

PEANUT DISEASE IDENTIFICATION



Aspergillus Crown Rot

Aspergillus crown rot causes pre- and postemergence damping off and sometimes kills up to five weeks after planting. Seedlings rapidly collapse and die. Dark brown discoloration is common on decayed roots and hypocotyls. Later, these areas often are covered with masses of black spores that look similar to bread mold. Aspergillus crown rot generally is of minor importance when high-quality, fungicide-treated seed are planted in well-rotated fields. Rotation and seed treatments are an effective control for this disease.



CBR

Cythrodcladium Black Rot (CBR) infected plants are initially chlorotic with foliage becoming brown to black as the disease develops. The symptom unique to CBR is the presence of brick red reproductive structures growing from the crown of infected plants, while the crown, itself, is usually black. Root systems of severely infected plants are deteriorated, void of secondary roots and are also black. Infection occurs at planting during cool, wet weather. However, symptom expression does not occur until mid-July.



Spotted Wilt

Given its wide range of symptoms, spotted wilt disease is sometimes confused with white mold and CBR. Spotted wilt is a viral disease spread by thrips. Foliar symptoms can be one or more of the following: concentric light green to yellow ringspots (predominant on young foliage), chlorosis (yellowing), necrotic terminals and/or necrotic leaf spots, nondescript tan spots or blotches, oakleafing or streaking and mottling. Foliage of infected plants may be reduced in size. Plants infected early in the season are usually stunted, have reduced pod production and may die.



Peanut Root-Knot Nematode

Peanut root-knot nematode infected plants are usually stunted and chlorotic. Typically, injury is not uniform in the field. Infected areas in a field are typically circular. Roots, pegs and pods of infected plants are galled. Galls on pods are wart-like in appearance and dark in color.



Late Leaf Spot

Late leaf spot symptoms are similar to those of early leaf spot, but lesions are usually dark brown to black. Conditions for disease development are the same as for early leaf spot. During favorable conditions, spores of this fungus can be seen on the underside of the leaf. Under extreme pressure, lesions can develop on stems.



Early Leaf Spot

Early leaf spot lesions are initially very small and light brown in color. Under favorable conditions, lesions enlarge up to one-half inch in diameter and are usually surrounded by a yellow halo (halo not always present). Lesions may be evident within 10 to 14 days after infection. During or after periods of warm temperatures in the 70s or above and during periods of high humidity, spores of the fungus can be observed on mature leaf spot lesions.



Rhizoctonia Limb Rot

Symptoms of Rhizoctonia limb rot are usually not noticed until after digging of the plants. Infected branches that were in contact with the soil are black and rotten. Infection often starts near the tip of a branch, killing the tip and then progressing down the branch.



◀ Stem Rot or White Mold

Stem rot or white mold is favored by hot, wet weather. Initially, foliage of the infected plants is chlorotic; this may include the whole plant or be limited to a branch. As the disease develops, the foliage turns brown to black. The crown area is usually light to dark brown depending on the stage of disease development. Symptoms unique to stem rot are white strands of fungus and white to brown sclerotia. These are usually found in the crown area of infected plants. Fields where stem rot is suspected should be scouted late in the season, 24 to 48 hours after a rain or irrigation event, beginning in late July and until digging.