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Circular of Information No. 162

December, 1936

GOOSEBERRY AND CURRANT DISEASES

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The two diseases of most importance on gooseberries and currants are powdery mildew and leaf spot. There are other minor diseases, but usually they cause no serious trouble. Powdery mildew is more serious on gooseberry than on currant while leaf spot may cause considerable damage to both fruits.

Powdery Mildew

On the gooseberry this fungus appears as a white, powdery growth on the surface of leaves, green shoots and particularly the fruits. The latter are conspicuously stunted and the white covering changes before the fruit is mature to a brown coating which renders the berries unmarketable. On the current the mildew is mostly confined to the leaves.

Control Measures:

The most effective remedy for powdery mildew on gooseberries is lime-sulfur spray. The following schedule is recommended.

- 1. Late Dormant Spray. Lime-sulfur 1 to 30. Apply in late dormancy just before the buds open. (If dry lime-sulfur is used, employ at the rate of 4 pounds to 30 gallons of water.)
- 2. Pre-blossom Spray. Lime-sulfur 1 to 40. Apply just as blossoms are ready to open but before more than 10 per cent of them have opened. (With dry lime-sulfur use 4 pounds to 40 gallons.)
- 3. After-blossom Spray. Repeat, if necessary, using about the same strength, when 90 per cent of the blossoms are set. (At this time, if the weather is warm, a fine dusting sulfur may be used instead of the liquid spray.)

Caution:

If the berries are to go to the cannery the third application should be omitted since no sulfur can be tolerated on canning stock because of its harmful effect on tin cans. However, if the berries are not to be canned, this third spray is very effective in controlling any mildew which may have escaped the first two sprays.

Leaf Spot

The leaf spot (Anthracnose) appears as small dead spots on either gooseberry or current leaves. When severe this disease may result in yellowing and dropping of the foliage in mid-season, greatly reducing the vitality, growth, and produc-

tiveness of the plants. Current fruits also may be spotted by the disease. The disease is caused by a fungus which over-winters on the dead fallen leaves.

Control measures consist of (1) destroying or plowing under the old leaves before blossoming time, and (2) spraying. Bordeaux is more effective than lime-sulfur for leaf spot. The following spray program is suggested when only leaf spot is to be controlled:

- 1. Pre-blossom Spray. Bordeaux 4-4-50. Apply just before blossoming.
- 2. After-blossom Spray. Repeat as soon as fruit is set.
- 3. After Harvest Spray. Apply again just after harvest, if needed. Sometimes this third spray may not be necessary.

Combination Program for Both Mildew and Leaf Spot

Where both mildew and leaf spot are severe, a combination program for both diseases is recommended using lime-sulfur for the earlier sprays, which are directed chiefly at the powdery mildew, and Bordeaux for the later sprays to control leaf spot. The following schedule is suggested.

- 1. Late Dormant Spray. Lime-sulfur 1 to 30. Apply in late dormancy just before the buds open.
- 2. Pre-blossom Spray. Lime-sulfur 1 to 40. Apply just as blossoms are ready to open.
- 3. After-blossom Spray. Bordeaux 4-4-50. Apply just after blossoming.
- 4. After Harvest Spray. Bordeaux 4-4-50. Apply just after harvest.
- Note 1: The Bordeaux spray recommended in the third application is not as effective as lime-sulfur for mildow but is more effective than lime-sulfur for leaf spot. It is recommended for use after blooming on borries intended for the cannery because of the danger from sulfur on cannery stock.
- Note 2: These recommendations are for the average conditions. Unusual cases may require a variation in this program, particularly the application of an additional spray where the disease is severe or not satisfactorily controlled by the earlier sprays. On the other hand, when the attack of leaf spot is mild or when the first three sprays give good control, the fourth or after-harvest application may be omitted.