

QUESTION AND ANSWER DEPARTMENT

Predicting Frost

I have been told that frosts can be predicted by the use of an instrument called the psychrometer. Is this so, and how is it done?—E. A. F., Sudbury Co., N. B.

An instrument known as the sling psychrometer or the wet- and dry-bulb thermometer is used for this purpose. As the name indicates, there are two thermometers, one of which has a dry bulb, and the other is kept wet. A comparison of the two readings is made and, with the aid of a tabulated table, the dew point is determined. The difference in the readings of the two thermometers will show the decrease of cold produced by evaporation. Evaporation will be more rapid in dry air, and hence the cold caused by evaporation will be greater. By thus determining the dew point, we may predict the approach of frost. When the dew point is low, frost may be expected. The tabulated table that is necessary is too long for publication. It can be found, with further information on this subject, in "The Horticulturist's Rule Book," by Bailey, which will be supplied through this office on receipt of the price, seventy-five cents, or in THE CANADIAN HORTICULTURIST for 1905, page 333.

How to use Pyrethrum

Can insect powder, or pyrethrum, be used in liquid form?—H. H. T., St. John's Co., Que.

Pyrethrum may be diluted in warm water (one ounce to a gallon) when the dry powder is not desirable or practicable. It is usually applied in the dry form, for small insects and larvæ; diluted with flour two or three times its own bulk, for plant lice, particularly in green-houses; or sprinkled upon hot coals, for fumigation.

Rhus Cotinus—Yucca

Kindly give some information about *Rhus Cotinus atropurpurea*,—class of shrub, height, hardness, and color of fringe. Tell something about *Yucca elegantissima*. Is the flower double? Does the flower stand erect or droop? Is the leaf broad and sword-like, with appendages like hair drooping from the leaves? Have I the right name for this particular yucca? Is it hardy, or should it be covered in winter?—C. E. V., Lincoln Co., Ont.

Rhus Cotinus atropurpurea is a very dark purple variety of the shrub usually known as purple fringe or smoke tree. This variety much resembles the common purple fringe, except that the feathery plumes are much darker in color. It

varies in height from ten to twelve feet, depending upon the character of the soil and age of the shrub, and should be perfectly hardy at Grimsby.

There are eight or nine species of yucca, but none of them bear the name, "*Elegantissima*." From your description of it, I think you must mean *Yucca filamentosa*, one of the most commonly grown in this country. This bears single white flowers which droop. The leaves are sword-shaped, and about an inch in width, with numerous filaments or thread-like appendages from the margin of the leaves. This species is usually quite hardy in certain parts of the province and stands the winter about Grimsby without protection.—Prof. H. L. Hutt, O. A. C., Guelph.

Moles—Damping off Fungus

What do ground moles feed upon? Give cause and remedies for the disease that causes young plants to wilt and die.—C. L. K., Essex Co., Ont.

Moles are said to feed upon the roots of grass, trees and garden crops, but it is probable that much, if not all, of the injury that is attributed to them is really due to mice. Moles are almost exclusively insectivorous in feeding habits and burrow through the ground in pursuit of insects. While beneficial on account of these habits they may cause considerable damage when they burrow extensively in lawns, or about the roots of some garden plants. They may be exterminated by capturing them in their burrows in the evening with a shovel and spade, by the use of traps, or by carbon bisulphide injected into their burrows. Carbon bisulphide may be poured into the holes and the holes immediately closed, or it may be injected into the soil by means of a syringe.

It is presumed that the disease referred to is what is known as the damping-off fungus (*Pythium de baryanum*.) It is a disease of seedlings which is characterized by the falling over and dying of the plantlets, due to the destruction of the tissue of the stem just above the ground. The disease occurs most frequently where the ground is very wet and the light dull. The fungus may be held in check by locating the seed beds where the drainage is good, and where a fair amount of sunshine and ventilation may be allowed. See that the seedlings are not crowded. Where the seed beds are not so located, and the disease appears, it is difficult to treat. Hot sand sifted

over the plants will check it, but there is no complete remedy. As soon as the disease appears, give more air, and prick out the plants.

Planting Asparagus

I sowed some asparagus seed last spring. Can the young plants be transplanted this fall, and how should it be done?—C. R., Antigonish Co., N. S.

It should make but little difference whether asparagus is planted in spring or fall, provided the roots are in proper condition and have been allowed to complete their season's growth. If planted in fall, it should be done late in September or the first of October. As the plants will be less than one year old, it probably would be advisable to plant them closer than usual in the rows so as to insure the chances of a better and surer stand. The customary distance is three or four feet apart. Set the plants four or five inches deep. If the crowns are much less than four inches below the surface they may be injured if the ground is harrowed or hoed before the plants sprout in spring.

Poison Ivy

I have a patch of poison ivy, about 20 feet square, in a wood lot. How can I get rid of it?—B. C., York Co., Ont.

About the only way to get rid of poison ivy in a woodlot is to grub, or dig it out, protecting the hands with leather mits or gloves. In a patch that is only twenty feet square, it should not be a difficult job. You might try spraying with sulphate of iron—two pounds to one gallon of water, or even one pound to a gallon, might answer.

Harvesting Cauliflower

J. N. Watts, Portsmouth, Ont.

When the young flowers begin to show themselves they must be covered up by using the outside leaves or by tying until they have attained the size for market.

Should the crop not be all sold before the weather becomes too cold to make any more cauliflower, they may be pulled and stood on a cellar or roothouse floor, until as late as January, when good money can be realized for them.

Never handle tomatoes when they are wet with rain or dew.

Do not let the boys kill the toads. They kill thousands of insects during the summer.