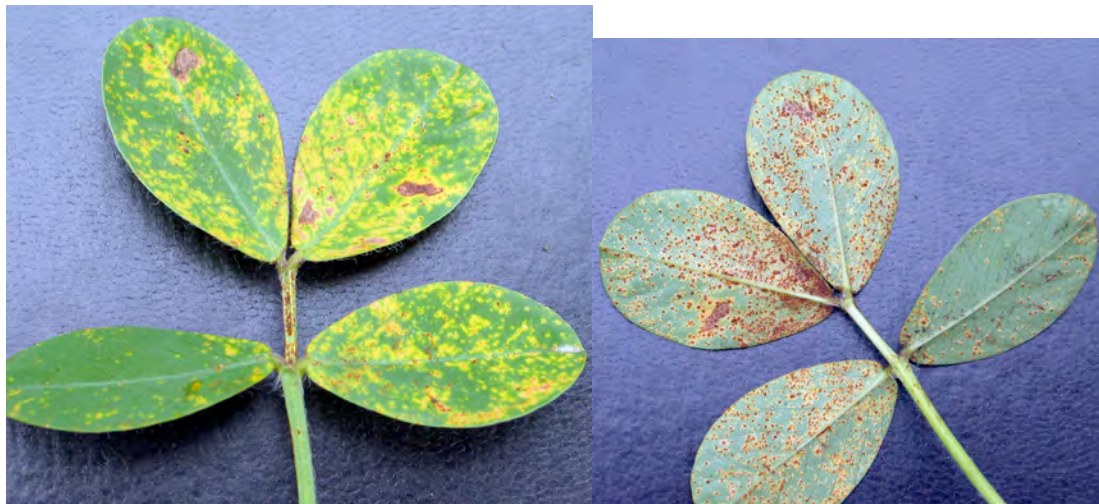


## Extension Fact Sheet 34: Peanut Rust



**Common name:** Peanut rust

**Scientific name:** *Puccinia arachidis*

**Hosts:** The fungi infect peanuts, and some other plants belonging to the genus *Arachis*.

### Damage

Infection causes leaves to turn yellow (photo, left), dry, curl and drop. It is not known what losses occur in Solomon Islands, but it is likely that yields are reduced by 50%, probably much more. Infected plants mature 2-3 weeks early.

Once infections occur, rust develops very rapidly, faster than the diseases caused by early and late leaf spots (see Fact Sheet No. 36).

### Biology and Life Cycle

The rust infects leaves, petioles, pegs (the shoots that grow into the ground) and stems. On the leaves, the spots are at first yellow, rapidly turning orange and then red-brown as masses of spores develop and break through the leaf surface (photo, right). The lower surface produces the most spores.

The spread of rust depends on wind to disperse the spores, and humidity to provide conditions for infection at the leaf surface.

### Detection and inspection

Inspect plants regularly, at least once a week, looking for the red-orange spots.

## **Management**

### **Cultural control:**

Cultural control is important, but note that rusts only survive in living plants; they do not survive in crop remains or in the soil. Spores are spread in moist, warm air, and periods of cloudy wet weather favour outbreaks of the disease; these are common conditions in Solomon Islands.

The following should be done:

- Remove any volunteer plants from the last crop;
- Plant new crops as far away as possible from older crops, especially those with rust infections;
- If it is not possible to avoid planting near older crops, do not plant down wind from them; otherwise, spores will easily spread to the new crops.

### **Resistant varieties:**

There are varieties that differ in resistance to rust, but there is no information about the resistance of those grown in Solomon Islands.

### **Chemical control:**

- Carry out regular inspections;
- Begin to spray as soon as rust spots are seen, even if they appear only on one or a few plants. Spray at regular intervals: 10-14 days is best, continuing until 14 days before harvest;
- Spray more often if the first treatment is late, and there are many plants with rust spots. In most cases, spraying should begin no later than 30-35 days after planting;
- Use chlorothalonil (the trade name is Bravo). It is effective against rust, and also leaf spot diseases. **READ THE INSTRUCTIONS BEFORE SPRAYING.**