Early & Late Leaf Spot

Early leaf spot
[caused by *Cercospora arachidicola*]

Late leaf spot
[caused by *Cercosporidium personatum*]

Peanut leaf spots are caused by two different fungi: *Cercospora arachidicola* (early leaf spot pathogen) and *Cercosporidium personatum* (late leaf spot pathogen). Other diseases cause spots on leaves, but they are not referred to as “leaf spot”.

It can be difficult to distinguish between symptoms of early and late leaf spot. Early leaf spot usually causes brown lesions (spots) that are surrounded by a yellow halo. Although early leaf spot can be found as early as 30 days after planting, first lesions often are not observed until mid-July. Early leaf spots produce tufts of silvery, hair-like spores on the top of the leaf. These spores can be seen with the help of a good magnifying glass.

Late leaf spot has become more common recently and has been the most important leaf spot the past few growing seasons. Late leaf spot causes dark brown to black spots that may or may not have halos. Late leaf spots produce dark brown spores, usually on the underside of the leaf. The mass of spores can be seen without magnification and give the spot a velvety appearance. It is important to determine if late leaf spot is present since it can be more difficult to control.

(note the difference between the black-brown late leaf spots and a few lighter brown early leaf spots)
Because the leaf spot fungi attack only peanuts, rotations with any other crop help to reduce disease. Peanut cultivars vary in susceptibility to both early and late leaf spot. Follow a strict control program on highly susceptible cultivars.

In addition to cultural practices, fungicide application usually is required for leaf spot control. Apply fungicides:

- on a set 14-day calendar schedule, OR
- according to a weather-based leaf spot advisory.

In well-rotated fields, the first fungicide spray should be applied at the very early pod stage (R3), which usually occurs in the first week of July. After the first spray, apply fungicides every 14 days or according to the leaf spot advisory. The advisory is a safe way to minimize fungicide applications by spraying only when weather conditions favor disease. Eliminating unnecessary fungicide sprays also helps to prevent tractor damage to vines and spider mite flare-ups. Leaf spot advisories are available in North Carolina by e-mail every day during the growing season. For more information on advisories in your area or to receive leaf spot advisories by e-mail, contact your county agent. Leaf spot advisories for Virginia can be found on the Web at [http://webipm.ento.vt.edu/cgi-bin/infonet1.cgi](http://webipm.ento.vt.edu/cgi-bin/infonet1.cgi).

Fungicides that control early and late leaf spot include:

- chlorothalonil (Bravo; various generic brands)
- tebuconazole (Folicur; various generic brands)
- tebuconazole + prothioconazole (Provost)
- propiconazole plus chlorothalonil (Tilt Bravo, various generic brands)
- propiconazole plus trifloxystrobin (Stratego)
- tebuconazole plus trifloxystrobin (Absolute)
- azoxystrobin (Abound)
- pyraclostrobin (Headline)
- fluoxastrobin (Evito)
- boscalid (Endura)

Many populations of leaf spot pathogens appear to be insensitive to tebuconazole. Performance of tebuconazole can be improved by mixing it with 12 to 16 oz. chlorothalonil.

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