

Peanut leaf spots (036)

Summary

- Worldwide distribution. On peanuts, and other plants belonging to the genus *Arachis*. Important diseases.
- There are two types: early and late, but difficult to tell these fungi apart on symptoms – there is need of a microscope.
- Reduction of yields of 50% are possible.
- Spots, first on older leaves, produce spores that spread in wind and rain; the fungi survive in crop debris.
- Cultural control: avoid planting near old crops; 1-year crop rotation; remove “volunteers”; check crop once a week; tolerant varieties; collect and burn trash after harvest.
- Chemical control: begin to spray as soon as spots are seen and no later than 30-35 days; use chlorothalonil (also effective against rust) at 10-14 days until 14 days before harvest. More often if rainfall high.



Photo 1. Early leaf spot of peanut with leaves showing distinctive yellow margins or haloes around the brown spots.

Common Name

Peanut leaf spots, early and late leaf spots of peanuts (groundnuts)

Scientific Name

Mycosphaerella arachidis (early leaf spot) and *Mycosphaerella berkeleyi* (late leaf spot). These are the names of the fungus that produce sexual spores. Where only asexual spores are present, the fungus is known as *Passalora (Cercospora) arachidicola* and *Passalora (Cercosporidium) personatum*, respectively.



Photo 2. Late leaf spot of peanut, *Passalora personata*, on top of leaf. The spots have smaller yellow margins or haloes, compared to Photo 1, and the spots are darker. On symptoms alone, difficult to identify.



Photo 4. Lower surface of a peanut leaflet with black lesions of late leaf spot, *Passalora personata*, and brown lesions



Photo 3. Late leaf spot of peanut, *Passalora personata*, underside of leaf in Photo 2.

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Information from Shew B (2020) Peanut leaf spots. NC Extension. (<https://content.ces.ncsu.edu/early-leaf-spot-of-peanut-1#:~:text=Peanut%20leaf%20spots%20are%20caused,arachidicola%20causes%20early%20leaf%20spot,>) and GRDC (undated) Managing leaf diseases in peanuts. Queensland Government. (https://grdc.com.au/_data/assets/pdf_file/0030/207687/managing-leaf-disease-in-peanuts.pdf.pdf); and Damicone JP (2017) Foliar diseases of peanuts. Oklahoma State University. (<https://extension.okstate.edu/fact-sheets/foliar-diseases-of-peanuts.html>); and from (including Photo 4) McKenzie E (2013) *Passalora arachidicola* and *Passalora personata* -

(<http://www.padi.gov.au>).

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