Loquat diseases: black spot and fleck

R. F. Doepel
LOQUAT DISEASES—BLACK SPOT AND FLECK

By R. F. DOEPEL, B.Sc. (Agric.), Plant Pathologist

Black spot is common on loquats and renders affected fruit unmarketable. Another disfiguring fungal disease, fleck, has also become established in this State. The newer fungicide dodine is recommended for controlling both these diseases.

EXTENSIVE plantings of loquats have not been made in the fruit growing districts of South Western Australia. However, blocks of trees are to be found in a number of orchards and single trees are widely scattered throughout the Metropolitan area.

Black Spot* is a widespread fungal disease both on established varieties and on seedlings, the latter often showing very severe symptoms. Fleck† disease has only been detected within the past three years on nursery stock of loquat, quince and pear (Pyrus calleryana) and in one commercial loquat planting. Little is known locally about the susceptibility of varieties to this disease.

SYMPTOMS

Black Spot
Leaves
Irregular to circular dark green or greenish-black spots which involve both lower and upper leaf surfaces (Fig. 1). Badly affected leaves may become distorted or quilted.

Shoots
Large circular to oval greenish-black spots which develop along the young shoots.

Fruit
Spots are similar in colour to those on leaves and shoots and often spread to cover much of the fruit surface (Fig. 2). Severely affected fruit is not marketable.

Fleck
Leaves
Small reddish-brown spots which may develop a lighter margin and subsequently whitish centres. (Fig. 3.)

Shoots
Elongated spots, reddish-brown in colour which may merge to form a larger discoloured area.

Fruit
Dark reddish brown circular spots which later develop whitish centres. The spots, if numerous, may join together and disfigure most of the fruit surface (Fig. 4).

SURVIVAL OF THE FUNGI

Fallen leaves, infected by the fungi which cause black spot and fleck, may con-

* Spilocaea eriobotryae.
† Fabreae maculata.

Fig. 1.—Leaf spots of the black spot disease. If numerous the spots cause a quilting of the leaf blade.
leaves, shoots and fruit by the fungicide.

(iii) The adoption of such a schedule each winter would be necessary in order to obtain satisfactory control of these diseases.

Hygiene

As a precautionary measure all fallen leaves should be raked up and burnt in the

CONTROL MEASURES

The following measures are recommended for the control of both black spot and fleck:

<table>
<thead>
<tr>
<th>Fungicide</th>
<th>Strength</th>
<th>Spray Schedule</th>
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<tbody>
<tr>
<td>Dodine*</td>
<td>(\frac{3}{4}) lb. - 100 gallons water (= \frac{3}{4}) oz. - 4 gallons water</td>
<td>(a) Pre-bloom</td>
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<tr>
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<td>(b) 14 days later</td>
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<td>(c) 14 days later</td>
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* Dodine is available commercially as "Melprex."

Spraying

NOTE:—

(i) Further applications at 14 day intervals may be necessary if the diseases are well established.

(ii) A suitable wetter-spreader should be added to the spray mixture, at the rate recommended on the container, to ensure adequate coverage of leaves, shoots and fruit by the fungicide.

Fig. 2.—Loquat fruit severely affected by black spot. Much of the fruit surface is covered by the fungus.

Fig. 3.—Numerous spots resulting from leaf infection by the fleck fungus. These are reddish-brown in colour and later develop whitish centres.
autumn. This practice should be repeated periodically throughout the year whenever possible.

Fig. 4.—Typical fruit symptoms of the fleck disease. The spots become darker in colour than the leaf spots but they also develop similar whitish centres.

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