

AGRICULTURE

Hints Given On Spraying For Late Blight Of Potatoes

Started When Plants Are Six To Eight Inches High.

By R. R. HURST,
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As a general rule spraying to prevent late blight should be started when the plants are six to eight inches high and repeated at intervals of two weeks. Four applications are considered sufficient in Canada, except in the Maritime Provinces where it may be necessary to spray at ten-day intervals, repeating five or six times for Irish Cobblers, and six to eight times for Green Mountains. Before the spraying season begins, go carefully over the sprayer, checking up on such items as pump packing, hose connections, rust accumulations in the nozzles, cracked fittings, etc., and replace useless discs with new ones. Remember also to clean out the sprayer thoroughly before putting it away for the winter.

Power sprayers apply approximately 80 gallons per acre. If hand sprayers are used it is advisable to give the field two sprays in opposite directions on each occasion, the second application being made as soon as the first is dry. In this way about 80 gallons of spray will be used per acre. Lighter applications than this will probably prove disappointing. The spray machine should be driven slowly at all times, particularly hand powered outfits.

The spray most commonly used is known as Bordeaux mixture and is made up as follows: Copper sulphate (bluestone), four pounds; lime (hydrated or properly slaked stone lime), four pounds; water, 40 gallons. To obtain the best possible solution the lime and bluestone are first dissolved separately in water and the two solutions mixed together in the most dilute form possible, otherwise a heavy precipitate will form and clog the nozzles. The Division of Botany of the Dominion Experimental Farms recommends the preparation of Bordeaux mixture from "stock solutions." Farmers and gardeners, therefore, who are not familiar with this method should enquire about it at the nearest Dominion Laboratory of Plant Pathology.

For best results spray applications should be made with three nozzles to each row, one to direct the spray downward upon the tops of the plants, the other two being arranged so as to have the spray directed upwards to cover the lower surfaces of the leaves. It must be understood that success in spraying cannot be realized unless the leaves are completely coated with the spray, and in order to make this possible it is necessary to maintain high pressure and pay careful attention to the boom and nozzle adjustments. Some spray outfits have a tendency to lose pressure at the end of the rows, but this objection may be effectively overcome by skipping every four rows going one way and spraying them on the return trip, for by doing this the sprayer covers sufficient distance on the turn to maintain the required pressure.

LORRIES FOR SOUTH AFRICA

Cape Town.—Germany shares with Britain an order for 99 new lorries, costing £118,828 (\$594,140), which has been placed by the South African Railway Administration.

Forty-eight lorries are to be of German manufacture and 51 are to be British.

THE AGRICULTURAL FAIR

Since the dawn of civilization, the agricultural fair has been regarded as a big social asset, a factor quite apart from the facilities for trade and barter and the enlarged educational outlook consequent on the new things seen and heard.

Modern invention may claim to have displaced many methods of an older generation, but the radio, the telegraph, the motor car and every other modern invention seem merely to have conspired to solidify the wisdom of the ancients in providing the thrill of an ever-widening social circle and the opportunity for a generous education through personal experience in the agricultural fairs of today.

Some Points To Be Given Attention to Regarding Plants

Enough Water and Air Are Main Requirements For Growth.

By Press and Publicity Division,
Department of Agriculture,
Ottawa, Ontario.

In the management of plants in the home there are many points that call for attention. Sometimes a plant does not grow well because of lack of food. In that case, so long as the roots have not become bound there is no need to re-pot the plant. Indeed, re-potting would cause a needless check to its growth, and the best thing to do is to scrape away the surface soil down to the roots and replace by a rich soil containing 25 per cent. of ground bone.

Correct watering is also an important procedure. Provided the plants have proper drainage, water should be applied until it runs through the bottom of the pot. Too frequent watering is often a cause of non-success because the water wets the soil so much that the air cannot pass through the mold or earth. To provide proper drainage, the hole at the bottom of the pot must not be clogged up. Small pots need not have the hole shielded at all, but larger pots, say, all pots over four inches wide at the top, require pieces of broken pots or pebbles placed in the bottom and covered with rough sod or other material to prevent the soil from washing down and choking the ventilation by filling up the spaces between the broken pieces.

Air in the average home is usually dry, a condition particularly inviting to the red spider. Dryness may be decreased by evaporating water in the room and by syringing the foliage of the plants on bright days. Thick-leaved plants may be sponged with water containing whale oil soap. On pleasant days, the plants should get as much air as possible. At night plants do best in a temperature ten to 15 degrees lower than they need during the day. Most species used as house plants require no more than 50 or 55 degrees F. during the night and they will not suffer injury if the thermometer falls to 40, although such a temperature maintained over a long period of time would check growth.

Apple juice is probably the most readily available raw material for vinegar making in most parts of Canada, and cider vinegar is, therefore, more widely made in the home than other kinds.

Pod Spot Disease Of Beans Widely Known In Canada

Caused by Fungus Attacking Pods, Stems and Leaves.

By R. R. HURST,
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Bean anthracnose, or pod spot, is widely distributed in Canada. It occurs upon field and garden varieties and is caused by a fungus which attacks pods, stems and leaves. The most conspicuous symptoms are the small, brownish or purplish, eventually dark and sunken spots on the pods. These spots frequently join together and form irregular sunken areas. In these spots the fungus produces thousands of spores which stick together when dry but separate when wet. Usually the fungus penetrates the pods down to the seeds causing their infection.

The Division of Botany, of the Dominion Experimental Farms, recommends crop rotation, good drainage and weed eradication as safety measures to reduce the severity of anthracnose. It is important to avoid cultivating, working among or picking the beans during wet weather, for this disperses the spores from plant to plant and sets up new centres of infection.

