

Difficulties in Spraying

Robt. Thompson, St. Catharines, Ontario

AS the season for spraying is rapidly approaching, we find many of our growers dreading the work of applying the lime and sulphur wash. In the preparation of this mixture, if there is no boiling plant nearby, and the grower wishes to prepare his material cheaply and efficiently, he can make a plank box about three or four feet wide, from five to seven feet long and twelve inches high. Secure a sheet of boiler plate that will project a couple of inches outside of box. Fasten the box to the sheet iron securely by means of screws through drilled holes.

strainer fifty meshes to the inch. Fine nozzles can then be used, and no trouble will be experienced from clogging. Better work can be done with small nozzles, and less material used.

Spray the first time about two-thirds of the tree from the windy side; then when there is a change of wind to one of the opposite quarters, the other third can be sprayed. A good breeze is found to be a good aid in spraying, especially for large trees. Be sure and cover every spot on the trees.

When spraying with Bordeaux mixture and poison for codling moth, see



Government Power Sprayer at Work in Orchard of C. C. H. Eaton, Canard, Nova Scotia

A fire-place can be built of bricks so that the boiler plate will rest on brickwork. Leave open at end, and put in two or three lengths of stove pipe. Limbs or brush can be used for firing. This makes the cheapest place for boiling lime and sulphur. The back end of the box can be lowered a little, and a large faucet put in to run the liquid out of the pan.

For fifty gallons of mixture put fifteen gallons of water in the pan. Bring to a boil and add twenty-two pounds of good fresh lime. Have eighteen pounds of finely ground sulphur mixed to a paste previously in hot water. Pour this in on the lime. When the lime begins to slack, stir occasionally. Boil for one or two hours or until the mixture turns a greenish color. Keep boiling vigorously all the time. Add more water to make the fifty gallons. The last few gallons added may be of cold water so that the mixture, if going directly into the pump to be used, will not be boiling and thus injure the hose. Great care should be exercised in straining into the tank, using for the last straining a

that every leaf and twig is covered, and every apple covered so that the poison will have filled the calyx end of the fruit. Thoroughness in every particular is one of the secrets of success in spraying.

Stocks for Grafting

Intend planting an orchard of plums, apples and some peaches, the latter in a sheltered location, and am desirous of budding my own trees. What stocks are most hardy for this locality, and where can I procure seedlings for the purpose? Are the French Myrobolan and St. Julien seedling plum stocks used in Canada?—T. G., Mono Centre, Ont.

The Myrobolan and St. Julien stocks should both be hardy enough in your district. The former is, we believe, the stock most generally used by nurserymen. The apple seedlings used in the nursery trade should prove satisfactory. For peaches we should suggest using the Americana plum in your district, as they are hardier than the peach stock, and the peach unites readily with them. If seedling stocks cannot be obtained from Canadian nurserymen, and we have not seen any advertised, they could be

obtained from the Shenandoah Nurseries, Shenandoah, Iowa, and other large wholesale nurseries.—W. T. Macoun.

Apples to Glasgow

Where are the best flavored apples grown in Ontario, and what prices do the growers get per barrel on the trees? What is the freight rate per carload of apples from Toronto to Montreal, and how many barrels are allowed to the car?—F. Paterson, Glasgow, Scotland.

The cost for freight and other charges, per barrel, from Ontario points to Glasgow, varies from 90 cents to \$1.10 per barrel. It is generally conceded that the district north of Lake Ontario, and including the central portion of Ontario to Lake Huron and the Georgian Bay, grows the best winter apples for commercial purposes. The capacity of cars varies from 150 to 200 barrels.

White Fly on House Plants

What can I do to get rid of a sort of louse that is ruining my house plants? They are like tiny white flies and cover the under side of the leaves with little eggs. When you touch the plants they fly off to others. They are especially bad on my fuchsias, heliotrope and nicotine, but do not molest geraniums or begonias. I have tried several remedies, but the pest seems to thrive and multiply at a great rate. Have washed the plants with tobacco water, soap suds, coal oil, and have had them smoked on, but all to no purpose?—J. W., Scarboro Jct., Ont.

The insect mentioned is probably what is known as the white fly, *Aleyrodes vaporarum*, and is a comparatively new insect pest to plant growers. In greenhouses it can be easily kept down by the fumes of hydrocyanic gas. This latter must not, however, be used by amateur plant growers in a dwelling house under ordinary conditions, as the fumes are fatal to almost all animate life of any kind, hence it cannot be used without great danger to human life as well as insect life. A very strong solution of soapy water—one ounce of common soap dissolved in a quart of warm water and allowed to cool—is a good remedy. This should be sprinkled thoroughly on the underneath side of the foliage once or twice a week with a fine rubber sprinkler. Scollay's angle or bent nozzle rubber sprinkler is the best appliance for this purpose. It can be purchased at seed stores. After sprinkling, before the foliage is quite dry, dust on some Pyrethrum powder, or tobacco dust made from a dry cigar. This also should be dusted on the under side of the leaves, with a Jumbo Powder Gun, which can be purchased at seed stores. The soap solution has been used effectively by some florists in keeping down this pest in greenhouses. Keeping the under side of the foliage sprinkled with clear, tepid water as often as possible is a good preventive, as the fly delights in a dry atmosphere, and does not like moisture. In sprinkling, dampen all parts of the foliage and stems of plants.—Wm. Hunt, O.A.C., Guelph.