Peanut Disease Photos

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COOPERATIVE EXTENSION
Empowering People · Providing Solutions

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Peanut disease photos

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Planting to July 1

Aspergillus crown rot

Seedlings and young plants suddenly turn light brown and collapse.

Dead and wilted seedlings have rotted roots. Masses of black spores are visible near or just below the soil line.

Spotted wilt

- Symptoms are highly variable.
- Leaves may have spots and unusual patterns.
- Lower leaves may have purple to brown spots and veins.

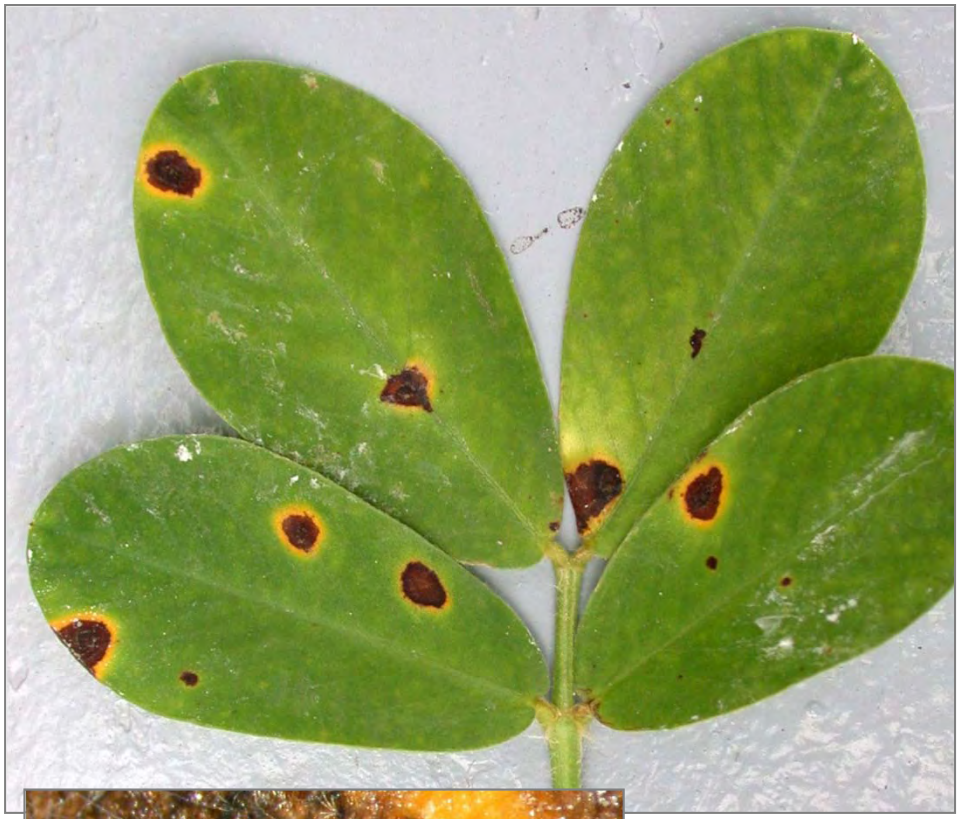
Emergence to harvest

Spotted wilt

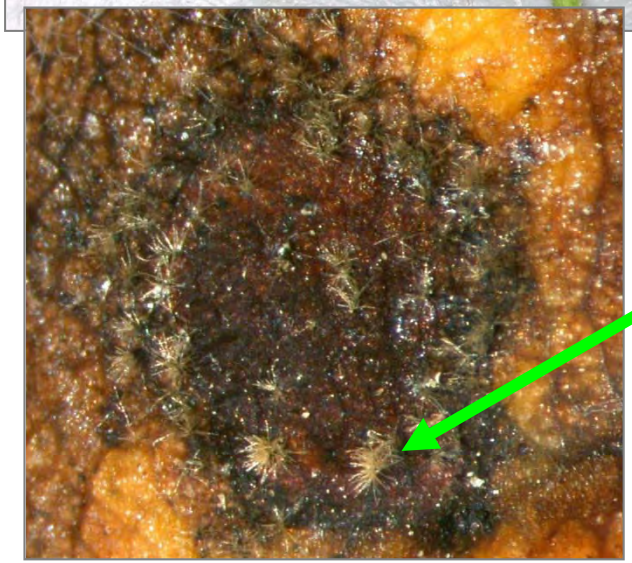
- Symptoms include bud death, stunting, and wilting.
- Petioles often are twisted downward.
- Plants may turn yellow and die.
- Pods may be stunted or deformed and seed coats are red.

