Apple Scab haunts Westerville Flowering Crabapple Population

Westerville, a Tree City USA designate, has a glorious tree population. The spring is a particularly spectacular time in Westerville with its flowering species, one being the Flowering Crabapple. Due to Apple Scab, by summer the disease will leave the Flowering Crabapple population looking sickly.

Although the disease does not kill infected trees outright, these repeated defoliations over the years can reduce the trees' vigor, growth and make it more susceptible to disease and ultimately death. Apple scab is caused by a fungus, Venturia inaequalis. The symptoms are most commonly observed on leaves, but fruit, blossoms, and all parts of the tree can become infected. As leaves mature, brown to dark green spots appear near the veins of the leaves in the spring. Leaves ultimately become distorted, turn yellow and drop in early summer.

This fungus is cyclical and the following illustrates its life cycle. As shown, this hearty fungus survives the winter in infected leaves that have fallen under the trees previously. During wet and rainy periods in the spring millions of spores are released into the air, and then carried by the wind to newly developing leaves on trees. Although this mostly occurs in April to June, infestations can occur throughout wet summer and fall. The spore’s effects acts quickly, and depending on weather conditions, symptoms (lesions) can show up as early as 9 to 17 days.

Westerville sees the effects of this disease each summer, so what can be done? Since the fallen leaves
carry this scab fungus, quick cleanup of fallen leaves is an integral part of prevention for the next year. Raking and destroying the infected leaves before they become dry, brittle and break into tiny fragments is essential. This will aid in breaking the disease cycle. Pruning the tree in late winter allows for better air circulation and faster drying conditions. Additionally, should you chose to look to chemicals as a remedy, pruning allows for better application of chemical fungicides.

Generally it is recommended that fungicide application occur prior to blooms appearing and then continuing on a regular schedule depending on how wet the weather is during the spring. Caution needs to be taken though to use a recommended fungicide that is not toxic to our already delicate honey bee population. As trees become larger it can be very difficult for homeowners to effectively treat for the fungus. A professional arborist with the correct products and equipment to handle the three to five applications needed per growing season may be the best and most effective route to take.

The City of Westerville does not provide this service for a number of reasons. There are nearly 1700 crabapples lining our streets; chemical costs would be enormous, manpower needs would be unable to be met and the timing window for good control is very small.

For more information please see: The American Phytopathological Society’s report on Apple Scab; Beautiful Death: Ornamental Plant Pathology, Apple Scab on Flowering Crab, Purdue University Extension; Scab of Apple, Michael A. Ellis, Dept. of Plant Pathology, The Ohio State University Extension.