

# THE PURDUE LANDSCAPE REPORT

## Sycamore Anthracnose - Don't let the rains get you down

By: John Bonkowski, [jbonkows@purdue.edu](mailto:jbonkows@purdue.edu)

Like anthracnose diseases of other [shade trees](#), sycamore anthracnose is a very common occurrence in the landscape ([Figure 1](#)). Symptoms of sycamore anthracnose normally develop as small spots or dead areas centered along the veins of leaves or along leaf margins ([Figure 2](#)). Under conducive conditions these spots expand, killing more leaf tissue and causing premature leaf drop. However, damage can be pretty severe in prolonged wet, cool weather like we have been experiencing ([Figure 3](#)).

Extensive twig or shoot blight occurs when young, growing shoots are killed, leaving affected stems leafless until dormant buds farther down, below the dead tissue, are able to develop and push out new leaves ([Figure 4](#)). This type of damage causes the tree limbs to look deformed or gnarled due to the repeated infections and twig death caused by this disease ([Figure 5](#)). It is commonly observed that the very top of the tree remains unaffected. New leaves developing in early to mid-summer, in warmer and drier conditions, will usually escape the disease.



Figure 1-Anthracnose on sycamore in downtown Lafayette, IN. (PPDL)



Figure 2-Sycamore leaf with veinal and marginal necrosis. (PPDL)



Figure 3-Severe anthracnose on sycamore in Purdue University Campus, causing delayed leaf flush. (PPDL)

Cankers may form on small branches, as evidenced by cracking and sunken bark ([Figure 6](#)). They do not usually kill the branch unless they occur at the base and completely girdle it. On younger trees, cankers can form on the main trunk which can threaten the life of the tree, but this is not normally an issue for established, mature trees.

The anthracnose fungus survives the winter in infected tissue on the tree and in dead twigs and leaves that have fallen to the ground. The spores of the fungus can be moved by wind and rain in the spring to initiate infection on young leaves and shoots ([Figure 7](#)). Since the fungus is present on the plant already from a previous infection, you can expect the disease to occur on the same plant in subsequent years.

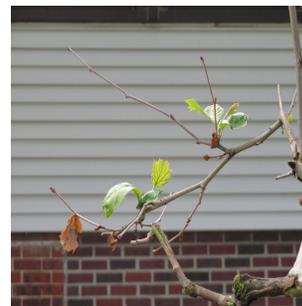


Figure 4-Sycamore branch with twig blight. (PPDL)



Figure 5-Sycamore branches with gnarled and deformed appearance. (PPDL)



Figure 6-Sycamore branch with a canker developing from an infected bud. (PPDL)

Defoliation, twig death and branch cankers can harm the tree, but this disease does not normally cause tree death. Repeated years of severe infection will reduce tree vigor and heavy twig blight may affect the appearance of tree branching. However, healthy and vigorous trees will be able to tolerate yearly infections of this disease. Providing adequate fertilization for growth and irrigation to prevent drought stress will improve the plant's ability to weather new infections and to grow after the damage has been already done. On young trees the infected or blighted tissue can be pruned out, where practical, to remove a potential inoculum source for the next year.

Fungicides are not recommended for current year symptoms because by the time you see symptoms it is too late to protect against new infections. They need to be applied at bud break the following year to prevent infections of newly forming leaves and of young, growing shoots. In landscape and residential settings, chemical spray applications are not practical due to the size of the trees and the high potential for pesticide drift. Fungicide injections have not been found to be effective for managing this disease on larger trees and so are not recommended.



Figure 7-Fungal structures growing on infected tissue. (PPDL)



Figure 8-Relatively healthy London plane tree beside an anthracnose afflicted sycamore. (PPDL)



Figure 9-Anthracnose symptoms on London plane tree. (PPDL)

Eastern sycamores (*Platanus occidentalis*) are susceptible to this disease and will likely suffer more severe symptoms compared to the oriental plane tree (*P. orientalis*) which has been found to be resistant. London plane trees (*P. x acerifolia*) can vary in their susceptibility to this disease because they are hybrids of the eastern sycamore and oriental plane tree, but many London plane trees show good resistance (Figure 8, 9). To find more information on the London plane tree, please use the following link: <http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=285140&isprofile=1&gen=platanus>

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