July 1 to harvest

Early leaf spot



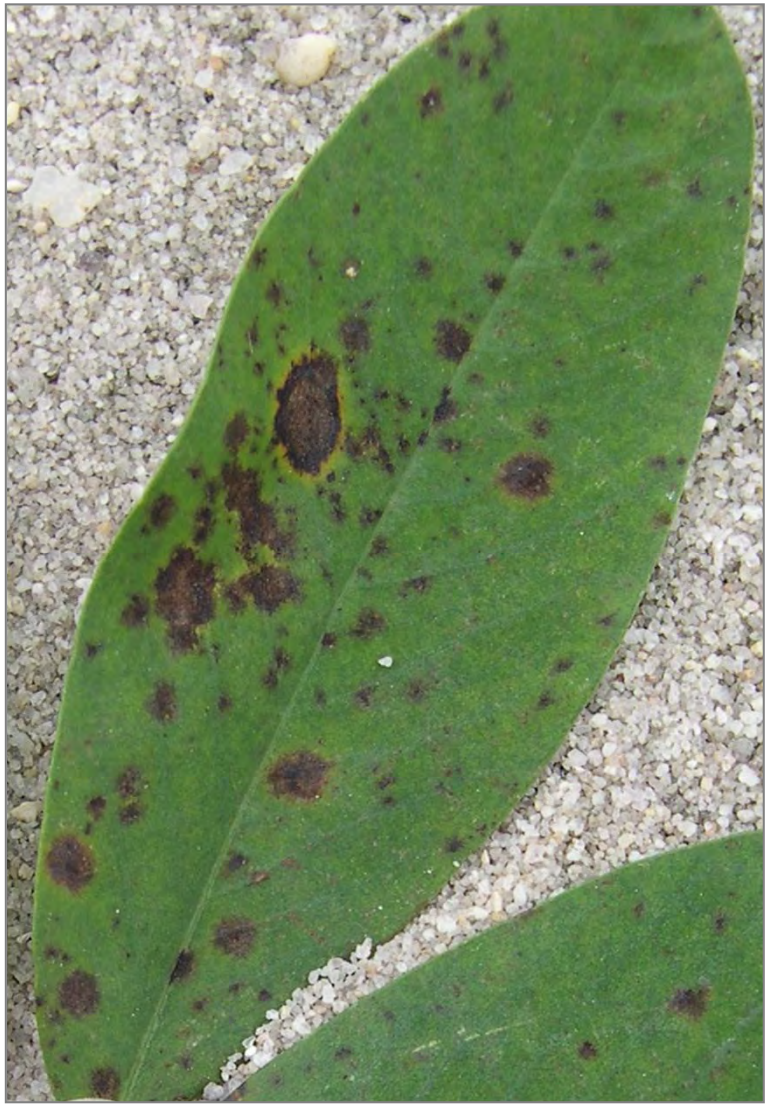
- The brown spots often are surrounded by a yellow halo.
- Spots may expand or grow together.



