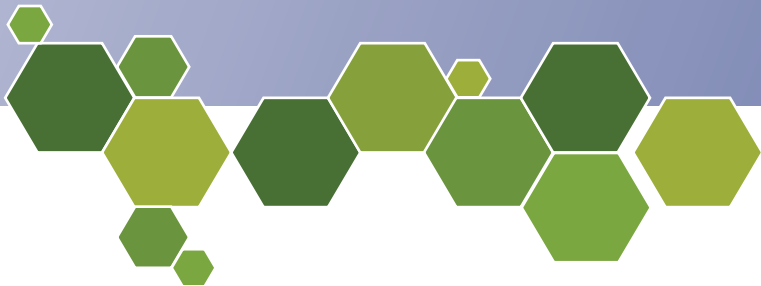


# Crop Pest Identification



Here’s what to look out for when you’re out scouting for pests.



### CUTWORMS

**Conditions**


- Late planting or replanting
- Weedy growth
- Dry weather, crusted soil

**Look For**

- Leaves with chewed holes in them
- Ragged leaf margins

**Prevention**

- Early diagnosis is key to minimizing cutworms and damage to crops
- Inspect seedlings for bare areas, holes in foliage, and wilting leaves



### WIREWORM

**Conditions**

- Planted early in cold conditions
- Fields with grassy-type plants
- In wet areas of a field

**Look For**

- Hard-bodied
- Shiny yellow to brown
- Young plants appear wilted

**Prevention**

- Bait stations set up 2-3 weeks prior to planting



### SEED CORN MAGGOT

**Conditions**


- Soil with decaying organic matter
- Past infestations
- Cool conditions that delay emergence

**Look For**

- Fly has a greyish-brown body. Can be mistaken as a common housefly.

**Prevention**

- Plant during warm soil temperatures for quick seed germination
- If putting organic matter on soil, wait a min. of 2 weeks before planting



### TWO-SPOTTED SPIDER MITE

**Conditions**

- Hot dry conditions

**Look For**

- Greenish yellow to orange to brown
- Pierced leaves

**Prevention**

- Natural predators, such as fungi and thrips
- Spray treatments





### GRASSHOPPER

**Conditions**


- Dry weather with high population
- Drought conditions

**Look For**

- Round or ragged holes in leaves
- Damage to soybean pods

**Prevention**

- There are a number of natural controls that kill grasshoppers
- Synthetic insecticides are recommended



### SOYBEAN APHID

**Conditions**


- Temperatures in the low to mid 20s

**Look For**

- Yellow-bodied with black eyes
- Can have wings
- Causes shorter plant height
- More honeydew on leaves

**Prevention**

- Spray insecticide before aphids reach 1,000 per plant
- Scout fields in July for aphids



### GREEN CLOVER WORM

**Conditions**

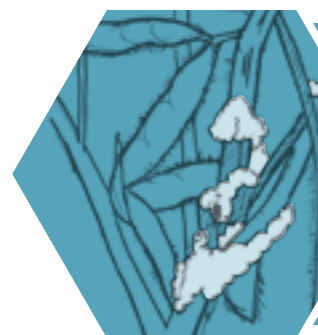
- Thrive in leaf litter and crop debris

**Look For**

- Young larvae feed on the entire plant
- Feed on the middle of the leaves
- Older larvae feed on the upper canopy

**Prevention**

- Fungal disease which favours warm temperatures with high humidity



### WHITE MOULD

**Conditions**

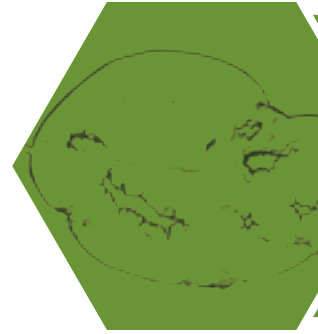
- Moist conditions
- Low temperatures (20°C-26°C)
- High yield potential soybean crop with dense canopy

**Look For**

- White, fluffy, cottony mycelial growth
- Wilted leaves
- Bleached and shredded looking stems
- Sclerotia (resembles mouse droppings)

**Prevention**

- Longer crop rotation



### BACTERIAL BLIGHT

**Conditions**

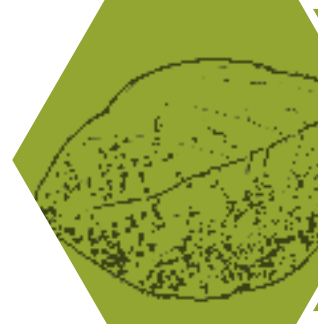
- Common on young leaves
- Cool, wet weather, and heavy rain
- Disease dissipates in hot dry weather
- Spreads by wind and rain

