it cost \$2.50 a pound to grow it. This year's crop is a subject of controversy. Buyers declare supplies are plentiful but growers insist production is inadequate. Whatever even tenor there may be is due to long term contracts, the which controlled growers, accepting a sliding scale, insured themselves of better prices than the open market brings.

"Observers predict increasing demand for oil. In respective order of importance it is used in dentrifices, confections and chewing gum, and in the retail drug trade. Makers of dental cream declare the world is just beginning to brush its teeth, and candy manufacturers report steadily increasing sales.

"Generally the mint supply is less than the demand. There are natural restrictions on production. Growers become discouraged when weeds overrun their crop and contaminate the oil so much that it suffers discounts on the markets. Distilling is a problem. Most growers have their own equipment although custom stills are operated. Private stills do not pay on less than 20 acres of good mint. However, mint production frequently is considered a subsidiary industry, and as one producer drops out another fills his place. While not always as profitable as track crops adapted to similar land, mint is perhaps more certain. The enormous price reduction has not cut the acreage seriously.

"Michigan and Indiana claim 85 per cent of the total mint acreage, with Oregon, Washington and California ranging next in importance. North Carolina raises mint on her reclaimed swamp lands and small amounts are grown in Wayne and Seneca counties, New York, cradle of the industry. This year's acreage was above 50,000 acres and production approximated 750,000 pounds.

"New York farmers started growing mint as early as 1816, but production did not spread to Michigan and become established as an industry until 1875. For

HERE IS A MAN WHO IS NOT GUESSING CONCERNING OIL SENT TO THE MARKETS

He Ships Peppermint Oil Only That Goes Above the Government Standards, and He is Able to Certify to This Fact, by Putting It Through Processes That Make It That Pure—And All of It Goes to the Markets Under the Name of Oregon Oil, Which Now Stands for High Quality Among the Qualified Judges and Buyers

Editor Statesman: All contracts for the sale or purchase of peppermint oil have the expression, "Prime natural oil of peppermint." The question arises, what is prime natural oil of peppermint? The answer is that it is the product taken by steam distillation from the plant known as mentha piperita and said product conforming to certain tests as set forth in the following paragraphs:

In color it ranges from a very light golden yellow to a rather deep yellow with a greenish tint. And it should be of a lustrous sparkling color rather than a dead one.

The specific gravity must fall between 0.896 and 0.908. By that we mean that oil is lighter than water. If a volume of water weighs exactly one pound the same volume of oil will weigh about a fourth to a third of a pound less than the water at the same temperature.

Oil is also tested in an instrument called the polariscope. A ray of light is passed through some glass prisms and also through a tube of oil and the prisms must be turned to a certain position to produce the test. This is known as the "optical rotations" of oil of peppermint and must fall between a minus 23 and a minus 33 on the scale of the polariscope.

There is another instrument known as the refractometer. Oil is tested by this instrument and must read on its scale between 1.4600 and 1.4710.

Another test of oil is its solubility in 70 per cent alcohol. Four

parts of the above alcohol must completely absorb or take into complete solution not less than one part of oil.

We also try oil with litmus paper to determine the possible presence of some undesirable acids. Prime oil has no effect on litmus paper.

The Physical Tests

The specific gravity, the polariscope, the refractometer, the solubility and litmus paper tests are known as the physical tests of oil. Prime oil passes all the above tests. If it fails to pass one or more it is safe to say that there are weed oils or other foreign oils present in the peppermint oils. Hence it follows that we make the above tests to determine the purity of the oils offered for sale, and the tests really serve that purpose. It is very hard to find anything but good oil of peppermint that will pass the requirements.

The Quality Tests

Then there remains the chemical assay of oil to determine the total menthol content and the ester content of the menthol. Menthol is the chemical name of the drug that forms the largest part of oil of peppermint. Esters of menthol is one form of the drug called menthyl. It requires a long and very careful chemical analysis to determine how much menthol and esters there are in a sample of oil. It must be done by an experienced and competent chemist or mistakes will be made and injury done to either the buyer or seller. There must not be less than 50 per cent total of menthol and of that 50 per cent at least 5 per cent must be in the form of esters. Then there is the final test of odor and flavor. A sample of oil might pass all the above tests and yet not be prime oil because it does not have the characteristic peppermint odor and flavor. It is a drug and not a food and is used largely to produce a certain flavor and odor in other products, hence must conform to the tests and also produce the effects desired. The flavor and odor are determined only by smelling and tasting the oil, and experience is necessary to judge of its value thereby.

Tests Are Required

The above tests are required by the United States government. Oil sold in the United States and other markets is judged and valued by these same tests. Hence prime oil is an oil that passes the above outlined tests. Oils which are deficient in one or more of the requirements can often be brought up to the standard by refining or redistilling.

What Oregon growers need

most to do to advance their industry is to place an oil very high in the above tests on the eastern markets under an Oregon name and label. The world markets don't know our oil and never will until we compel them to. There is no question but we can and do produce a very superior oil.

Grant W. Shaffner is the chemist in charge of testing for us.

L. O. HERROLD, Salem, Ore., Dec. 5, 1927.

(Mr. Herrold himself grows 300 acres of mint; in several sections of the Salem district. He markets a lot more. He has the first refinery in Salem, already working and being increased in capacity and equipment, and due to become as complete as the best brains, expert skill and liberal money expenditure can make it. Mr. Herrold is too modest to make such statements; and there are a lot more that the writer is sworn not to divulge. But, under another heading, there are some facts about his refining operations, and some hints, at least, about what great benefits all this is going to mean to the Salem district.—Ed.)



Headquarters for Gifts that Keep on Giving



Hotpoint TRIPLEX GRILL

It toasts, broils, boils, fries, poaches—three operations at one time. Connects to any electric socket.

Here is a beautiful gift that will be used every day—a permanent reminder of the giver.

The name Hotpoint guarantees the quality. Complete with utensils.

\$13.50

PORTLAND ELECTRIC POWER CO. Salem, Oregon 237 N. Liberty St.

The Statesman Annual Edition

Will be released Sunday, January 1, 1928

Order your extra copies now to send to your friends here and in the East

Oregon Statesman, Salem, Oregon. Please mail for me.....copies of the 42nd Annual Year-End Edition of the Oregon Statesman to the following listed addresses, for which I agree to remit on receipt of statement at the rate of 25c per copy.

NAME	STREET	CITY	STATE
1			
2			
3			
4			
5			
6			
7			
8			

Skeptical?

A trial will prove its merit. You must be satisfied -- you are the judge -- under the positive money back guarantee.

