

## BLACKBERRY LEAF RUST

Spores of a fungus which causes a disease of blackberries have been released on a limited number of blackberry plants in areas of W.A. where it is a significant problem weed.

The fungus, *Phragmidium violaceum*, causes a disease, blackberry leaf rust, on the wild blackberry plants found in W.A. It does not attack other plants, including cultivated relatives of the blackberry, such as Boysenberry, American brambleberry or Youngberry. Samples of W.A. plants have been tested to confirm this.

The spores belong to a 'field' strain of the rust found in Gippsland, Victoria. Selected strains of the fungus which are more virulent are being held in France until new legislation on biological control is passed in Australia. They will be considered for release in W.A. later.

The rust fungus attacks blackberry leaves. It may kill seedlings but seldom kills mature plants. Affected blackberries are nearly defoliated, produce little fruit and cease to spread by tip-rooting of canes.

Symptoms of the rust on



## BIOLOGICAL CONTROL OF BLACKBERRIES

infected leaves consist of purple-brown blotches on the upper surface and yellow or black pustules on the underside. If the leaf is heavily attacked, the blotches merge and the leaf shrivels and dies. Then the underside is covered with a uniform yellow dust of spores.

Other disease organisms attack blackberry leaves, but in no cases are both these symptoms (purple brown blotches on upper surface, yellow pustules underneath) found together.

The disease is spread by the golden yellow spores found in summer. These germinate on the underside of the leaf under warm, moist conditions, and penetrate the leaf tissues through the stomata.

Spread of the disease will be slow at first in W.A. It may be several years before the major impact of the epidemic is felt. To inoculate blackberry bushes, shake spores from infected leaves on to the underside of new leaves and mist with water. Only treat fully opened leaves

which are still young and actively growing.

Blackberry is a declared plant in the south west of W.A. because it takes over from native understorey plants in forests and creek beds and invades degraded pastures. Landholders are under an obligation to destroy all plants on their land.

Spraying must continue in spite of the release of the rust fungus. This is because the rust will not eradicate blackberries and affected plants may continue to produce seeds, although less vigorously.

The rust will present landholders with a golden opportunity to get on top of the weed over the next few years.

*For further information on blackberry rust and blackberry control contact the Agriculture Protection Board on (09)367 0111 or your local district office of the Department of Agriculture, or the A.P.B.*

1. Introduced virulent rust, *Phragmidium violaceum*
2. Local non-virulent rust, *Kuehneola uredinis*