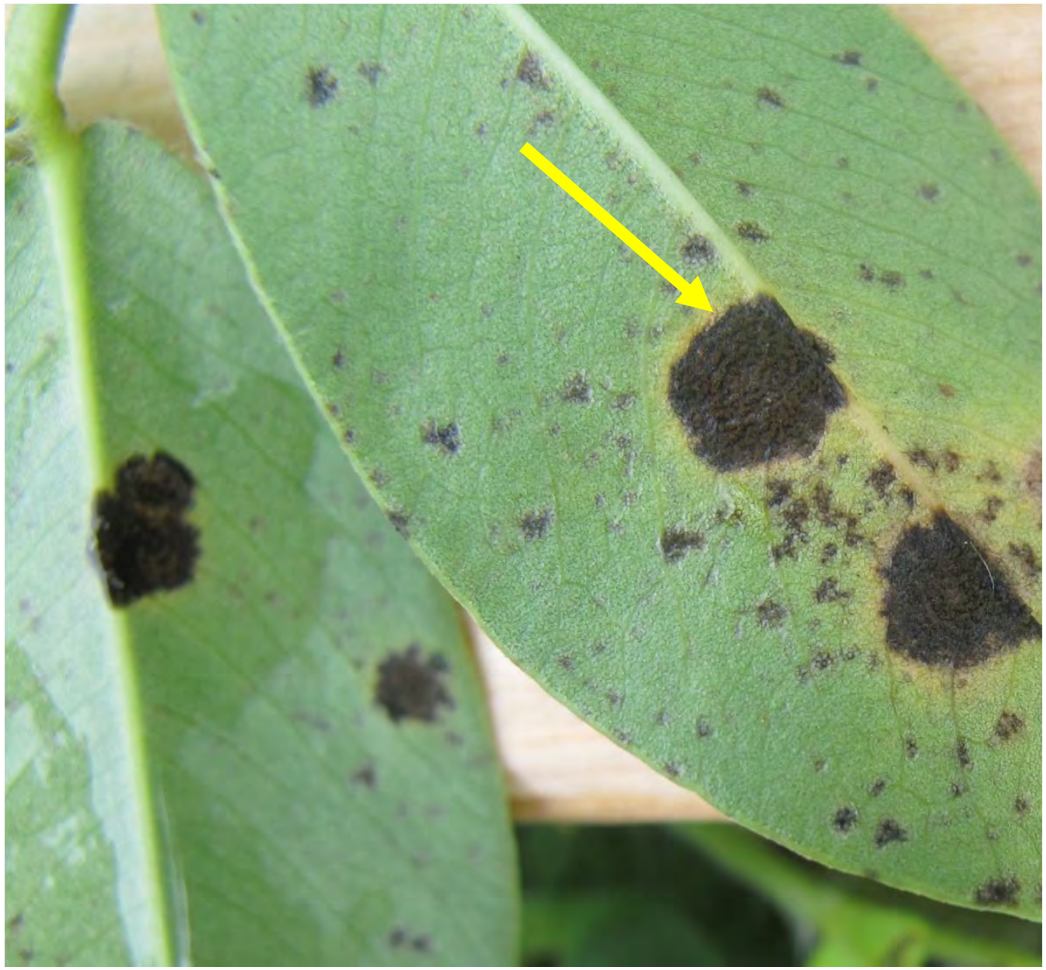
Close up view of spores on the upper surface of an early leaf spot.

July 15 to harvest

Late leaf spot



- The dark brown spots may or may not have a yellow halo.
- Dark brown to black spores are found on the lower leaf surface. Masses of spores make the spots look fuzzy (arrow).



July 15 to harvest

Early and late leaf spots

Comparison of early and late leaf spot. Color differences are most distinct on lower leaf surface.

