



SPRAYING ORCHARDS.

Coddling Moth and Woolly Aphis—A Spraying Outfit Described.

F. L. Washburn, entomologist of the Oregon experiment station, after three years' observation on the habits of the coddling moth, expresses the belief that orchardists begin to spray too early for this pest and names as the time for the first spraying just after the blossoms have fallen. At the Oregon station, where the several insecticides have been tested, the combination that gave best satisfaction consisted of a pound of IXL (a comparatively new insecticide) to every 10 gallons of water, and to this paris green added in the proportions of a pound to every 200 gallons of liquid. About 15 pounds of whale oil soap (soft soap) was added to pieces about the size of a hen's egg and sufficient hot water poured on to cover it. It was then added to the water, as well as the soap, which latter had first been thoroughly dissolved. The paris green was then added and the mixture kept stirred when spraying. It has been found expedient to mix the paris green with a small amount of water first and then pour the creamy mass into the spraying liquid. The spraying of apple trees began with the dropping of the blossoms; then three weeks were allowed between the second and third sprayings unless a heavy rain followed immediately after the application.



A SPRAYING OUTFIT.

While not indorsing all that the manufacturers of IXL claim for it, Mr. Washburn reports that in addition to its effectiveness in checking the coddling moth it also kept in check the woolly aphis and apple scab on trees that were thoroughly sprayed. Bending the trees with a strip of burlap proved a valuable adjunct to spraying. The bands are examined every few days and the larvae found beneath killed. The cost of treatment per tree with the mixture described is 7 cents, including labor and material.

In the cut here reproduced from the station bulletin is shown the outfit used. It consists of a galvanized iron tank capable of holding about 100 gallons, fastened to a frame made of 2 by 19 planks, which in turn is hooked onto a wagon bed. When it is necessary to use a warm solution, a sheet iron stove is fitted under the tank, its door flush with the rear end. The smokestack from this runs forward below the tank, out through a hole in the frame at the anterior end, and ends in an upright piece about 5 feet long (shown in plate). A pump No. 5 was used. Its receiving hose screws onto a faucet leading from the anterior end of tank, and its two pieces of discharge hose are connected with bamboo extensions, as shown in cut.

A wooden cover fits tightly onto the tank, in the center of which is a wide slit 2 feet long, through which a paddle is inserted and the liquid kept stirred while being sprayed. A good and cheap improvement on this method of stirring is to have a series of paddles hung from the cover, all worked by a lever which the driver could occasionally push back and forth. When not in use, this tank fits into a brick furnace and is used for superheating any insecticide which requires heat. A desirable addition is a tackle to hoist the tank when full from off the furnace and to roll it onto the wagon bed.

Notes For Bean Growers.

About a bushel of seed will plant an acre, dropping four to six in a hill. Of course the variety and size govern the quantity required. With a modern planter 10 to 12 acres can be planted in a day. The best planters leave a slight ridge over the seed. This permits early cultivation without injury to the young plants.

It is best to finish the cultivation by the time the first blossoms appear and the vines cover the ground. A crop of beans can sometimes be raised after the removal of a crop of hay, but there is danger of frost overtaking a late planting. Spring grain usually follows beans; then wheat, then grass and beans again. Wheat may follow beans, especially the pea variety, which ripens early.

Of varieties, the whites are most certain to be in demand. Of the whites, the mediums and the peas have proved to thrive best on moderately fertile soil and are less liable than the large marrows to damage from rain and frost.

Growing beans is somewhat of a local trade. Very few farmers less than 25 miles south of the bean growing section of northwestern New York have ever such a bean planter or harrow. Although they do better wheat land, they cannot grow beans, writes a western New York bean grower in The Farm Journal.

Fishing Land.

Among new ideas in farming is a point in corn culture that is being worked out by the leading farmers in some parts of Ohio and Iowa. An Iowa farmer tells in The Country Gentleman of farmers who take the clean corn land and remove as much of the litter as possible; then put on disk harrows and thoroughly work up the surface about three times before being the usual amount of work on a corn field. One man, in speaking of his trial of this plan last year, said he could tell to the row where he ceased plowing and began with the disk harrow, the corn on the latter ground being so much larger.

