

Ask A Master Gardener

December 12, 2016

Kathy B. Howell, Carroll County Master Gardener Extension Volunteer

The Effect of Spanish Moss and Mistletoe on Their Host Plants

Q: I wonder if Spanish Moss and Mistletoe can harm the trees on which they grow?

A: The University of Georgia Cooperative Extension has a publication that explains the difference in Mistletoe and Spanish Moss. I have used its content to answer your question.

Mistletoe and Spanish moss are completely different type plants although both grow in trees. Mistletoe is a parasite. A parasite lives or feeds on a host plant of a different species and causes harm to the host plant. Spanish moss, on the other hand, is an epiphytic plant. It needs the host plant for support and protection, but produces its own food and does not harm the host plant. Other epiphytes are numerous ferns, mosses, air plants, bromeliads and orchids.

Mistletoe is an evergreen parasitic plant. When the leaves drop from deciduous trees it is easily seen as balls of green. You will notice it as you drive along the highway during this season. Some trees have mistletoe growing all through them, giving the tree the appearance of a full canopy in the middle of winter. Mistletoe is found on oak, alder, birch, cottonwood, maple and many other hardwoods. It obtains minerals and water from the host trees, but it produces its own chlorophyll and can synthesize carbon dioxide, so it isn't totally dependent of its host. Mistletoe is spread by birds that eat the berries then excrete it onto trees. The seeds of mistletoe found in the excrement germinate on the trees and invade the vascular system of the host plant.

Mistletoe grows slowly at first. It may be years before it produces berries. Healthy trees are able to withstand small mistletoe infestations. Individual branches, however, may become weak and are susceptible to wind or cold injuries and can break off. Heavy infestations of mistletoe can damage the overall health of the tree and may cause an early death. I remember years past when the hunters in my family would bring mistletoe home after a hunt. They shot it out of trees! I guess they were prolonging the tree's life.

Mistletoe isn't easily removed because it is found in the higher branches of trees because that is where the birds roost. Tree services may need to be utilized to accomplish removal because they have the mechanical equipment to do the job. Removing young plants can help but if the plants are large, cutting off the branch about a foot below the infestation will be necessary to remove the roots invading the vascular system. If the infestation is on a main trunk, The University of Georgia Extension Service recommends cutting off the plant and covering it with an opaque plastic to prevent sunlight from reaching the site. When the tree is dormant a chemical, ethephon, may be used inhibit growth of the mistletoe. The chemical is recommended only for trees of high value, like those in your landscape that you want to save.

Spanish moss is found on hardwoods mainly in the southeast. It is not a parasite and makes its own nutrients needed for survival. It produces long slender stems that wrap around stems of the tree on which it grows. Tiny scale-like cups on the moss collect water and nutrients from the air and allow it to be drought tolerant. Spanish moss does require sunlight to undergo photosynthesis. It may be found on trees in decline with openings in the canopy, but it does not necessarily cause the plant's decline.

Although Spanish moss is relatively harmless to trees, excessive growth can limit the trees ability to produce the leaves necessary for its own photosynthesis needs. One can manually remove Spanish Moss, provide more irrigation and proper fertility to increase the health of the trees.

To read the complete article, The Truth about Slime Molds, Spanish Moss, Lichens and Mistletoe go to this link: <http://extension.uga.edu/publications/detail.cfm?number=B999>. For answers to any of your gardening questions, contact a Carroll County Master Gardener Extension Volunteer at 770-836-8546, via e-mail at ccmq@uga.edu or visit our office in the Ag Center at 900 Newnan Road in Carrollton.