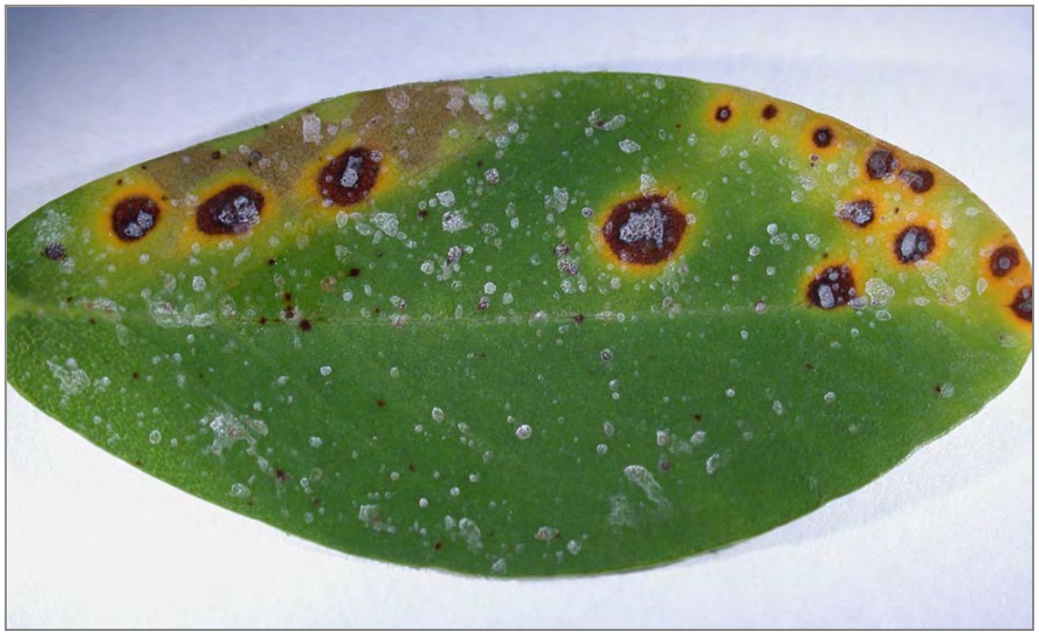
late leaf spot

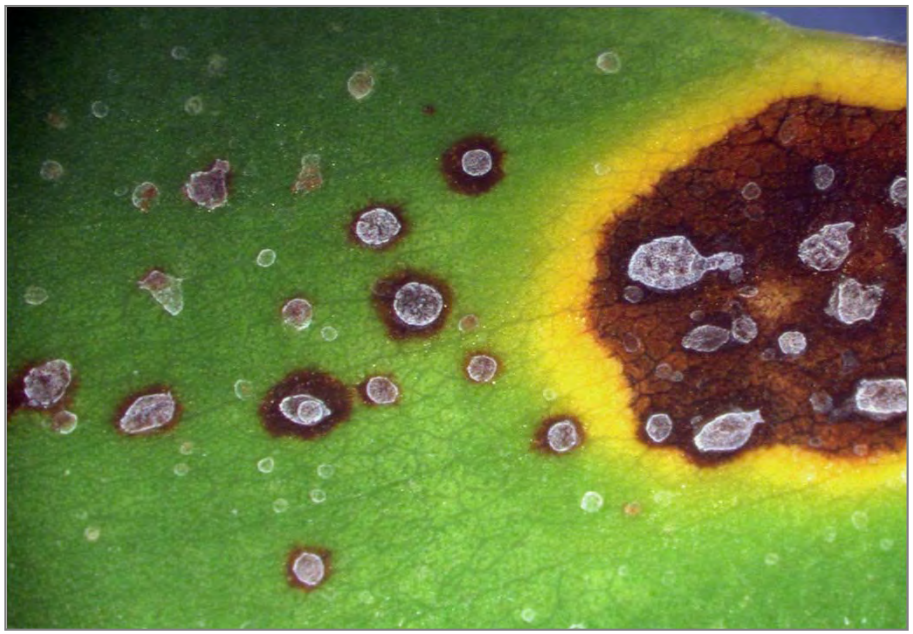
early leaf spot

June 1 to harvest

Chemical injury

- Spots may be surrounded by large yellow or dead areas.
- Spots are usually clustered on leaf margins and in the upper canopy.
- Residues may be clearly associated with spots. Spores are never present on spots.
- Heavy spotting before July 15 is usually due to chemical injury or irregular leaf spot.





