Identification of Greenhouse Vegetable Foliar Diseases

Powdery mildew

- Problem in greenhouse vegetables the whole year
- Favours temperatures around 20-25°C
- Does not need high humidity to establish or grow
- Usually appears on the oldest leaves first

- In cucumber white powdery growth appears on top and bottom of the leaves

- In capsicum the white powdery growth usually begins on the bottom of leaves (left)
- Yellow lesions can often be seen on top of infected capsicum leaves (right) that should not be confused with downy mildew
- Powdery mildew will also grow on top of capsicum leaves

- There are several different species of powdery mildew
- The powdery mildew that infects cucumbers is different to the one that infects capsicums and eggplants

Do not confuse powdery mildew with downy mildew!!!

Downy mildew

- Needs high humidity and temperatures around 20-25°C
- Usually seen in spring
- Yellow lesions appear first on older leaves
- Lesions are characteristically bordered by leaf veins so appear very angular
- Produces greyish fluff on undersides of lesions only
- Only infects cucumber – not known on capsicum

- Leaves infected with powdery or downy mildew will usually wither and die, leaving fruit exposed to sunscald
- Mildew does not infect the fruit directly
- Severe infections will shorten the life of the crop and reduce yield

Botrytis (Grey mould)

- *Botrytis* needs high humidity to develop and favours mild temperatures around 18-24°C
- Growth is grey and fluffy
- Infects through flowers and causes flower or fruit rot (left) or through pruning wounds and causes a stem rot that can kill plants (right)
- It is usually seen during the winter and spring months

Sclerotinia

- Cool-mild temperatures and high humidity favour *Sclerotinia*
- It is usually seen during winter and early spring
- Growth is white and fluffy
- *Sclerotinia* forms characteristic survival structures that look like mouse droppings (right)
- It causes fruit rot or stem rot that can kill plants (left)

Make sure you know what disease you are trying to control!

- Correct disease identification is crucial to effective management of a disease
- If you aren't sure then find out

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