



Preparations for a Clean Crop in a Waterloo County Orchard
 -Photo furnished by F. C. Hart, U.S.A

portions of one gallon of spray to nine gallons of water to be ready for use. For an average six acre apple orchard it would require about four barrels of this spray, or twenty-four dollars. Being put on before the leaves are on the trees it takes much less of this preparation than is required when the foliage is on.

A SECOND SPRAYING

The next spraying is with commercial arsenate of lead. This is sold in kegs of different sizes at about eleven cents a pound. For the six acres the quantity required would be about forty pounds of this, which makes about thirteen hundred gallons of spray at a cost of about four dollars and a half. This spraying is to kill all codlin moth, apple worms, and so forth, and is applied directly the bloom falls. If a late hatch of these pests appear of course another spraying has to be done. But as I am figuring on a season fairly clear of pests we will cut out this second spraying of the trees with arsenate.

The third spraying will have to be made to insure the absence of all aphids (green), foliage pests, and so forth; for this Black Leaf Tobacco Spray is admirable. This spraying would cost probably thirty dollars to do as the trees are dense with foliage, and the spray itself is expensive.

Of course, it goes without saying that the orchard has to be properly plowed and cultivated, and kept cultivated. This would cost probably thirty-five dollars for the season.

Thinning the fruit is the next item. No up-to-date orchardist would expect

large fruit if no thinning was done, let alone the damage done to the trees by the weight of fruit breaking off the branches. This would cost perhaps about one hundred dollars, but this is almost impossible to determine, owing to the different things to be taken into consideration, namely the dexterity of the men employed, size of trees, size of crop, and so forth. This is figuring on a full crop.

Now, as the booster's advertisement says, figure your six acres as having one hundred trees per acre, or six hundred trees altogether, eight years old, and five boxes of apples from each tree (very good) and you arrive at three thousand boxes of apples. Of this, say, sixty per cent., or eighteen hundred boxes, are number ones; thirty per cent., or nine hundred boxes, number twos; and the balance, ten per cent., or three hundred boxes, culls. Your account would figure out something like the following:

RECEIPTS

1800 boxes No. 1 apples @ \$1.50..\$2700
 900 boxes No. 2 apples @ \$1.00.. 900
 300 boxes culls @ 40c 120

Your total.....\$3720

Now, for the part the land shark does not tell about, namely, the expenditure incurred before you receive this amount. (Also bear in mind that I have been figuring on a full crop and top prices, a combination that rarely happens). But to proceed:

COST OF PRODUCTION

	No. 1	No. 2	Culls
Packing, per box	06c	06c	Not packed
Picking, per box	03c	03c	03c
Hauling to market, per box	06c	06c	06c

Paper for packing, per box	04c	02c	No paper, Put in sack
The box itself, per box	14c	14c	06c
Wholesalers 10% com., per box	15c	10c	04c
Incidentals	02c	02c	00c
Total expense per box.	50c	43c	20c

Thus for the whole crop it works out as follows for expenses:

1800 boxes No. 1 apples at 50c	\$ 900
900 boxes No. 2 apples at 43c	387
300 boxes culls at 20c	60
Thinning \$100, Spraying \$80 and cultivating \$35	215
Total	\$1,562

Thus it figures this way:

Gross receipts	\$3,720
Cost of production	1,562
Bal. net	\$2,158

And this is an absolutely full season, and the prices figured in are very high. If two thousand dollars was cleared it would be good indeed.

Now, in finishing it would be well to say that if it is possible, it would be by far and away the best policy to let the man, ignorant as yet of fruit farming, know the business as it is, and that is, as a good honest, splendid health-giving means of making a livelihood, not a tremendous fortune, and to prohibit the use of the mails to all those ingenious frauds who are daily catching so many poor suckers!

Use of Soap in Spray Mixture

Prof. L. Caesar, O.A.C., Guelph, Ont.

A contributor in the February issue of The Canadian Horticulturist intimated that soap helped to make arsenate of lead spread and adhere better. There is just a little danger of those who are using lime-sulphur with arsenate of lead thinking that they can increase the value of the mixture by adding soap. If you get a chance to put some lime-sulphur in water in a glass vessel and add some dissolved soap to it, do so, and see what will take place. The soap at once changes the mixture and causes it to curdle, breaking down the compound. No one should use soap with lime-sulphur. It is very probable that soap can be used with the so-called soluble-sulphur, which is not a lime-sulphur, but a soda sulphur. It does not cause this to curdle, and so far as one can see without a chemical examination, does not alter its character.

At an experimental station in New Hampshire they have found that the method of treatment of an orchard which gives the best results is cultivation in the early part of the season. They sow crimson clover in midsummer, and turn that in early the following spring. That method has given good results.—W. F. Kyda, Simcoe, Ont.