June 1 to July 15

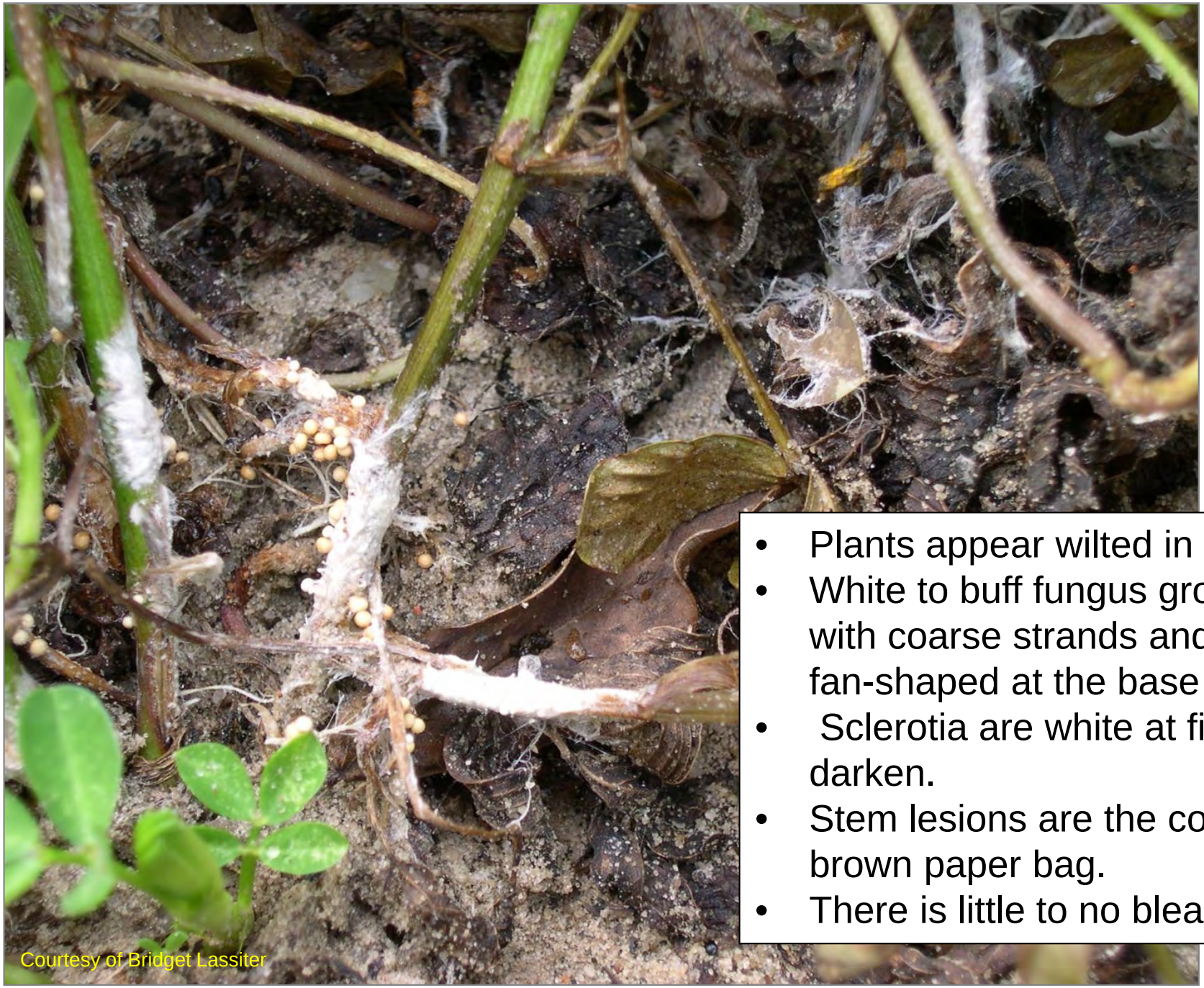
Irregular leaf spot

- Brown spots may be surrounded by yellow halos or large yellowed areas.
- Defoliation may occur.
- Spores are never present on spots.

Heavy spotting before July 15 is usually due to chemical injury or irregular leaf spot. Fungicides are not effective against irregular leaf spot and irregular leaf spot does not affect yield.

July 15 to harvest

Stem rot



- Plants appear wilted in the field.
- White to buff fungus growth is thick with coarse strands and often is fan-shaped at the base of the plant.
- Sclerotia are white at first and then darken.
- Stem lesions are the color of a brown paper bag.
- There is little to no bleaching.

July 15 to harvest

Stem rot

Sclerotia

- Stem, peg, and pod rot often is most visible after digging.
- Rotted pegs and pods are the color of a brown paper bag.
- Pegs are shredded and pods are thin and brittle. Coarse strands of fungus may be present.
- Tan to brown sclerotia are round and look like mustard seed.

July 15 to harvest

Sclerotinia blight

Fluffy fungus growth is visible on stems and pegs during humid weather.

July 15 to harvest

Sclerotinia blight

- Stems are bleached and shredded.
- Black, irregular shaped sclerotia form on and in the stems and pods.

July 15* to harvest
*Associated with extreme heat and drought

Diplodia collar rot

Symptoms start on a branch and/or on the lower part of the plant. Plant death may be rapid.

Courtesy of Art Bradley

July 15* to harvest
*Associated with extreme heat and drought

Diplodia collar rot

The taproot is dull brown to gray and may have a distinct lesion when cut lengthwise.

- Pods are dark gray to black.
- Pods may be covered with gray pimple-like pycnidia, which later turn charcoal black.

August *1 to harvest
*may cause seeding disease

Cylindrocladium black rot (CBR)

Symptoms in the field include yellowing, wilting and death. Diseased plants tend to occur in runs within a row.

