

Symptoms and Signs of Diseases

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YOU HAVE TO FIND IT TO ID IT SCOUTING



**Make sure you can
see - light**

Turn leaves over

**Be consistent and
take notes**



Spotting Trouble

Like finding Waldo - what looks out of Place?



DISEASES YOU CAN ID BY SIGHT

Symptoms and Signs

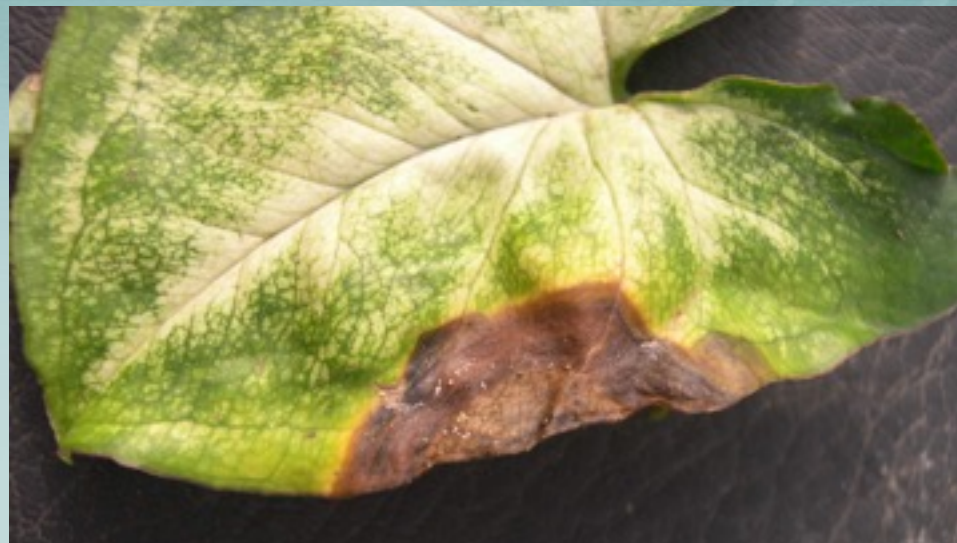
Gray mold (Botrytis blight) symptoms and signs



Anthracnose symptoms and signs



Myrothecium symptoms and signs



Rust signs



Powdery mildew symptoms



Powdery mildew signs



Downy mildew symptoms



Downy mildew signs



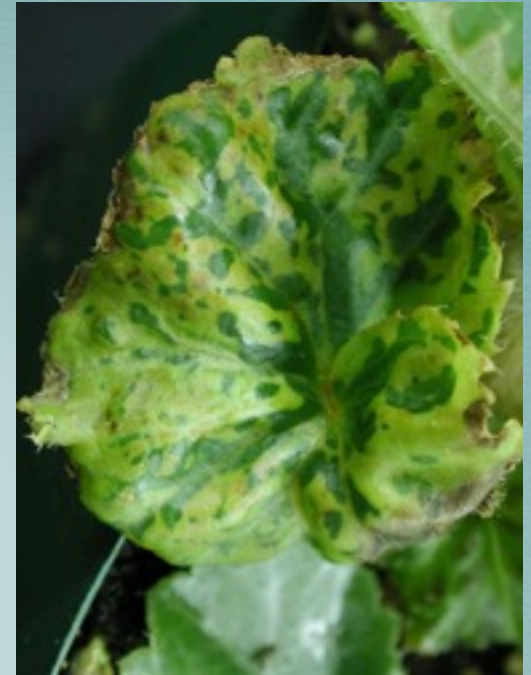
Disease	Key characteristics
Gray mold	Gray, brown dusty spores any part of the plant
Anthracnose	Pincushion – pepper grains in rings (upper surface)
Myrothecium	Black spore clusters with a white fringe in rings (undersides)
Powdery mildew	White colonies (upper surface) any plant part, purplish mottling
Downy mildew	White or purple down on undersides, yellow blotches between veins, burning
Rust	Brown, orange and yellow pustules (undersides) scattered or in rings

