

Materials which have proved satisfactory in preventing black spot are:

### **Bordeaux Mixture**

Bordeaux mixture has been the standard spray for black spot for many years. Applied as a green tip spray on both apples and pears it provides a sound foundation for control and may be followed by any of the materials listed below.

### **Colloidal Copper**

Colloidal copper is quite effective and easier for home gardeners to mix than bordeaux mixture.

### **Captan and Thiram**

Sprays based on captan and thiram are available in packs suitable for home gardeners. They have proved effective against black spot, especially when preceded by a bordeaux or a strong lime sulphur spray at green tip. Captan has proved particularly satisfactory on pears.

### **Lime Sulphur**

As with bordeaux lime sulphur has been in use for many years. The great advantage it has over the other materials mentioned is that it gives a very good control of mildew as well as black spot. With pears this does not matter, as mildew does not affect them.

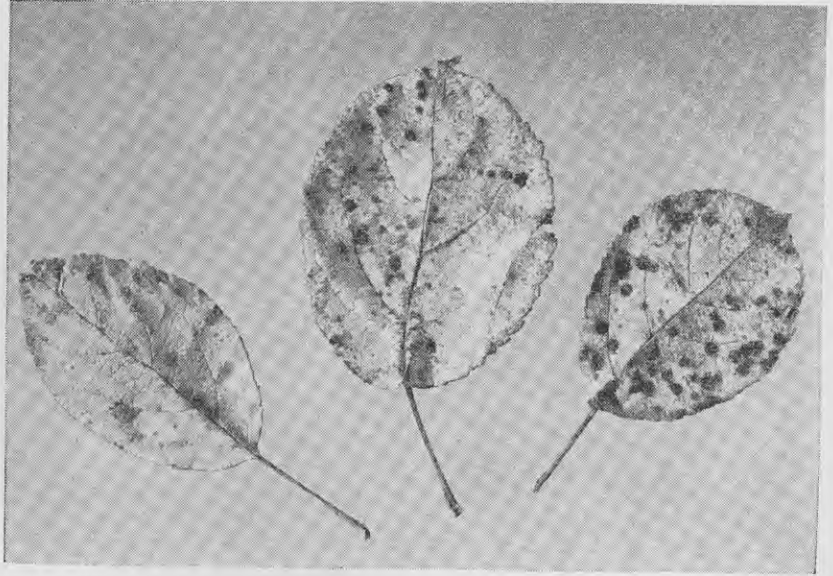
Apples can be very seriously affected, especially in the relatively low rainfall areas such as Central Otago, Canterbury, and Marlborough. Hence the wider range of diseases controlled by lime sulphur well justifies its use. However, it is a harsh spray on foliage and fruit and some russetting may occur, but this does not affect the flavour or, unless severe, the keeping quality of the fruit.

Black spot infection varies between districts and spray programmes must be varied accordingly. Growers who are not sure of the best sprays to use should consult the nearest Horticultural Instructor for more detailed information on control measures.

### **ROUTINE WORK**

In spring precautions should be taken against dry conditions which may develop later in the season. Weeds should be eliminated, as apart from inducing unhygienic conditions they draw heavily on water and nutrients from the soil. In winter this is not important, but when active growth of fruit trees and berry fruits starts in spring the demands made by plants are considerable and competition should be reduced to a minimum. Grass round trees in lawns should be kept well cut.

Mulching will assist in conserving moisture. A 2 or 3 in. layer of organic material such as sawdust, straw, or cut grass will reduce moisture loss by evaporation from the soil surface.



Black spot on apple leaves and apples.