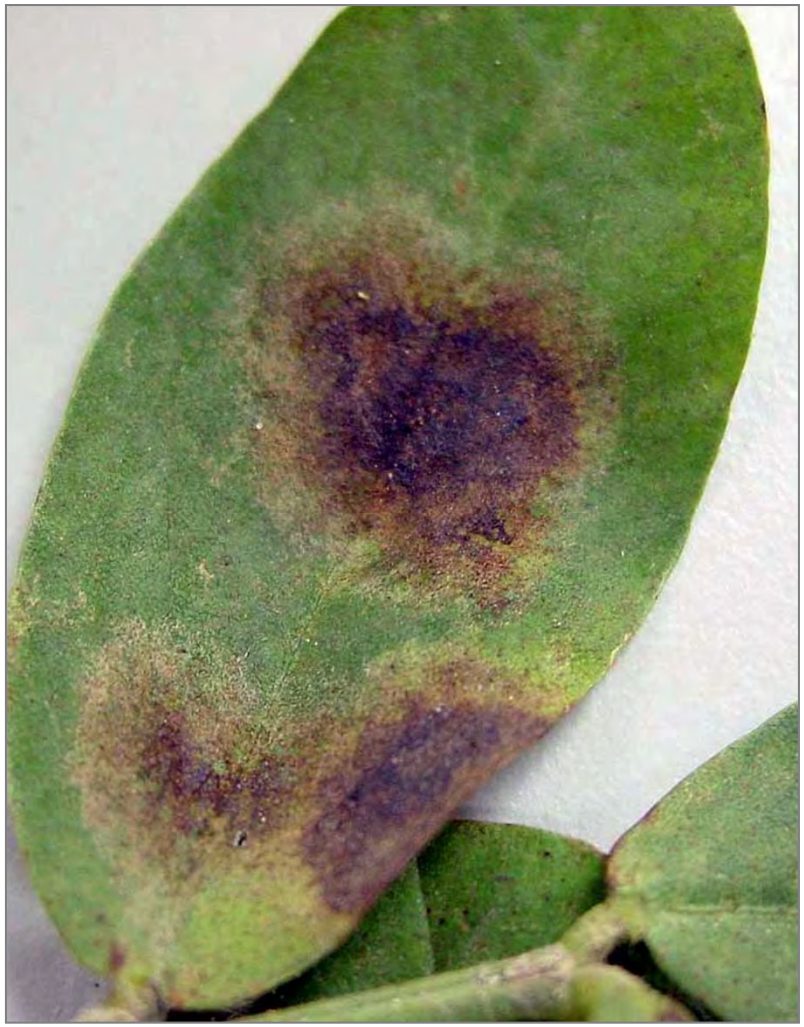
August 1 to harvest

Cylindrocladium black rot (CBR)

- The rotted roots are black to dark brown and brittle.
- Brick red fungal structures (perithecia, arrow) on stems or pods indicate that CBR is present.
- Seeds may be speckled.

August 15 to harvest

Web blotch



- Large irregular spots are found on the upper leaf surface.
- Young spots are grayish brown to dark brown with lighter margins. Older spots may be light brown.

August 1 to harvest

Root-knot nematodes

Northern root knot

- Root and pod galls are very small.
- Roots may have many small branches.

Peanut root knot (left, rare)

- Root galls are large and knot-like.
- Pods have large galls.

September 1 to harvest

Stem lesions have a target-like appearance with dark margins.

Rhizoctonia limb rot

In fields with rank growth, leaves may blight and turn brown to black.

September 1* to harvest
*Associated with tropical storms

Peanut rust (rare)

Numerous small spots (pustules) are yellow on the upper leaf surface.

The loose and powdery spores found on the lower leaf surface give the pustules a rusty orange to brown color.

