

"GERANIUM RUST"

By PLANT PATHOLOGY BRANCH

GERANIUMS are affected by relatively few troublesome diseases. However, in Western Australia, leaf rust of these plants is very common and can become a serious problem, particularly in the more susceptible varieties growing in sheltered positions.

SYMPTOMS AND SPREAD

Rust in Geraniums is caused by the fungus *Puccinia pelargonii-zonalis*. It is readily recognised by the raised reddish brown pustules which occur on the lower surface of the leaf. As these blister-like pustules develop they assume a zonate appearance and change to a dark brown colour (Fig. 1). Affected leaves gradually yellow, except for the areas immediately above the pustules which remain green, so that when seen from above the leaves appear green spotted (Fig. 2). Diseased leaves soon fall from the plant giving it a very straggly appearance.

Numerous spores or fungal seeds are produced in the pustules. These are blown by the wind from diseased to healthy

leaves and to adjacent healthy plants where they germinate under moist conditions and give rise to new infections.

Geranium rust is most common in summer—development and spread being favoured by hot humid weather. However, it can be present in the garden throughout the whole year, particularly if plants are grown in a sheltered position and the weather conditions are right for development.

CONTROL

1. Wherever possible, choose an open sunny situation for growing Geraniums as, under these conditions, humidity is reduced and therefore the disease is less likely to become serious.

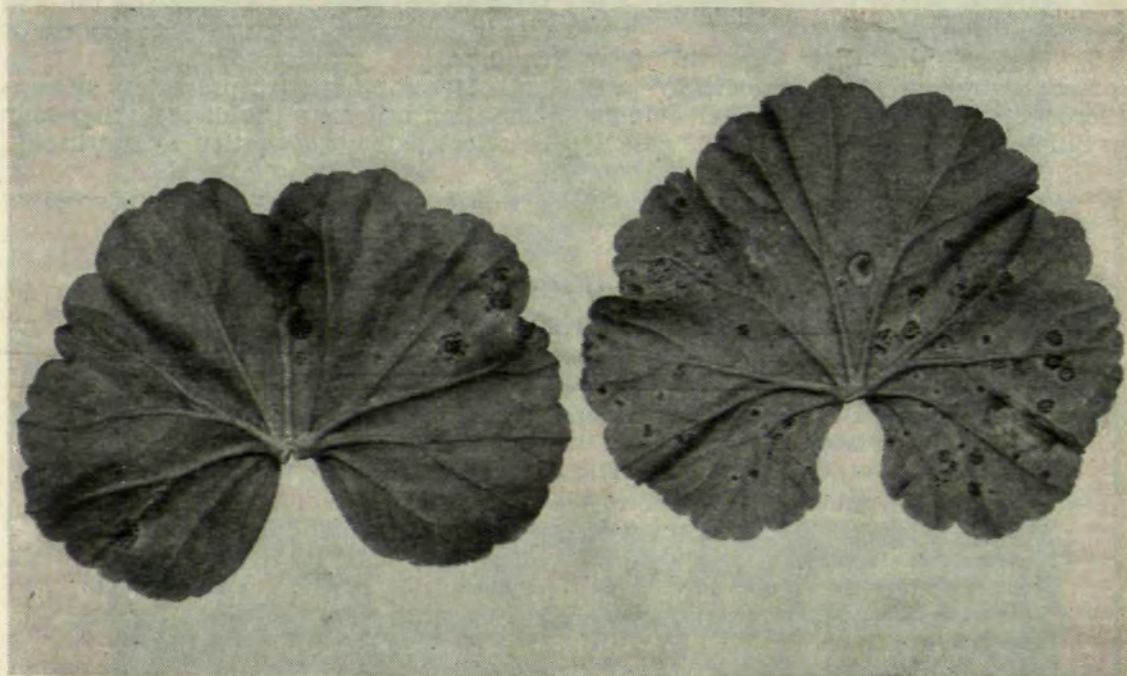


Fig. 1—Geranium leaf infected with the rust fungus viewed from the lower surface. Note the rust pustules which are reddish brown to dark brown in colour and appear concentrically zonate