**Look For**

- Starts as small brown spots that spread to the full leaf

**Prevention**

- Diverse crop rotations
- Plant resistant varieties



### SEPTORIA BROWN SPOT

**Conditions**


- Symptoms develop at 15-29°C
- Warm, wet conditions

**Look For**

- Infects lower canopy leaves. In a warm rainy season it infects the top.
- Rusty-brown or yellow leaves fall in the early season

**Prevention**

- Crop rotation of more than just soybeans



### PHYTOPHTHORA ROOT ROT

**Conditions**

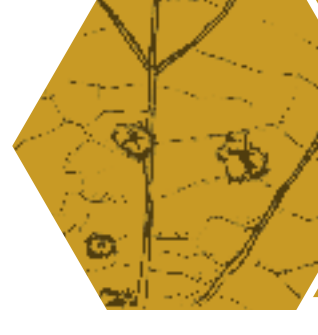
- Wet and warm soil conditions
- Clay and compacted soils
- Saturated soil early in the season

**Look For**

- Early Season: Stems appear bruised and are soft. Secondary roots rotted.
- Mid-Late Season: Brown lesions appear on the roots. Plants may die.

**Prevention**

- Select soybeans with major gene resistance (Rps)
- Increase drainage in your field where possible



### FROGEYE LEAF SPOT

**Conditions**

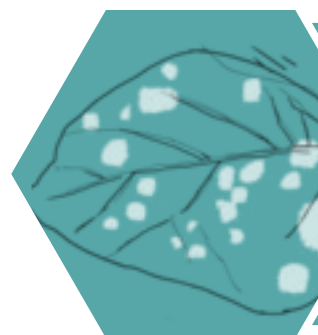
- Frequent rain following onset can lead to an outbreak
- Warm and humid conditions

**Look For**

- Spots on upper surface of the leaf
- Lesions appear
- Infects leaf, stem, and pod centres on water-soaked spots

**Prevention**

- Plant resistant soybean varieties



### DOWNY MILDEW

**Conditions**


- Hot, dry conditions

**Look For**

- Greenish yellow to orange to brown patches
- Pierce leaves and feed on plant juices

**Prevention**

- Natural predators, such as fungi and thrips
- Spray treatments



### RHIZOCTONIA ROOT ROT

**Conditions**


- Warm soil temperatures
- Delayed emergence
- Soil types with high amounts of organic matter

**Look For**

- Rusty-brown, dry sunken lesions on stems and roots near the soil line
- Decay of lateral roots may occur
- Affects seedlings and older plants

**Prevention**

- High quality seed
- Good agronomic practices
- Avoid/reduce plant stress from herbicide injury



### FUSARIUM WILT

**Conditions**

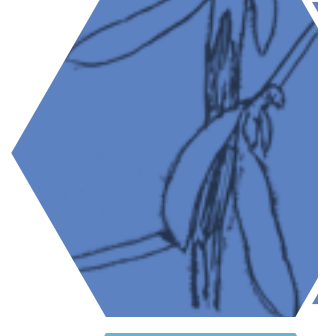
- Cool temperatures
- Wet soil
- Early in the growing season
- Flooding

**Look For**

- Showing cortical decay or vascular discoloration
- Roots may appear brown to black
- Lateral roots may die and decompose

**Prevention**

- Ensure soil is well drained
- Minimizing soil compaction
- Fungicidal seed treatments are recommended



### STEM CANKER/POD AND STEM BLIGHT

**Conditions**

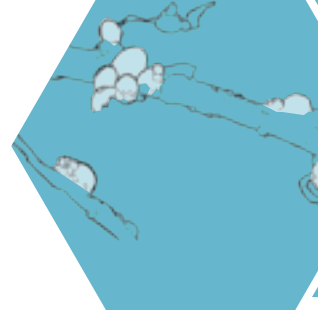
- Dry weather with high population
- Drought conditions

**Look For**

- Round or ragged holes in leaves
- Damage to soybean pods

**Prevention**

- Spray insecticide before aphids reach 1,000 per plant
- Scout fields in July for aphids



### SOYBEAN CYST NEMATODES

**Conditions**

- Wind, water, animals, and farm machinery can spread the disease

**Look For**

- Lemon shaped cysts
- Stunted, yellow looking plants with root damage
- Symptoms are identified most accurately by below-ground analysis

**Prevention**

- Plant resistant varieties
- Rotate crop with non-host plant
- Reduce other pests such as weeds, insects, and diseases

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