September 30* to harvest
*Associated with mechanical or frost damage

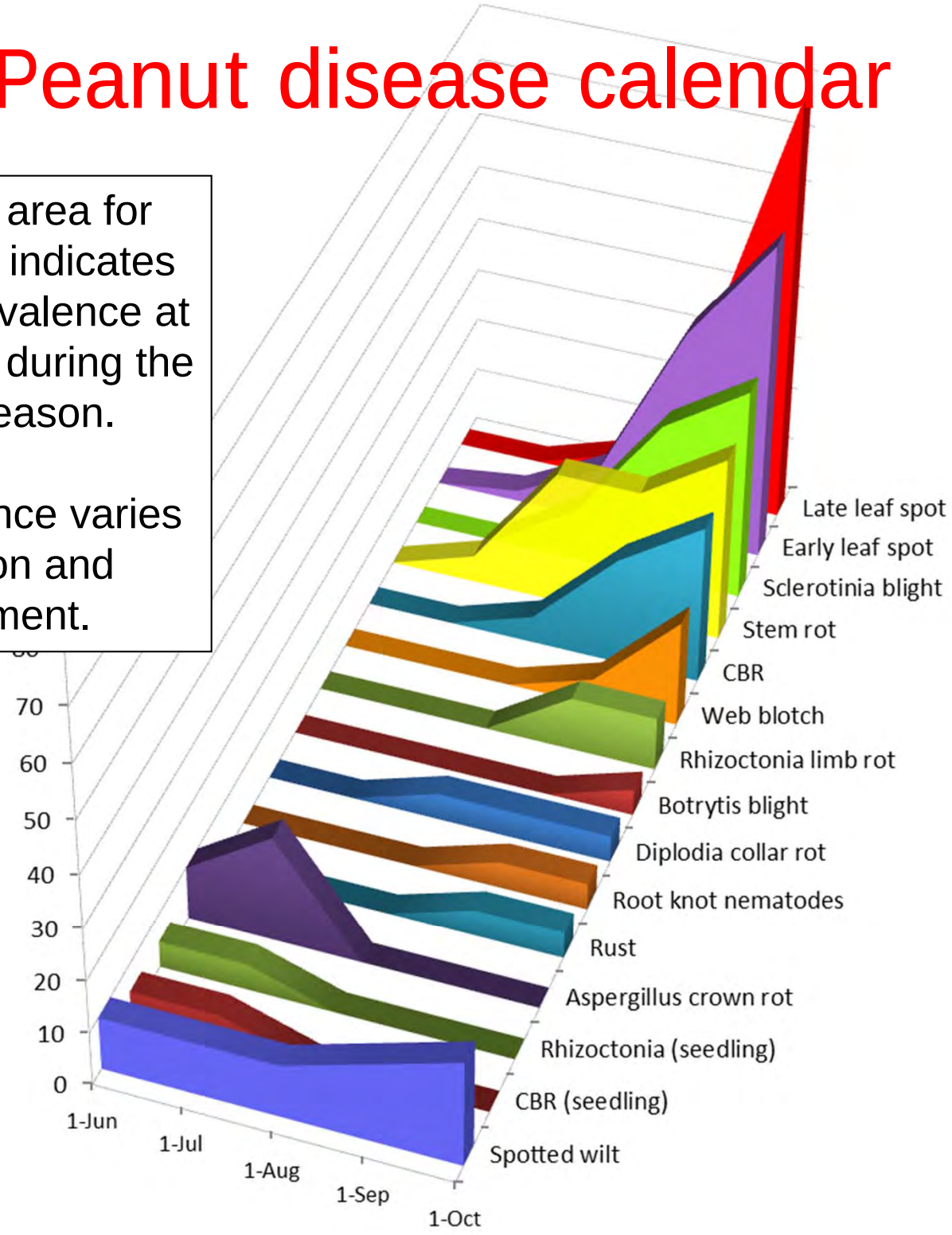
Botrytis blight

- Stems and leaves have a water soaked appearance at first, then turn dark.
- Lesions are covered with masses of fuzzy gray or grayish-brown spores.
- Occasionally, leaves have light brown spots with grayish spores in August or September (top right).

Peanut disease calendar

The shaded area for each disease indicates its relative prevalence at different times during the growing season.

Actual incidence varies with season and management.



