# Leaf Spot on Lilac

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The MU Plant Diagnostic Clinic received several lilac samples this summer that all showed leaf spot and leaf drop/blight symptoms caused by the fungi called *Pseudocercospora* spp. This pathogen favors shaded areas and humid weather, which Missouri has experienced quite often in this summer.


**Figure 1. Leaf spots and lesions caused by *Pseudocercospora* spp.** Photo: Peng Tian

**Name:** *Pseudocercospora* spp.

**Symptoms and Signs:** Symptoms usually begin as brown spots on the leaves that begin at the edges and move inward (Figure 1). As the disease progresses, it causes leaf curling, leaf blight and eventually leaf dropping once the leaf is completely infected (Figure 2).

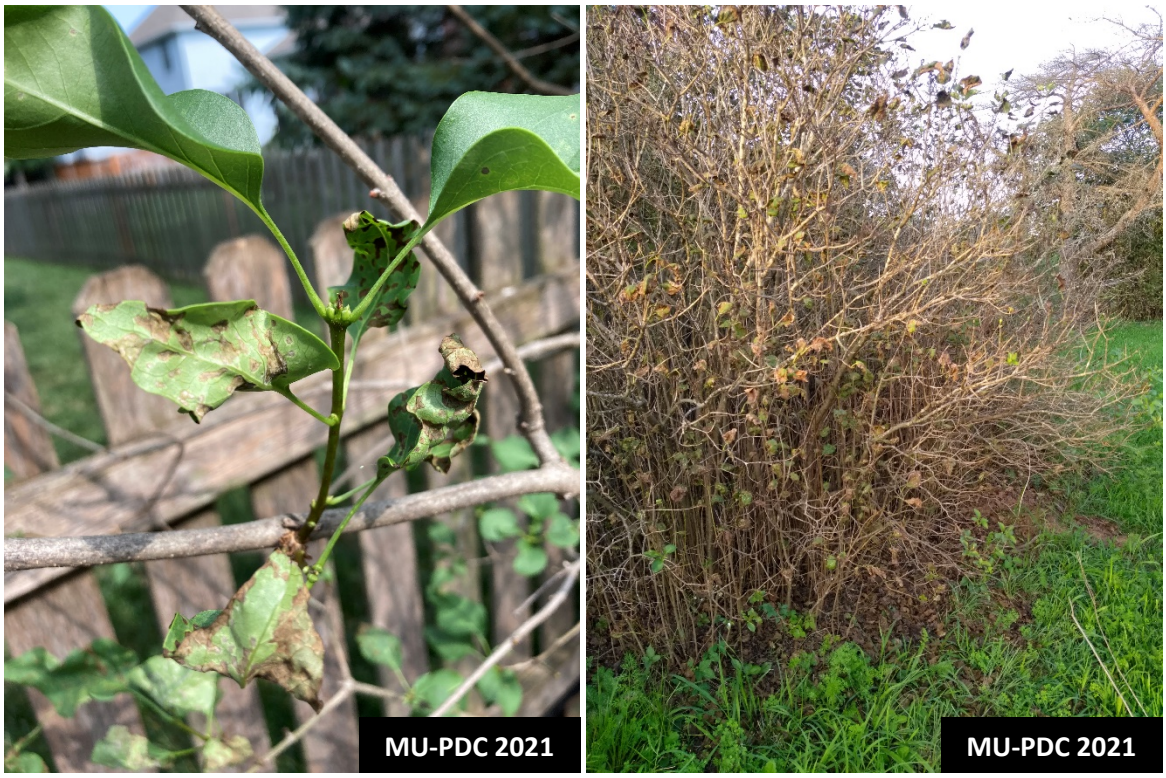


**Figure 2. Leaf curling and dropping as the leaf spot disease progresses** Photo: MU-PDC clients

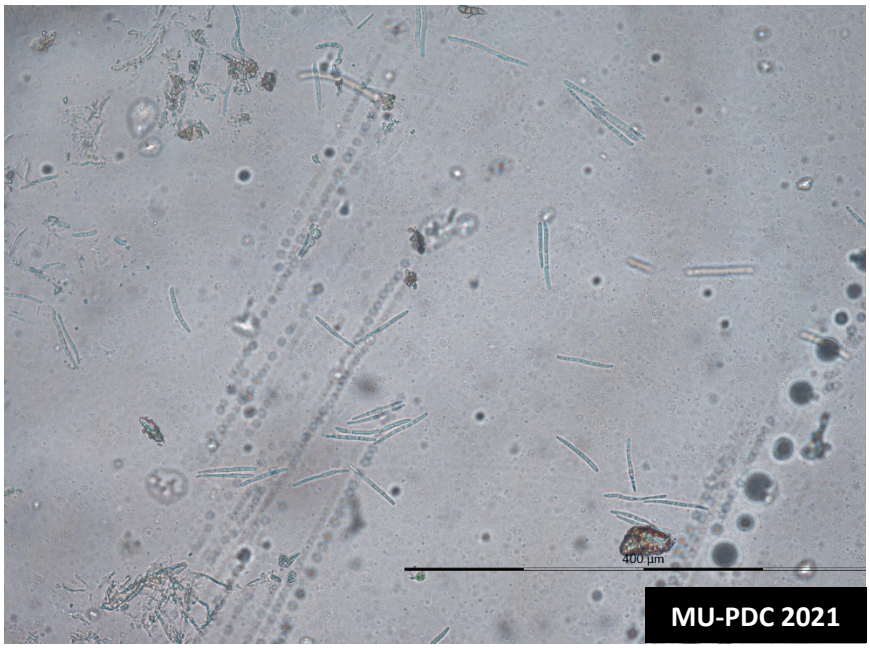


**Figure 3. Conidia of *Pseudocercospora* spp. observed under a compound microscope 400×**

Photo: Peng Tian

**Life cycle and damage**: *Pseudocercospora* sp. can survive the winter in Missouri by residing in plant debris for about 2 years and cause re-infection of the lilac. This pathogen is very active and infectious in high humidity and moderate temperatures (around 76°F). It produces asexual spores, conidia on the leaves and can be transmitted by wind and rain splash (Figure 3). This disease normally only cause cosmetical issues and rarely kill the plant; however, if the plant has been affected for numerous years in a row, then it may cause decline of the plant.