In attempting to control this disease first emphasis must be placed on the production or use of anthracnose-free seed as follows: Sort out the diseased pods by hand picking; select seed from anthracnose-free pods and maintain a seed plot for the production of disease-free seed; procure seed from localities in which anthracnose does not occur. Bear in mind also that it is highly important to plant the beans sufficiently far from infested fields to prevent contamination by spores carried over by the wind.

Seed treatment has not proved satisfactory, simply because the chemicals used for this purpose impair germination and do not penetrate the seed sufficiently to destroy the parasite. Spraying with Bordeaux mixture provides a fair measure of control provided the applications are begun soon after the plants have appeared above ground and continued at intervals of ten days until the pods are formed.

Useful Household And Farm Spray Quite Easily Made

Pyrethrum Insect Powder and Kerosene Are the Only Ingredients Necessary.

By Press and Publicity Division,
Department of Agriculture,
Ottawa, Ontario.

A very useful spray for destroying insects in dwellings and farm buildings may be easily and cheaply made from pyrethrum insect powder and kerosene. According to the directions of the Entomological Branch of the Dominion Department of Agriculture the spray is prepared by adding one-half pound of pyrethrum to one gallon of kerosene, allowing the mixture to stand and agitating it at intervals over a period of about two hours, or longer, thus ensuring that practically all the active principle of the pyrethrum is dissolved. The residue of the pyrethrum settles to the bottom of the vessel as a brown sediment, and the clear liquid, which is pale lemon-yellow in



NEW BRUNSWICK Woods Closed

FOREST TRAVEL PERMITS ARE CANCELLED, AND NO MORE WILL BE ISSUED UNTIL THE FOREST FIRE MENACE IS RELIEVED.

Under authority vested in the Minister of Lands and Mines, all Forest Travel is hereby prohibited, and all Forest Travel Permits are hereby cancelled until further notice. This action is made necessary by the seriousness of the forest fire hazard. Due to the very dry conditions prevailing for some weeks fires already started have burned into the soil making it difficult to fully extinguish them. Every precaution must be taken to prevent further outbreaks. Violators of this order are subject to immediate arrest by fire wardens, or other officers in accordance with the regulations of the Forest Fires Act.

F. W. PIRIE,
Minister of Lands and Mines.

August 15, 1935.
Department of Lands and Mines,
Fredericton, N. B.

color, may either be syphoned or filtered off.

When the spray is required for use in farm buildings, it may be prepared satisfactorily with ordinary kerosene and it is unnecessary to add any other chemicals. For household use, however, to remove any possibility of staining fabrics or furniture, water-white kerosene should be used, and, in order to impart a pleasant odor, methyl salicylate or oil of sassafras may be added at the rate of two or three fluid ounces to each gallon. The spray should be kept in a tightly corked container to prevent it deteriorating in strength, as the active principle of pyrethrum easily evaporates. For use against bedbugs the addition of about one-half pint of cresol to each gallon of spray increases its effectiveness. The spray should be applied in the form of a fine mist by means of a small hand sprayer.

There are a number of proprietary fly sprays on the market similar in composition to the one described above, which may be substituted for it by those who wish to avoid the trouble of preparing their own spray material.

Three Big Parties Now In Contest For Federal Seats

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It would be hard to convince Liberals that Stevens has any chance. Rt. Hon. W. L. Mackenzie King, in his air speeches, devoted much time to the third party and warned his hearers against the new trend and advised them to stick to either the Liberals or the Conservatives.

Rt. Hon. R. B. Bennett, in his radio addresses, stole much of the Grit thunder and the two older parties seem to be closer together than ever before. It would appear that the suggestion of Mr. Bennett for a national government might have some weight with the Liberals after all, but the Grits will not support the idea unless they see a possibility of Stevens gaining too much strength. Just at present the Liberals are counting on a federal victory in spite of all opposition.

In any case Stevens has made a stir in politics and the Reconstruction party is now reckoned in with the Liberals and Conservatives, as one of the big parties. Still Stevens has much to catch the popular fancy. Many people

are heard to remark that they have little to hope for from either the Liberals or Conservatives and that things could not be any worse under Stevens, so they give thought to voting for the Reconstruction party.

It will be hard to root out the Grit and Tory ideas, but stranger things than that have happened in politics and the ideals of Mr. Stevens may take with the people better than the ideals of Mr. Bennett and Mr. King. At any rate it looks like an interesting campaign and when the votes are counted on the evening of October 14, more will be known of the strength of the different parties.

Canada's New Deal Plans Are Being Put In Operation

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discounts, rebates, etc.—are now in force.

Many enquiries have been received from business men as to the method of enforcement. In point of fact, the Dominion Government does nothing to enforce the Criminal Code. The Code is the law of the land. Anybody can go to a magistrate and swear out a charge against a citizen for an infraction of this law. As a rule, enforcement devolves largely upon provincial attorneys-general, though police authorities in suppressing crime rely largely upon it.

The director of public prosecutions, who will be appointed under the Trade and Industry Commission Act, may initiate prosecutions, if occasion warrants, under the Code but unless the police authorities, the provinces or ordinary citizens seek to enforce these two sections they will probably become dead letters on the statute books, just as are scores of other sections in the Code.

Companies Act—Amendments to this act are to be made effective on September 15. The law provided that the amendments were to be brought into force, in whole or in part, upon proclamation. It was believed, from the wording of this provision, that the Government proposed to proceed cautiously and apply some of the new provisions in advance of others. The whole of the amendments, however, now stand proclaimed as of September 15.

Employment Insurance—The insurance commission is now in operation.—Financial Post.