



TAR SPOT OF MAPLE

by: Joel Allen, Extension Educator

A number of samples of maple tree leaves has been submitted from around the county. All are showing classic symptoms of an early infection of tar spot of Maple.

There are several different fungi in the genus *Rhytisma* that infect the leaves of various species of maple trees. This disease organism usually causes raised, black spots to form primarily on the upper leaf surfaces of otherwise healthy maple trees. These spots that look like drops of tar, hence giving the disease complex its common name of "tar spot," generally start showing up in late summer or early fall as the maple foliage begins to fall to the ground. However, the first symptoms of infection by a tar spot fungus usually start showing up in mid-June as small (less than 1/8 inch diameter) pale yellow spots. The spots enlarge and their yellow color intensifies as the season progresses. The spots generally turn brown with small black pepper-like dots or fruiting bodies in the center and the leaves take on a "scorched" appearance. Each leaf can have dozens of these circular spots on it which can coalesce together encompassing large portions of or the entire leaf. These leaves will often turn brown, dry and curl and fall to the ground early. Many areas of Columbia County had a serious problem several years ago. Too early to tell if the problem will be the same this year, however. It is this scorch appearance that often draws one's attention to their maple tree. Lots of brown, curled leaves on the ground beneath the maple, does as well.

The more typical stage of tar spot is the rather large black tar-like blotch that appears on the otherwise green leaves. It becomes apparent to the homeowner as they begin to rake up the leaves of fall. The earlier form of tar spot seldom takes on the more typical tar-like blotch.

While the typical tar spot fungus disease, that usually shows up later in the season, rarely causes serious damage to the maple trees, requiring no special attention or control, this earlier form can result in brown and withered foliage and severe premature defoliation. In some cases it may appear as if a hot fire had been built nearby the affected maple tree. Maple appear to be the only tree species in our area affected by this disease organism at this point in time.

While both the early and later stages of tar spot disease seldom present a need for control, the vigor and health of severely infected trees is affected and the annual premature defoliation of the tree may lead to the eventual decline of that tree.

There are some fungicides available for the management of the tar spot disease, however, these involve the complete coverage of the tree in the spring at budbreak and a couple of follow up applications 10 to 14 days apart. Therefore, it is too late to try and manage the disease with fungicides in the summer or fall. It may also be difficult to even find someone that can spray your large trees. Annual applications of the appropriate fungicide will also be necessary to gain any results since it is an annual disease and not necessarily within the tree itself.

Foliage of affected trees that drop to the ground should be collected and disposed of. Do this wherever possible to cut down on the disease spores that can overwinter. Also consider fertilizing the severely affected maple trees in the fall. Contact Cornell Cooperative Extension (518-828-3346) for a free fact sheet on fertilization recommendations and procedures or consider hiring a local tree care or landscape specialist to do it for you. All homeowners who have severely affected maple trees should continue to be concerned about the tree's health since an injured and/or weakened tree can present a serious liability problem from falling dead limbs and branches and be more susceptible to other maladies.

Burying the affected leaves is an acceptable disposal technique. Composting is, as well, since experiments have found that composting renders most of the tar spot fungi incapable of producing spores. Many of the tar spots are eaten by insects, slugs, and other minute creatures while some are colonized by various molds. Since the new disease spores are "shot" from the old spots, simply covering the leaves with soil or other debris will greatly diminish the live spores in the spring.

Do your best to collect the fallen tar spot-infected leaves and keep the trees as healthy as you can. You are welcome to bring leaf samples for positive identification to Cornell Cooperative Extension of Columbia County, 479 Route 66, Hudson, NY 12534 between 8:30 and 4:30 Monday through Friday.

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