

which can be profitably spent in the garden, when it is not worth while going to the field.

When and What to Spray

L. Caezar, O.A.C., Guelph, Ont.

Every pear and apple orchard should be sprayed three times each year and in some years four times as follows:

(1) Shortly before, or as the leaf buds are bursting. Use lime-sulphur, either commercial or home-made, corresponding to the strength of the commercial diluted 1 gal. to 10 gals. with water. No poison as a rule is necessary. This application kills San Jose Scale, Oyster-shell Scale and Winter Mite, and helps ward off Cankers and Apple and Pear Scab.

(2) Just before the blossoms burst. Use commercial lime-sulphur diluted 1 to 30 or 35, or Bordeaux mixture (4:40), and 3 lbs. arsenate of lead to each 40 gals. This application is to destroy all early feeding caterpillars, such as Tent-caterpillars, Cane-bearers, Canker Worms, and Bud Moths, and to help against Apple and Pear Scab and Cankers.

(3) Immediately after the blossoms fall. Use the same mixtures as for No. 2, but the lime-sulphur need not be stronger than 1 to 40 or the Bordeaux than 3:3:40. This application is chiefly to control Codling Moth and Apple and Pear Scab, but also helps greatly against Lesser Apple Worm and Pear Curculio.

(4) If a fourth application is given it should be about three weeks after the blossoms fall and with the same mixtures as in No. 2, except that if the season is dry the fungicide may sometimes be omitted. This application assists in holding the Codling Moth in check in the warmer part of the province and in moist climates is often necessary for the thorough control of the Apple Scab. Thoroughness is essential.

Horticultural Notes

A syndicate capitalized in England, has representatives in Prince Edward Co., Ont., bargaining with farmers for the control of their orchards up to a 10 year lease basis. The work of caring for the orchards will be carried forward in the most progressive and up-to-date way, and the work will be a good object lesson for Prince Edward County fruit growers.

A charter has recently been granted to a corporation known as the Brant Fruit Growers' Association. The charter members of this association are farmers in the neighborhood of Burford, Ont. The object of the association is the co-operative packing and marketing of fruit, vegetables, and all products of the farm. Its operations at present, however, will be restricted largely to fruit, and the association will be operated along similar lines to the Norfolk Fruit Growers' Association.

I must congratulate Farm and Dairy on the fine Horticultural Number of March 2nd.—Wm. Barnett, Wellington Co., Ont.

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J. H. RUTHERFORD,

POULTRY YARD

The Setting Hen

C. E. Brown, University of Minnesota

We believe a great deal of the so-called trouble with sitting hens is that we do not understand them or have not the patience or perseverance necessary for success. The hen should be moved to a quiet place, preferably in the evening, where a good, roomy nest has been prepared by making a box at least 14 inches square and six inches deep. This box should be filled with earth to within two inches of the top and a place hollowed out and lined with a little chaff or straw and then the hen should be placed on some stale or china eggs for a day or so until she takes kindly to her nest surroundings, when the good eggs should be given her. She should be thoroughly dusted with sulphur or other insect



A Re-Modelled Open Air Colony House

Prof. W. E. Graham of the Ontario Agricultural College having obtained splendid results from the wide open front, cold air poultry house has remodelled several of his colony houses so as to embody this feature. The front half of the structure as here shown is the addition to the old style colony house.

powder at least twice during the hatch, as a lousy hen will never make a good sitter.

Another very important point is the selection of a healthy hen. A fowl with a weak constitution will not have the proper temperature for a successful hatch. She will be restless and probably leave the nest before the hatch comes off. When the hen is confined in a box she should be let off once a day to feed and dust herself. If, however, she is in a good, roomy pen by herself she could have food, water and a dust box before her at all times, thus saving a lot of care and attention.

Points on Brooders

Do not put too many chicks into one lunch.

Clean the brooders and brood coop often, keeping it dry and in a sanitary condition.

Don't overlook the fact that ventilation is necessary in the brooder. But it must not be supplied in the way of a draft on the chicks.

Regulate the heat in your brooder more by the action of the chicks than by the temperature of the brooder.

Have a regular time to attend to the incubator and brooder and the work will not be so easily forgotten.

The drinking water should be arranged in the brooding pens so the little chicks can not get into it with their feet.

By leaving off the oil cap to the incubator and brooder lamp you will never be troubled by the lamp glass climbing.

Perfectly clean hands are necessary when turning the eggs. Don't fill the

lamp and trim the wick first. Always go with clean hands, attending to turning the eggs first.

See that the lamp box of the brooder has plenty of fresh air, but not in the way of drafts, as they are liable to blow out the flame. A stuffy box without ventilation is liable to be a fire trap.

Pointers on Natural Incubation

Mrs. Jno. Roseborough, Brant Co., Ont.

The eggs intended to be incubated should be kept at a rather cool temperature, from 50 to 60 degrees. It is not advisable to keep them longer than two weeks before being incubated, and the fresher they are when set the better the chances of a good hatch and strong chicks. Only well formed eggs with good strong shells should be set.

Never put any more eggs under a hen than she can cover nicely; in cold weather put less than in warm weather. Always test the eggs from a hen the sixth or seventh day, and when the good eggs will have more chance of being kept covered by the hens.

When Hens Lay.—Professor Graham has found that hens that lay well in the winter will continue to lay well during the summer, and that if they do not lay well during the winter, they prove to be indifferent layers later on in the season. He affirms that if a hen does not lay in the winter time, the eggs she might have laid will never be received later on in the year, or in other words, if a hen does not lay when she should, you never get the eggs. These facts

are true of the general utility breeds, but would not apply to the same extent in connection with hens of the Mediterranean breeds.

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