Get rid of your indigestion before the threatened outbreak of cholera. K. D. C. will cure the worst form of indigestion. It will prevent cholera.



LAWNS AND WALKS.

How to Keep Them Free From Annual, Biennial and Perennial Weeds.

Intensive cultivation allows no weeds to appear, but then comparatively few persons practice it. Annual weeds die after the season's growth and require no special treatment. The biennial species may be held in check by preventing them from seeding, as by mowing them when coming into flower. The perennial species, which live indefinitely, often require particular treatment.

Weeds in lawns are to be prevented by a liberal use of commercial manures and clean grass seed sown thickly. Fortunately grass can stand more cutting than weeds, and therefore most perennial weeds may be kept down by frequent mowings with a good lawn mower. Those that do not succumb to this frequent cutting must be cut off below the surface with a spud and the crowns pulled out, or a little oil of vitriol may be poured upon the crown of each plant.

Walks ought to be made so that weeds cannot grow in them. Professor L. H. Bailey tells in the "Horticulturist's Rule-book" that this can be done by making a deep stone foundation and then filling in between the stones with cinders, coal ashes and other similar materials. But when weeds become established they can be destroyed with hot brine applied with a watering pot. Another remedy consists in sprinkling the walks with carbolic acid solution in the proportions of one ounce of acid to a gallon of water. This will also destroy ants.

Care of Bees.

At a meeting of Massachusetts horticulturists M. H. Walsh gave his plan of treatment for hybrid perpetual roses. He said:

I find syringing twice a week very beneficial after the leaves put out. This is done in the late afternoon or evening. As soon as the leaves begin to show I give all the plants a liberal dusting of white hellebore. I have to apply it twice during the season.

I keep a sharp lookout for mildew and apply sulphur on the diseased branches. In England they use sulphate of potassium—1 ounce dissolved in 4 gallons of water—syringing the plants with the same, which is quite as effective as sulphur and not so unsightly. I shall try this solution the coming spring should occasion require. For green fly I use a solution of whale oil soap.

When the buds are just beginning to show, I water with liquid manure from the barn collar and repeat it when the buds have fully formed, also just before they begin to open. As soon as the buds are large enough I disbud where I want fine flowers, leaving only one bud on each flower shoot. After flowering—about the 15th to the 15th of July—I prune all the vigorous growing varieties, such as Paul Neyron, Antoine Mouton, Alfred Cochet, Ulrich Brunner, Gloire Lyonnaise, Louis Van Houtte and Anna de Diesbach, cutting out most of the old wood that has flowered. Then I sow some guano, rich in ammonia, and fork it in. They will then make a fine growth and produce nice flowers in September and until frost comes.

A Valuable Oriental Plum.

The handsome plum depicted in the cut was imported from Japan by Luther Burbank of California in 1885 with a lot of other seedlings. As it proved superior to many of the named kinds upon coming to fruiting age, samples were sent to Pomologist Van Daman of the agricultural department at Washington, who christened it in honor of the introducer.



THE BURBANK PLUM.

The fruit, which is of medium size and of dark red color, carries remarkably well and therefore seems adapted for market. The flesh is of an amber hue, juicy and of flavor resembling other Japanese plums. The tree has proved as early as far north as Geneva, N. Y., where the specimen here illustrated was grown.

Double Petunias.

One of the charms of the double petunia is perhaps found in the fringed or lacinated edges of the petals, and it is something to rejoice over that this character seems in no danger of being eliminated. There are two double varieties of petunias which have in market flower producing establishments become exceedingly popular. These are the pure white and the rose. There are either several varieties nearly identical or else the same sorts have got into commerce under diverse names. All the varieties are easily propagated. Some of the petunias do well as trellis plants.

Pear Orchards.

At a meeting of the Western New York Horticultural society the fact was brought out in a discussion that but few pear orchards have done well in fruit yield when only one kind was grown by reason of imperfect pollination. Setting several different kinds obviates this difficulty.