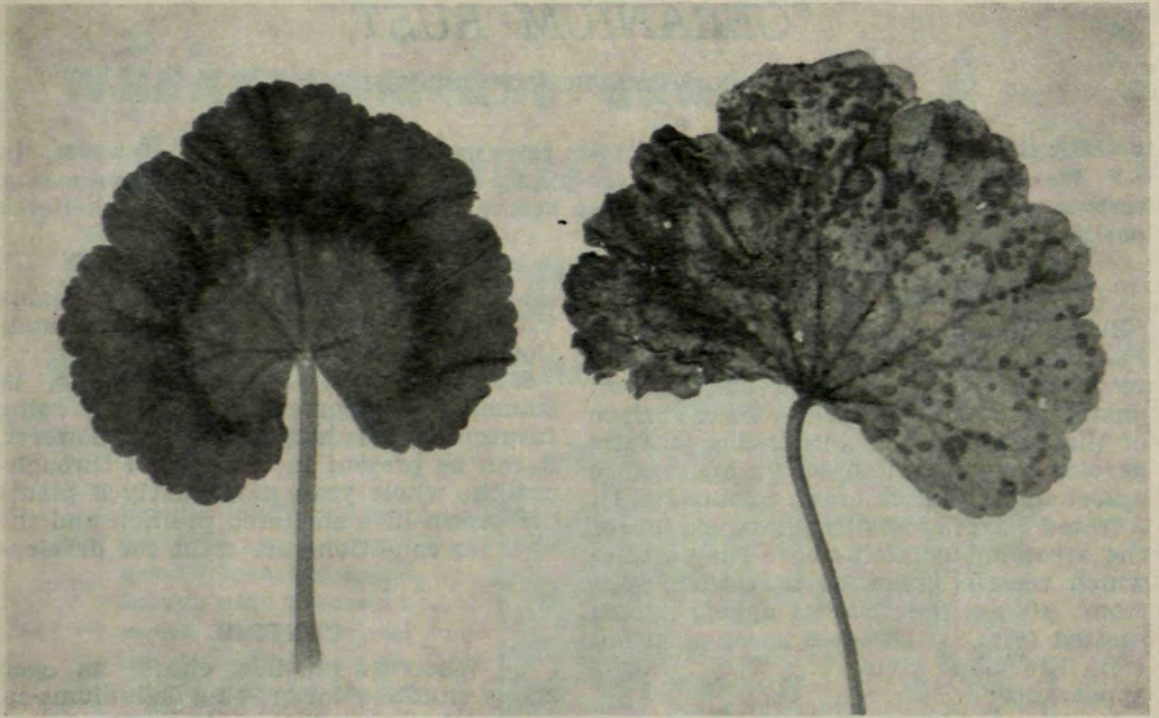


Fig. 2—Older leaf viewed from above showing leaf yellowing except in the region of the pustules where the green colour is retained. Healthy leaf for comparison

2. Prune the plants back severely in late winter to promote healthy growth, and burn the prunings.

3. Protect the new growth from infection by spraying periodically and thoroughly with either colloidal sulphur or Zineb at the rate of 1 ounce in 3 gallons

of water, being sure to spray the undersides of the leaves as well as the top and to get good penetration into the centre of the bush.

4. If some varieties prove less susceptible than others to the disease, they may be selected for propagation by cuttings.

WESTRALIA BEAN SEED

Because of the increased acreages sown to the rust-resistant "Westralia" bean in the Carnarvon area, and the necessity for second sowings following cyclone damage, stocks of seed were practically exhausted this year.

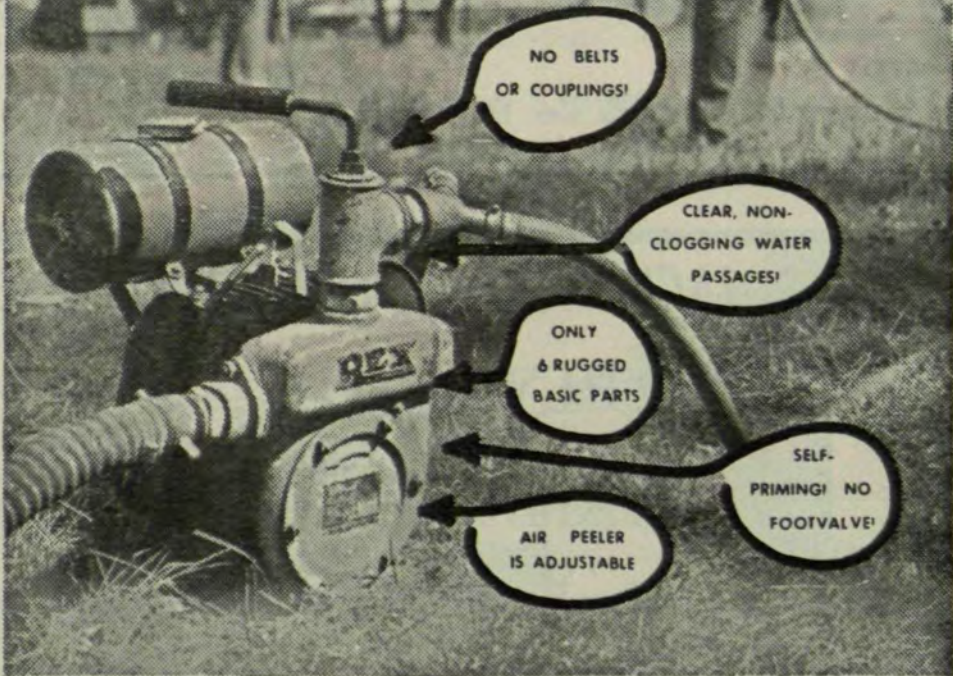
When discussing the problem of seed supplies for subsequent sowings, the Minister for Agriculture (Mr. C. D. Nalder) said that it was unlikely that there would be any shortage.

The main grower of "Westralia" seed, Mr. B. Arbuckle of Balcatta, would arrange to increase his sowings to cover any reasonable quantities of seed likely to be required. While supplies of pedigree seed could be built up in the Carnarvon district there were definite advantages in producing the seed in the metropolitan area where it could be closely supervised for certification by officers of the Department of Agriculture.

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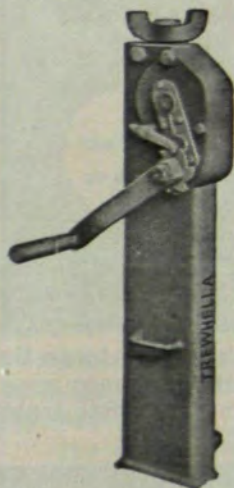
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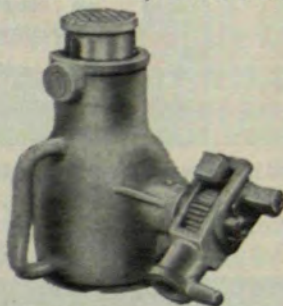
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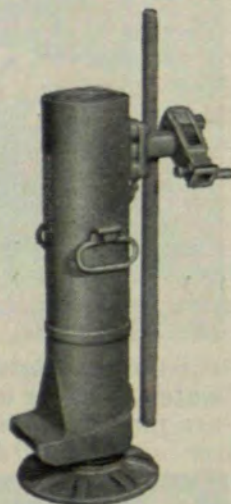
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