Texas Cooperative EXTENSION
The Texas A&M University System

Texas A&M Dallas Research and Extension Center
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MISTLETOE


Female


Male

During the Christmas season, mistletoe is used as decoration and by some, to obtain kisses. Yet, severe infestations of mistletoe on a tree can give it the "kiss of death".

CAUSAL AGENT

Mistletoe *(Phoradendron spp.)* is a dioecious evergreen parasitic plant, meaning the male and female flowers are on different plants, and the plant remains green all year long. Several species of this parasitic plant exist. Mistletoe absorbs water and mineral nutrient from its host plant. This pest affects many of our landscape trees in Texas, which include hackberry, oak and cedar elm. Typically, this plant can be identified by its cluster of green stems with thick, leathery, green leaves that are nearly oval in shape. Small, whitish, translucent berries are produced from October to December. It should be noted that the berries of the mistletoe are poisonous and should be kept out of the reach of small children.

ENVIRONMENTAL CONDITIONS

New infections are caused by the dissemination of mistletoe seeds. The whitish, sticky berries of mistletoe are attractive to birds. The birds feed on these berries and then excrete the seeds which can form new mistletoe plants. Additionally, berries may ripen and drop from the mistletoe onto lower branches and create new infestation. The spread of mistletoe is directly related to the proximity and severity of established infestation.


Swelling on point of attachment

SYMPTOMS

Usually problems with mistletoe are noticed in the winter when deciduous trees lose their leaves. Severe infestation of mistletoe can give a deciduous tree the appearance of an evergreen tree. Heavily infested trees may have reduced growth vigor, be stunted or even killed. New infections occur when mistletoe seeds germinate and penetrate the bark. It develops rootlike structures called haustoria which extend within the branches of the host tree. Large swellings are often found where the mistletoe is attached to the host tree.

MANAGEMENT

The most effective method of controlling mistletoe is by physical removal of infected branches, preferably as soon as the parasite appears and before it can produce seed. Cuts should be made at least one foot below the point of attachment in order to completely remove the haustoria. Removing the mistletoe at its point of attachment will only provide temporary relief as new growth will appear at that point of attachment. Presently no chemical control has proven satisfactory in controlling mistletoe. If planting in an infested area or replacing infested trees, resistant tree species should be considered. Some trees that appear to be resistant to mistletoe include crape myrtle, Chinese pistache, Bradford pear and red cedar. For more information, please contact your local county Extension agent.

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