

# OUR QUESTION AND ANSWER DEPARTMENT

Readers of The Horticulturist are Invited to Submit Questions on any Phase of Horticultural Work

## Pollinating Lindley Grape

Can the Lindley grape be pollinated artificially and profitably to obtain a more perfect bunch?—S. L., Prince Edward County.

This question was sent to the Central Experimental Farm, Ottawa, from Winona, Ont., but as the writer did not sign his name to the letter, the columns of THE CANADIAN HORTICULTURIST have been used, knowing that the reply will come under his eye.

The Lindley grape is one of the varieties known to be self-sterile or partially so; consequently, if planted by itself, the bunches will be very imperfect. To get good bunches one should have one or more varieties, that bloom at the same time, planted near, to pollinate it. At the Central Experimental Farm, where we have a large number of varieties in our vineyard, and only a few vines of each of these scattered in different parts, the bunches of the Lindley are, most of them, well filled and quite satisfactory. We should advise, in planting a vineyard, to plant alternate rows of another variety. Niagara and Word'n should make two good sorts for this purpose.

Experiments in artificially pollinating the Lindley have given very satisfactory results, although the experiment was not carried on with the idea of making it pay; but, it is quite probable that it could be profitably done. In the case referred to, bunches of another variety were simply attached to bunches of Lindley when they were in bloom, and nature did the rest. It is possible that a more economical method of using pollen could be devised, such as applying it direct to the flowers. This will be a good line of experiment for the Niagara Fruit Experiment Station to take up.—W. T. Macoun, Horticulturist, C.E.F., Ottawa.

## Pruning for Fruit Buds

If a lateral shoot of an apple tree be pruned back one-third, to or near a promising fruit bud, or two-thirds, with fruit buds on two year wood, has it a tendency to make or turn these said buds into wood growth? Is it a mistake to cut back every lateral, in spring pruning, on a tree, for are not a great number of the terminal buds fruit buds? Can you name the varieties whose fruit buds are frequently and invariably terminal?—L. B. P., Salmon Arm, B.C.

The pruning back of lateral shoots of apple trees will not change the fruit buds that have already been made into leaf buds. The fruit buds were formed early last summer and will expand when the time comes. Severe heading back of laterals in the spring will, however,

have its effect on the number of fruit buds which will form this season, as the tree will be re-invigorated by the heading back and the tendency will be for it to make leaf buds rather than fruit buds, although there may be as many of the latter form as is needed for a good crop.

It would be a mistake to cut back every lateral very severely, as it would mean the sacrifice of too many fruit buds. The ones to prune back will be learned by practice.

We have not made a study of the varieties which are most inclined to bear fruit on terminal buds, so cannot say which do it most.—Answered by W. T. Macoun, Horticulturist, C.E.F., Ottawa.

## Hardy Roses for North

Kindly recommend a few varieties of roses for continuous bloom throughout the season in Peterboro county?—S. A., Jermyn, Ont.

The following half-dozen varieties of hybrid perpetual roses are among the best and hardiest: General Jacqueminot, Mrs. J. Sharman Crawford, Mad. Plantier, Ulrich Brunner, Magna Charta, and Alfred Colomb. While these will not bloom freely throughout the summer, most of them will continue to give a few blooms until autumn. By planting a few of the hybrid tea roses, more bloom will be obtained late in the season. Two of the best of these are: Kaiserin Augusta Victoria and Caroline Testout. The former is a white rose and the latter a pink. These are not quite so hardy as the hybrid perpetuals but, with a little protection, they come through the winter very well at Ottawa.—Answered by W. T. Macoun, C.E.F., Ottawa.

## Transplanting Dogwood

Some fine specimens of Flowering Dogwood, *Cornus Florida*, are growing in the woods not far from my home. Kindly advise me as to the best time of year to take up and transplant dogwoods that are growing in a wild state?—B. P., Grimsby, Ont.

The only season in which dogwoods may be transplanted is spring. These wild trees have few roots, and you will not succeed with the transplanting unless you prune back the branches severely. Should you desire to secure the trees without its being necessary to prune back one-half or more of the growth, it will be necessary to root-prune the trees this spring and allow them to remain a year before transplanting. The cutting off of the roots causes many

more smaller ones to form, and this almost assures transplanting with safety. Dig a trench around the trees, 18 inches or two feet from the trunk; dig to a depth of two feet, then dig under the trees, cutting off all roots met with from first to last. Fill back the soil and let the trees alone for a year. But if the trees are out of shape prune back the branches a little, to shapen the outline. In fact it is a good thing to prune the branches at the same time that the roots are pruned. Such root-pruned trees rarely fail to live, and the practice is often adopted by those who wish to transplant wild trees.

## Watering Trees at Planting

I intend to plant some shade trees this spring. Is it best to water them at the time of planting?—R. T., St. Hyacinthe, Que.

Tree planting succeeds best when water is applied. The water carries the soil in close contact with the roots. Pour the water in when the hole is about half filled with soil. When it has soaked away, the rest of the hole should be filled in with soil comparatively loose. Watering in this way saves ramming or firming the soil with the feet or a pounder.

## Cost of Forcing House

What would be the cost to build a forcing house of about 400 square feet? What would be the proper size to build for a beginner? Which is best, steel or wooden frames? Would a forcing house of size mentioned pay?—N. C., Riviere du Loup, Que.

The cost of a forcing house of 400 square feet can best be determined in the vicinity where it is to be built, as prices of material vary greatly, and also the plans and construction. In Leamington, it would cost about \$100. It is difficult to state the proper size for a beginner without having some knowledge of the man and his capital. It is best to start on a small scale and increase as experience warrants. A house of 400 square feet, or even twice that size, is of little value except for starting plants in spring for moving to the open ground when the weather becomes warm. I have one house 42 x 100 feet, exclusive of boiler room, and I find it too small for growing vegetables in winter. It would pay "N. C." to erect a house for the purpose of producing plants for transplanting later and growing outside. For so small a house, it is best to use a wooden frame.—Answered by J. L. Hilborn, Leamington, Ont.