

## The Wonder of Mistletoe

We had an early freeze out here in the ranch country of Deep South Texas. The freeze hit us right in the middle of a spectacular butterfly migration, so our butterfly season was cut short and all of our beautiful butterflies and wildflowers were gone overnight. Along with the flowers, our mesquite trees immediately



began to lose their leaves, and although a few leaves remain, most of our trees are looking pretty bare. Among the bare limbs, one occasionally sees clumps of dense green that are a reminder of the Christmas season — mistletoe.

For a plant that is part of a quaint Christmas tradition, mistletoe has a bit of a devious nature. The mistletoe you see on oaks, hackberry, elm, and mesquite in our area is *Phoradendron tomentosum*, also called leafy mistletoe, hairy mistletoe, or Christmas mistletoe. *Phoradendron tomentosum* is native to Texas, Oklahoma, Louisiana, and Mississippi. In Spanish, it is

often referred to as injerto, which is a fitting name given that injerto is the Spanish word for “graft” and mistletoe connects to a host plant via a modified root called a haustorium.

All mistletoes are hemi-parasitic, which means that, although they contain chlorophyll and produce some of their own food, they get most of their water and nutrients from their host plant. Even though they are literally sucking the life out of their host plant, mistletoe rarely kill their host plant. That said, if there are



enough mistletoe on a single plant, the host plant may become stressed and more susceptible to disease. Mistletoe can also reduce production on fruit trees that are used as host plants. Currently, the most effective method for controlling mistletoe in your tree is removal of the branch from the tree.

Mistletoe plants are generally either male or female. The female plants bear pearly white seeds that attract birds which help to distribute their seeds. The seeds are coated with a sticky substance called “viscin” which causes the seeds to stick to the bark of trees rather than fall to the ground where they would not be able to germinate and grow.

Historically, mistletoe has been used as a folk medicine in Mexico to treat diabetes. Scientific research in Mexico has shown that an aqueous extract of mistletoe had a beneficial effect on glucose levels in diabetic rats. But before you decide to try mistletoe medicinally, you should know that both the berries and leaves are toxic to humans, dogs, and cats.



So, what do we know so far about mistletoe? It is a toxic parasitic plant that may have some medicinal value. But before you go cutting branches off of your tree, you should know that mistletoe is a host plant for one of the most striking butterflies we see in our area, the Great Purple Hairstreak. Not only is it a host plant for the Great Purple Hairstreak, it is the only host plant for the butterfly. So when you notice mistletoe in the bare branches of trees around this time of year, hopefully it will remind you of the joy of the Christmas season and the chance of seeing the colorful Great Purple Hairstreak.