

OUR QUESTION AND ANSWER DEPARTMENT

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

Self-sterility of Fruits

What is meant by self-sterility of varieties?—R. G. W., Nelson, B.C.

Certain varieties of fruits, when planted alone, fail to fertilize their own blossoms and are said to be self-sterile. They are barren to their own pollen, although that pollen may fertilize the flowers of other varieties. Self-sterility is said to be due to the pollen of such varieties being impotent or uncongenial when it falls upon the pistils of their own flowers. This condition is a varietal peculiarity and may be affected also by climatic and local conditions.

Subsoiling for Strawberries

Should a sandy loam with clay subsoil be plowed with a subsoil plow for strawberries?—G. H. de B., Toronto.

Where sub-soiling can be done, it is advisable to loosen a clay subsoil for strawberries and other fruits, but in a small garden it is not imperative. The operation improves the drainage and gives the roots a deeper and freer area from which to draw moisture and plant food.

London Purple

Compare London purple with Paris green as an insecticide.—E. F., Oakville, Ont.

The composition of London purple varies considerably and, as a consequence, it does not give as uniform results as Paris green. It is cheaper than Paris green and is more soluble in water. London purple contains some free arsenic and, when used, must be mixed with lime.

Mulching Trees

Does mulching retard the blooming period of trees, as peaches or plums?—C. S., Berlin, Ont.

No, mulching does not retard the blooming period. Buds can swell and grow while the roots remain frozen and dormant. The bursting vegetation of spring time is more or less independent of root action. It is supported by a store of nutriment within the twig.

The Care of Manure

Kindly state how to prepare manure for fruit growing purposes. Is it necessary to give the same treatment to manure hauled from the city as to that produced in the home stable?—G. H. de B., Toronto.

For fruit growing, it is best to apply barnyard manure in a rotted or partially rotted state. Covered sheds are used for temporarily storing manures,

where they can have water added if too dry or if likely to "fire-fang"; or absorbents, such as straw or gypsum, may be used if they are too watery. Manure hauled from the city will give best results if thrown in the shed and mixed with the home-produced material. Manure for tree fruits may be applied in a greener state than that intended for the growing of small fruits.

Moving Large Shade Trees

I have some fairly large shade trees that I desire to transplant. What is the best time to do it and how?—P. T., St. Stephens, N.B.

The best time to move large trees is in winter. In late fall or the early part of an open winter, a trench should be dug around and at a reasonable distance from the trunk, depending upon the size of the tree. This will leave the roots in a ball of earth which, when frozen, may be moved with the tree; thereby permitting the operation to be performed without disturbing the roots.

Making Plans for Lawns

I desire to prepare a plan for improving the grounds about my home. Please outline some of the principles to be followed.—L. B., Georgetown, P.E.I.

It is best to have the lawn open and wide and to group the trees and shrubs on the borders. Zigzag borders are the most effective. Plant irregularly and allow the grass to run into the openings between and apparently behind the clumps. This makes the lawn appear as though it extended much farther than it really does. By preserving open outlooks at a few places in the border, we may appropriate to ourselves distant views. Other pointers on this subject are embodied in an interesting article on page 9.

Watering House Plants

When watering house plants, is it well to apply sufficient water to run out at the bottom of the pot? Does not plant food leach out when that is done?—W. A. F., Ottawa, Ont.

It is not advisable to apply sufficient water to run through the bottom of the pot in appreciable quantities. It is necessary to gauge the amount, so that when it first appears to trickle through, it will then stop. It should be noted, also, that soil in a pot acts as a filter. The first water that percolates through it comes out somewhat pure. Should a constant stream run through, however, considerable plant food would be lost.

Vitality of Seeds

How long will seeds retain their vitality?—A. B., St. Johns, Que.

The period of vitality varies with the kind of seed. Seeds of the willow lose their vitality in two weeks after maturity; on the other hand, seeds of the cucumber may retain their vitality for ten years. It is said that oily seeds will retain their vitality longer than others. This is true with regard to the seeds of mustard, which may retain their vitality as long as 30 years, but is not true of large seeds like the walnut, butternut and similar types. To a certain extent, the vitality of seeds depends upon surrounding conditions.

Books on Hedges

Please tell me the titles of some books on the growing and care of hedges for ornamental purposes?—V. F., Kentville, N.S.

An excellent treatise on the subject is entitled "Hedges, Windbreaks, Shelters and Live Fences," by E. P. Powell. It will be furnished by *THE CANADIAN HORTICULTURIST* on receipt of price, which is 50 cents.

Optimum Temperature

What is meant by an optimum temperature for the germination of seeds?—R. McL., Owen Sound, Ont.

An optimum temperature for the germination of seeds is that temperature at which the greatest number of a given quantity of seeds will germinate most rapidly. It is the condition of temperature that produces the best results.

Sweet Potatoes

Can sweet potatoes be grown successfully outdoors in this locality. Kindly state how to go about it. Can they be sprouted in the house like Irish potatoes?—G. H. de B., Toronto.

Sweet potatoes cannot be grown in Canada with commercial satisfaction, except perhaps in the Essex peninsula of Ontario. In an amateur way, excellent specimens have been grown by Mr. Walter Ross, of Picton, Ont., by Mr. P. G. Keyes, of Ottawa, and others. It is not customary to sprout them in the house. Tubers are bedded in an outdoor hotbed early in spring. In a few weeks the latent buds will sprout, and by the time all danger from frost has passed, a dense growth of "slips" will cover the bed. These are removed from the tubers and set by hand in the field or garden in rows three or four feet apart—the plants generally fifteen inches apart in the rows. Read the article on page 13 of this issue.