

OUR QUESTION AND ANSWER DEPARTMENT

Readers of *The Horticulturist* are invited to submit Questions on any phase of Horticultural work

Oyster-Shell Bark-Louse

Would Gillett's Lye be of value in treating the Oyster-shell Bark-louse?—F.F., Brighton, Ont.

We do not recommend Gillett's Lye as a remedy for the Oyster-shell Bark-louse. As far as we know, it is a soda lye, and we do not think that it would be at all effective. There are two very satisfactory remedies for this insect. The best is the lime-sulphur wash to be applied about the beginning of April. The wash must be properly made and boiled for at least two hours before being applied to the tree. It will usually clear the tree completely of this scale and of any other that may be upon it.

The other remedy is an application of ordinary whitewash. This should be applied in the fall and repeated a second time. The effect of it is that when it scales off in the winter it carries the insect with it. I am not at all sure that it will destroy the eggs of the bark louse, but there is no doubt that the lime-sulphur treatment, if applied in such a way as to completely reach all the interstices of the bark, will kill both scales and eggs. We are intending to carry a further series of experiments with the lime-sulphur wash, and other insecticides in the early spring, and hope to have more information to impart later on.—Answered by Dr. Charles J. S. Bethune, O.A.C., Guelph.

Propagating Apple Trees

Will you please give detailed instructions for the propagation of apple trees by root grafting?—C.M.H., Bridgetown, N.S.

Standard apple stocks are grown from seeds, and dwarf apple stocks from mound layers of the Paradise apple. Seeds for standard trees are either imported from France or obtained from the pomace of cider mills. As a rule, fruit growers or nurserymen do not grow stocks, the raising of which is a business in itself. The seeds are removed from the pomace by washing. They are then dried and stored in sand in a cool, dry place until spring. Fall sowing may be advisable in loose, well-drained soils. Spring planting is better adapted to our conditions. The seed should be sown as soon as the ground is in fit condition to receive them in rows three feet apart for horse cultivation, or in drills 5 to 10 inches wide for hand labor. Sow two or three inches deep. Cultivate well, and thin if necessary. The seedlings should grow 8 to 12 inches that season.

In the fall they are sold to nurserymen, who root graft them during the winter. The roots are cut into sections four or five inches long. The lower pieces are discarded. The best ones are selected and whip-grafted with scions of about three buds that have been taken from trees of the desired variety the previous fall and stored. After the union is made, the parts are wrapped with waxed bands to exclude the air. Bands or string should be used that is strong enough to hold the parts for the time being, but, at the same time, weak enough to break when pressed by the growth of the graft. Pack the grafts in sand and store until spring in a cool cellar. Should the cellar be close and warm, the grafts are apt to start into growth, and subsequently rot. In the spring, when the ground can be worked, plant the grafts in the nursery and care for them until two years old, when they may be sold or transplanted to the orchard.

Varieties of Peaches

Kindly name the best early, medium and late peaches for market purposes that may be grown on sandy soil.—F. H., Sarnia, Ont.

Most peaches do best on sandy land. For your section the following varieties probably will give good results: Early St. John, Early Crawford, Fitzgerald, New Prolific, Engol, Elberta, Golden Drop, Kalamazoo and Smock. These are mentioned in their order of ripening, and are yellow fleshed free-stones.

Selecting Nursery Stock

As I intend to buy some trees for planting, I desire some information regarding nursery stock. Will you tell me the points that should be observed when purchasing.—I.R., Burlington, Ont.

When buying nursery stock secure trees of the desired varieties that will give the best possible results. The trees must be true to variety and of a proper age for planting—apples, pears and quinces, from two to three years; peaches, not more than one year from the bud; and so on. Large trees are not always the best. Medium-sized ones are usually more satisfactory. Whether large or small, they should be healthy, thrifty, smooth and well grown, but not spindly. They should possess good roots, and be free of fungi and injurious insects. It is best to avoid trees grown in districts subject to tree troubles, such as peaches from a district where leaf-curl is prevalent or pears from a section where blight is known to exist.

To secure these desirable features in

the trees, it is advisable to have a written agreement with the nurseryman to that effect. Allow no substitution of varieties and reject all inferior stock. When convenient to nursery, it is well to inspect the stock and buy directly from the nursery rows.

Treating Freesias

When my freesias are finished flowering what shall I do with them? Can the bulbs be kept and planted next fall?—C.D., Annapolis, N.S.

Give freesias less frequent waterings after flowering, withholding water gradually until the foliage turns yellow. Give no more water. Place pots away just as they are in a dry room or cellar. About the end of August or early in September shake the bulbs from the soil and re-pot them in fresh, rich, loamy soil. Use some drainage in pots. Water sparingly until growth has well commenced. Place in window when potted. Freesia bulbs treated in this way can be kept for years. Plant only large bulbs for flowering.—Answered by Wm. Hunt, O.A.C., Guelph.

Winter Care of Hibiscus

How shall I treat a hibiscus that bloomed freely last fall? Does it need a rest?—B.T., Bracebridge, Ont.

Keep the hibiscus partially dormant in winter. This is done by giving sufficient water to keep the soil barely moist, and by keeping the plant in a cool room or basement in a temperature of 45 to 50 degrees. The pot or Japanese hibiscus likes partial rest during winter as described to flower well in summer and autumn.—Answered by Wm. Hunt, O.A.C., Guelph.

Heating a Forcing House

What is the best system of heating a forcing house for the growing of vegetables?—R.N., Hamilton, Ont.

Forcing houses may be heated by hot water, steam, or, in cases where the house is small, a smoke flue. The two former are the most satisfactory, although much more expensive. Steam averages higher in temperature than the hot water. The heat from steam is distributed more regularly than that from hot water. It heats longer runs, and is better for crooked circuits. It is probable that steam is the most economical source of heat for a large forcing house.

If the reader of *THE CANADIAN HORTICULTURIST* who asked a question regarding weeds in lawns, will send his name and address, the desired information will be furnished by letter