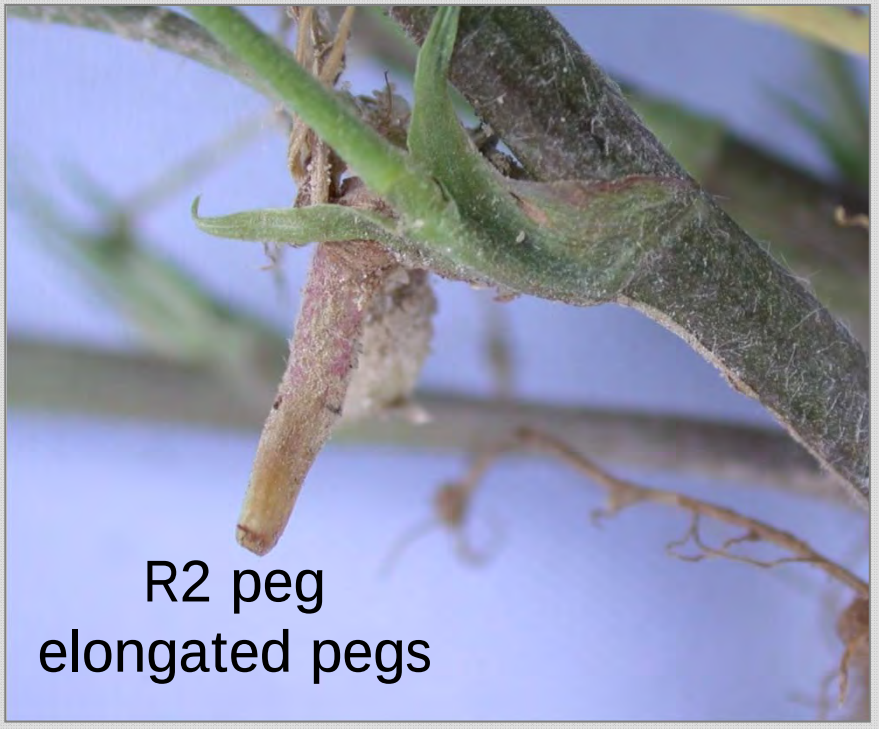
Disease	Pathogen	Part of plant affected	Time when symptoms most apparent
Aspergillus crown rot	*Aspergillus niger*	Seedling	Planting - July 1
Botrytis blight	*Botrytis cinerea*	Stem and leaf	September 30 - harvest
Cylindrocladium black rot (CBR)	*Cylindrocladium parasiticum*	Root, peg, pod, seed	August 1 – harvest; can cause seedling disease
Diplodia collar rot	*Diplodia gossipina (syn. Botryosphaeria rhodina)*	Crown, root	July 15 – harvest; associated with heat and water stress
Early leaf spot	*Cercospora arachidicola*	Leaf	July 1 - harvest
Late leaf spot	*Cercosporidium personatum (syn. Passalora personata)*	Leaf	July 15 - harvest
Root-knot nematodes	*Meloidogyne hapla (Northern) and M. arenaria (peanut)*	Root, peg, pod	August 1 - harvest
Rust	*Puccinia arachidis*	Leaf	September 1 – harvest; seen after tropical storms (rare)
Rhizoctonia limb rot	*Rhizoctonia solani and Rhizoctonia spp.*	Seedling, stem, peg, pod	September 1 – harvest; can cause seedling disease
Sclerotinia blight	*Sclerotinia minor*	Stem, peg, pod	July 15 - harvest
Stem rot	*Sclerotium rolfsii*	Stem, peg, pod	July 15 - harvest
Spotted wilt	*Tomato spotted wilt virus (TSWV)*	Leaf, bud, pod, root	Emergence to harvest
Web blotch	*Phoma arachidicola*	Leaf	August 15 - harvest

Peanut reproductive stages

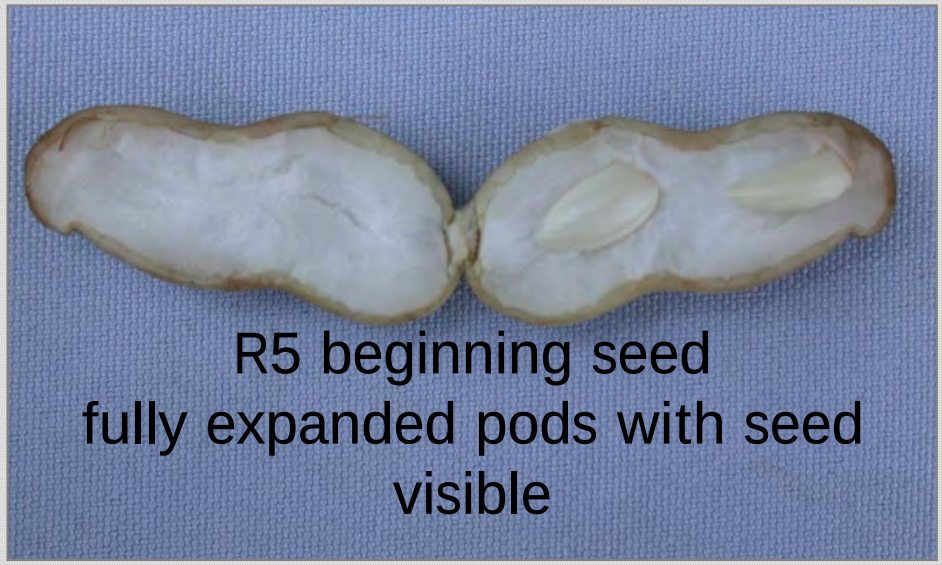
Begin leaf spot sprays at R3

R1 flowering
open flowers

R3 early pod
pegs in soil with swollen tip



R2 peg
elongated pegs



R5 beginning seed
fully expanded pods with seed visible