



THE MAN ON THE LAND

Take a Note of these Talks:

- 1YA: *Milking Shed Equipment, from the Dairy Division; and Farm Shelter, by P. S. Syme, Instructor in Agriculture, Warkworth. Monday, August 13, at 7.30 p.m. and 7.40 p.m.*
- 2YC: *Diversification of Farm Production, from the Department of Agriculture, on Tuesday, August 15, at 7.30 p.m.*
- 3YA: *History of Implements, by M. Meyer and D. Partridge, under the auspices of the Federation of Young Farmers' Clubs, on Thursday, August 17, at 7.35 p.m.*
The Fertiliser Act, from the Department of Agriculture, on Friday, August 18, at 7.35 p.m.
- 4YA: *Equipment for the Supplying Dairy, from the Dairy Division, on Monday, August 14, at 7.30 p.m.*
- 4ZB: *The Man on the Land Session. Mondays and Thursdays, at 12.30 p.m.*
- 2ZA: *Young Farmers' Club Session. Tuesday, August 15, 9 p.m.*

Fruit Trees

Two or three weeks ago the Gardening Expert of 1YA broadcast a talk on "The Spraying of Fruit Trees." Since it was delivered the Station Director has had so many requests, both over the telephone and in writing, for a copy of the talk, that we now make the first portion of it available in print. We regret that we cannot print the talk in full, but the part we have given contains information that the average fruit-grower will not find easy to obtain elsewhere.

Fungicides and insecticides, whether applied in liquid or powder form, to fulfil all requirements must be: first, capable of destroying the parasite; second, non-injurious to the plant; third, easy to apply; fourth, easy to prepare; fifth, reasonable in cost. Dusting for the control of fungi and insects has not been to any extent practised commercially in New Zealand, so that no data can be given as to its utility, but from the results obtained by experimentalists in North America and Australia, it would appear as if dusting will shortly be the principal method adopted for the control of fungus diseases and insect pests. The principal defects of the system at present appear to be in the apparatus used, and the fact that the best of the dust materials experimented with do not possess the fungicidal value of the best sprays, such as Bordeaux mixture, and in the case of insect pests, efficient contact dust is yet to be definitely approved. The advantages of dusting may be summarised as follows:—

1. Initial cost of the apparatus is about half that of spray apparatus.
2. The upkeep of the apparatus is much less.

3. It takes less than half the time to dust an orchard than it does to spray it.
4. The apparatus weighs much less, consequently it may be used on land that would be impassable to the spray outfit.
5. No water is required, a big factor in its favour, especially where water is scarce.
6. Takes less time to fill the apparatus.
7. Dusting may be performed at any time, whether the trees are wet or dry.
8. There is little or no deterioration of the dust in storage.
9. Dusting causes little inconvenience in handling.

American experiments have shown that where sprays are supplied up to the time of blossoming dusting with sulphur-arsenate of lead powder will readily hold in check black spot, leaf-curl, brown rot, codlin moth, and other chewing insects. In fact, it



HON. W. LEE MARTIN, Minister of Agriculture:
Sponsored an interesting film

is as good as, if not better than, the dual spray, lime-sulphur, and arsenate of lead. One of the great advantages of the method is the speed with which the orchard can be covered, partly owing to the light draught of the apparatus, partly to the speed with which the apparatus may be recharged, and largely because no stoppages are required, for the apparatus may be taken down one row and up the next. Although dust materials cost more than sprays, the speed with which the operation may be carried out

more than counter-balances the initial extra cost by the time saved. It must be stated that the process has not yet passed the experimental stage, but the results obtained certainly justify investigation under New Zealand conditions.

Useful Formulae

Numerous commercial dusts are on the market, but for the fruitgrower who is desirous of making his own, the following formulae are given:

Sulphur, arsenate of lead powder, 90-10 formula.

Finely ground sulphur: 90 parts, arsenate of lead powder, 10 parts.

It is necessary that the materials be so finely ground as to pass through a sieve having 200 meshes to the inch. This formula may be used as a dual dust for the control of codlin-moth and black spot, or on peaches for brown rot and caterpillars. It is advisable to spray until after the petals have fallen, when the dust may be used in place of the lime-sulphur sprays, if applied at the same times. It is claimed that this dust tends to prevent transit or store infection from brown rot.

A second formula is Sanders' Bordeaux dust formula 15-8-77. Dehydrated copper sulphate 15 parts, Calcium arsenate 8 parts, dehydrated lime 77 parts.

It is claimed that this is equal to Bordeaux mixture for the control of black spot. It is necessary to warn the orchardist that any of these substances should first be experimented with in a small way, for where too much is applied to a tree, severe leaf scorch and fruit cracking may result.

Clover Mysteries

How much do you know about clover—in addition to its trick of "blowing" stock when they treat it with too little respect? You know of course that it is good fodder for sheep, cows, horses, and pigs, a friend to bees, and a stimulator of superstition when it loses the count of its leaves.

But if you have seen the film made recently by the Department of Agriculture you will never again look at a paddock of clover without seeing wheels and chimney-stacks and hobgoblins. The wheels and chimney-stacks are the desperate device of chemists in other lands to produce what clover gives New Zealand without all that bother; but the hobgoblins will interest you.

The film was shown recently in the Tivoli Theatre, Wellington, to an audience assembled by the courtesy of the Minister, the Hon. W. Lee Martin, and if the attention of the guests means anything, it will be a very popular film when it goes on tour. It was encouraging to see so many members of Parliament present, and to note that the Minister's guests included pressmen and representatives of the business side of farming.