Diseases you cannot ID by sight

Symptoms only

Virus symptoms

Mosaic
Distortion
Ring spots
Chlorosis
Stunting



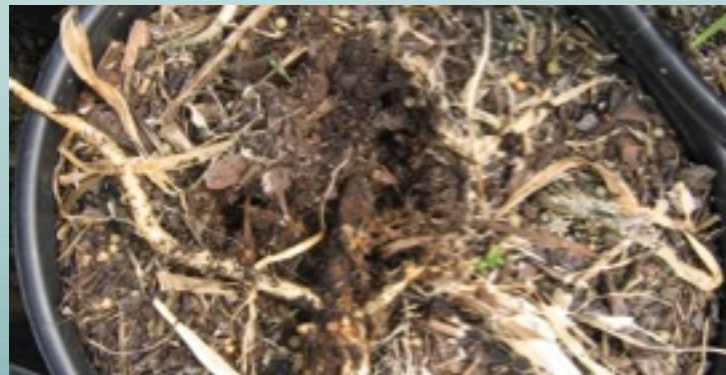
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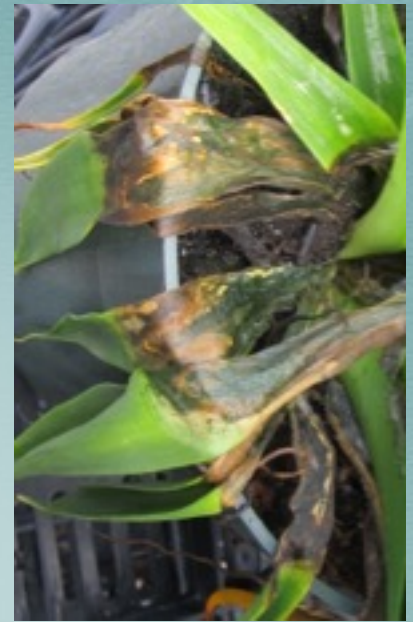
Crown Rots



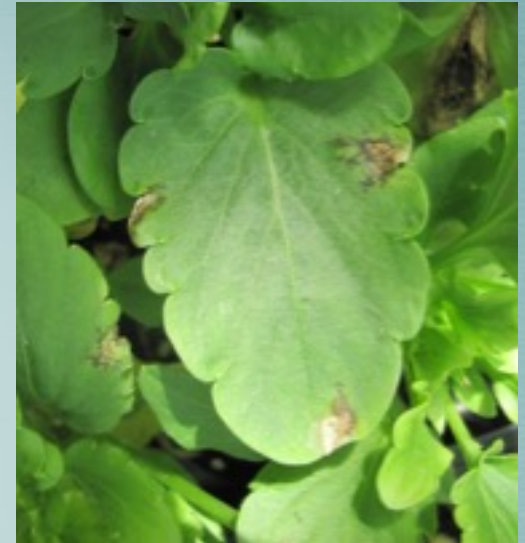
Root Rots



Bacterial Leaf Spots



Fungal Leaf Spots



Do you know the difference?



Water-soaked or dry



Tan/white or brown/black



Sharp or irregular margins



Red, purple or yellow margins



Spots or stems disintegrate



Spots confined between veins



Spots start on leaf edges



Spots one size or all sizes



Spots with concentric rings or not

Characteristics of leaf spots

Characteristic	Phytotoxicity	Fungi	Bacteria
Water-soaked	No	Rare	Yes
Color	Tan/white	Tan/brown/black	Brown/black
Colorful margins	No	Yes	No
Disintegration	No	Rare	Yes
Between veins	No	No (except downy mildew)	Yes
Edges	Sometimes	No	Yes
One size	Yes	No	No
Concentric rings	No	Yes	No (except Erwinia)
Sharp margins	Yes	Sometimes	Sometimes



**....There is always
a practical solution**

QUESTIONS???