



**A Productive Strawberry Plantation in British Columbia**

This four-acre strawberry plantation, owned by O. J. Wigen, Wyndel, B.C., produced 53,000 quarts of strawberries. Mr. Wigen grows Kellogg thoroughbred plants. (Photo copyrighted by The R. M. Kellogg Co.)

women and girls, thus greatly reducing the cost.

There is much less financial loss from fallen fruits from trees with very low spreading tops, because less droppings and less bruising.

Low trees permit economy in time and methods of picking.

Cooperative or wholesale buying of supplies and selling produce helps much in reducing the cost.

Our friends may expect us to recommend the elimination of spraying for the scale by the introduction of scale parasites (of which much recently has been printed) but we can not yet be sure that in all orchards they will do their work as thoroughly as they have in our own and in hundreds of others we have carefully inspected in Pennsylvania. It is surely worthy of careful consideration. We have discovered and published regarding certain entomological conditions, and have been criticised by a few who have been too narrow to understand or believe them, and of course by certain agents of scale-spraying materials. We have seen enough to give firm faith in the adequate reduction of the San Jose Scale by minute internal hymenopterous parasites. If any unprejudiced person will come to Harrisburg, Penn., and go with me to see a score or more of orchards that have been cleaned of San Jose Scale by the parasites, and then not agree that these natural agencies have been efficient in suppressing the scale I am willing to pay

the expenses of the trip. Hence, our recommendation to "Reduce the cost of production by the application of modern methods."

### How Often and When to Spray\*

Prof. L. Caesar, Provincial Entomologist, Guelph, Ont.

IT is difficult for one who has not lived in Nova Scotia to advise Nova Scotia growers how often and when to spray. We shall, I believe, all agree on at least two of the applications, namely one just before the blossoms burst, beginning with the earliest varieties, and then going right on with the later, and the other just after the blossoms have nearly all fallen, say eighty to ninety per cent. of them off. Without these two in a wet cold May or June no one need hope to control apple scab. One of these is almost as important as the other.

There will be a difference of opinion as to the other sprayings necessary. I think you should carefully test the value of one earlier application. Try it on at least one-third of the orchard and continue it for at least four or five years, as one year's results are often quite inconclusive. When this application should be put on is a debatable question. If you have oyster shell scale, blister mite or much canker to combat it should be before the buds burst or just as they are ready to burst. If these things are not troublesome I should feel like suggest-

\*Extract from an address delivered before the Nova Scotia Fruit Growers' Association.

ing that the spraying be done not before but as the buds are bursting, or just after they burst, so that the unfolding leaves may be covered with the spray mixture and protected against scab until the application just before the blossoms open can be given.

As for any later sprays one must be guided by the weather. I think it probable that it will pay to spray again about ten days after the codling moth spray. It seems to me that better results will be got by not waiting for two weeks as ordinarily recommended, because each week after the blossoms fall the danger of apple scab begins to grow rapidly less and the all important thing is to get the apples safely through June because there is seldom danger in July.

All are aware that two years ago the injury by apple scab was done chiefly in the latter part of August and September. This injury could have been largely prevented by an application of spray mixture the last week in August, supplemented perhaps by another about two weeks later.

### The Production of Gooseberries\*

L. B. Heary, B.S.A., Winona, Ont.

ONE difficulty in growing gooseberries is to bring them to maturity without having them become slightly scalded. A few hours exposure to a very hot sun will scald them very badly causing the skin to become tough and destroying the flavor of the berry. I remember three years ago we lost quite a quantity of fruit which was exposed in this way. We have one patch of three thousand bushes planted out in the open and that particular year we had them just a little over half picked by a Saturday night. Sunday was a roaring hot day and as a result we had stewed gooseberries by Monday. You could notice the cooked odor quite a distance.

At the same time another patch of nearly one thousand bushes, just across a lane but planted under peach trees remained practically uninjured on account of the shade afforded by the trees. Gooseberries seem to require shade for their best growth. Even in England the best and largest berries require shade for their best growth.

They can be grown in an orchard with very little extra work as they can be cultivated lengthwise when the orchard is worked and a one-horse cultivator can be used crosswise. Two bushes can be planted between the trees in the row. Spraying can be done easily and the picking of them is more of a pleasure than being picked and pricked to small bits in the sun. Our Whitesmith patch under

\*Extract from an address delivered at the last annual convention of the Ontario Fruit Growers' Association.