**Disease management:**

1. **Chemical control.** A preventative fungicide application in the spring when leaves first emerge may help prevent the disease if the disease pressure is high for consecutive years in the past.
2. **Ensure a dry environment.** *Pseudocercospora* spp thrives in mild, wet weather conditions, therefore avoid overwater and maintain good air circulation.
3. **Keep plants healthy.** This can be done by proper care including watering, fertilizing, providing a well-draining soil medium, and adequate lighting.
4. **Remove plant debris and pruning dead branches.** Since the pathogen can overwinter in plant debris, removal of this debris may help prevent reinfection. Do not use plant debris as compost.
5. **Ensure good air circulation.** This will promote the leaves to dry out quicker and reduce the amount of time the leaves are susceptible to inoculation.

**References:**


1. **Lilac Foliar Diseases on The Rise**, Iowa State University, Horticulture and Home Pest News, https://hortnews.extension.iastate.edu/2020/08/lilac-foliar-diseases-rise
2. **Lilac Pseudocercospora Leaf Spot**, Iowa State University, Horticulture and Home Pest News, https://hortnews.extension.iastate.edu/lilac-pseudocercospora-leaf-spot
3. **Gardeners battling leaf spot, mildew on lilacs**, Nebraska Extension, https://www.agupdate.com/midwestmessenger/lifestyles/gardeners-battling-leaf-spot-mildew-on-lilacs/article_ce19750e-e2e8-11ea-b6d4-6f481524dd73.html