Minard's Lament Cures La Grippe.

Small doctors' bills—Williams' Royal Crown Remedy and Pills. Get Williams'.

LEGAL QUERIES.

ADOPTED DAUGHTER.—A farmer takes an orphan girl to raise when 11 years old, she remains till she is 21, then marries, is he obliged to give her anything? Ans.—No.

MILDMAY.—A line fence has been in position for fifteen years. The line being run, and being about three feet in on B, and A move the fence, it being his part, if B is not willing? Ans.—No.

INGLEWOOD.—Is a farm laborer when driving a team obliged to work only ten hours a day and take care of his team? Ans.—He has no regular hours and must work as may be necessary.

SON.—Has a farmer's son, after he is of age, a right to use a horse and buggy occasionally even if his father objects? Ans.—He has no legal right if the father objects, but he has a clear moral right if he does not.

MARCUS.—A farmer's son leaves home when a boy and returns after he is of age, remains, by his parents' request, several years, then wishes to leave again, can he secure compensation for his work? Ans.—No; there must have been an agreement for compensation.

DRAIN.—Can I be stopped from draining water into a ditch by the council and four or five interested farmers, and is an outlet for me to drain into? One of the farmers has notified me not to drain into it. Ans.—You can't be stopped on the fact stated, but if necessary to charge the ditch you may have to contribute.

PARKMAN.—A rents a farm to B for five years, and by the lease B, at the end of the term, to leave five acres of summer fallow, or eight acres fit for fallow. If B does not leave the summer fallow, in what condition should he leave the eight acres? Ans.—The words used are capable of raising a dispute as to the meaning to be assigned to them. In our opinion the eight acres should be plowed and ready to be sown.

CRONK.—Can a superannuated minister make over his allowance to another minister and then make an assignment; or would the other creditors be entitled to a claim? The ministers tell me there is no law can touch them. Ans.—The superannuation allowance is a gratuity and cannot be assigned to another or attached by creditors. If it is made by deed, it is a gift and he cannot assign it. We assume that the minister has no absolute right to the allowance which he could enforce in a court of law. If he has such right, which depends upon the special facts of his case, his assignment might be set aside as a fraud upon his creditors.

ADMINISTRATION.—Is an administrator liable to be sued in a division court for money held by him for years, belonging to friends? Ans.—Yes, if otherwise without the jurisdiction of the court. 2. Can he set apart money in his possession to friends in their goods who left no will, no debt, no issue? Ans.—No. 3. What Government was in power in this Province when the wonderful Limitation Act was placed on the statute book, that is, if a man is in possession of any portion of his neighbor's farm for ten years that he becomes the real owner of it after that? Ans.—The act you refer to is generally considered to be a very beneficial one. It was passed in 1874, since Sir Oliver Mowat has been Premier of Ontario.

The following letter was received by the Isaac Williams Company this morning. It shows how this wonderful remedy is esteemed wherever known.

SHERMAN CITY, June 21, 1893.

Isaac Williams Company, London, Canada.

Dear Sirs,—If any firm on this side of the line handles your "Royal Crown Remedy," will you please send me the proper address, for I wish to obtain a quantity of your Remedies. Many persons about this vicinity, I believe, would be either cured or benefited by their use and I am sure much of it for you here. If I had can sell much of it for you here. I have given up this matter at once, because I may live until we can obtain a supply. Yours in haste,

JOHN A. MORDEN.

Sherman City, Mich., U. S. A. It is only justice to Royal Crown Remedy to say it has already saved the lives and restored to perfect health hundreds of people given up to their physicians, and that the manufacturers are sending this wonderful remedy to all parts of America and who has not heard of the wonderful cure of Mr. John Weir, of London town.

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Nothing impure or injurious contaminates the popular antidote to pain, throat and lung remedy and general corrective, Dr. Thomas' Electric Oil. It may be used without the slightest apprehension of any other than salutary consequences. Coughs, rheumatism, carache, bruises, cuts and sores succumb to its action.

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Caution.—If you desire to retain your nervousness and ill-health, do not use South American Nervine, as it is an absolute cure.

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