

## APPLYING THE SPRAY.

The cost of spraying material, including both poison and fungicide diluted ready for the trees, is between 75 cents and \$1 per hundred gallons. The cost of applying this from \$1.50 to \$2 per hundred gallons. For this reason economies affecting the application of the spraying material are of greater importance to the grower than economies affecting the spraying solution. We have endeavoured to work out the solutions, so that the tree may be drenched with any of the sprays as recommended in the spray calendar without any harmful results. For the greatest economy and efficiency in controlling all pests we would recommend at least 200 pounds pressure and high capacity nozzles, so that the nozzle may be passed rapidly over the tree and still enough spray will come through it to thoroughly drench every portion covered.

## TUSSOCK MOTH AND CANKER WORM.

These two insects are still on the increase in the Valley, and will undoubtedly do serious damage to many orchards during 1917. The secret of controlling both, lies in poisoning the insect as soon as possible after it emerges from the egg. The canker worm emerges three or four days before the blossoms open and where they are present, special attention should be paid to the spray immediately before the blossoms open.

The Tussock Moth larvae emerge from the egg during the last few days of June and as they are present in greater or less numbers in practically every orchard in the Valley, special attention should be paid to the fourth or last summer spray. We would in no case recommend the omission of poison from the fourth summer spray in Nova Scotia during 1917.

## THE CONTROL OF THE APPLE MAGGOT (*Rhagoletis pomonella*) BY ARSENICAL SPRAYS.

That the apple maggot can be controlled by timely applications of arsenical sprays has been abundantly demonstrated by our work during the past two years. There can be little doubt that the sprayings regularly applied in the ordinary well-kept commercial orchards, will keep this pest in control. Scattered cases of apple maggot have been found throughout the chief fruit-growing counties, namely Kings and Annapolis, and the pest occurs generally in the fruit of the hawthorn, but we have never found a severe infestation in an orchard that regularly received applications of arsenical sprays. Furthermore, we have reliable information to the effect that formerly the apple maggot was much more serious in several localities in Kings and Annapolis counties, but with the aid of arsenical spraying, the infestations gradually died out.

On the other hand we find that on both sides of the main fruit belt, in Hants, western Annapolis and Digby counties, there exist very severe infestations in many of the small orchards that have not been sprayed regularly, if at all. Many such infestations have been present for a number of years past, sometimes destroying the entire crop of the susceptible varieties and frequently a large proportion of even the more resistant sorts.

Experiments have shown that a light arsenical spray, applied when the first adult flies appear, and another about two weeks later, gives excellent results even in very wet seasons. In cases where the weather is dry during the latter half of July and August, one application is satisfactory. Any grower having a