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News Release

## **The History of Mistletoe**

**Question:** Can you tell me about the history of mistletoe and whether or not it is poisonous to people or harmful to plants?

**Answer:** Mistletoe is an interesting plant with an interesting history. Mistletoe refers to any of more than 200 species of semi-parasitic shrubs found worldwide. Mistletoe lives throughout the southern United States, from the Atlantic Coast to California, and on every continent except Antarctica.

Mistletoe has true parasitic properties not unlike the men I see hovering around the sprigs at Christmas parties. Rather than true roots, the plant has extensions called holdfasts that grip the host plant. With the holdfast the plants take what they want from the host plant (again not unlike the aforementioned men).

In the South, tiny yellow flowers bloom on the evergreen mistletoe from fall into winter. The familiar white berries begin to form soon after pollination and resemble little packets of glue around tiny indigestible seeds. A mistletoe plant can be either male or female, and, like a holly tree, only the female plant has berries. Although eating mistletoe berries may potentially be lethal for humans, birds seem to be immune to any toxicity.

The immunity of birds to mistletoe's poisonous qualities is essential to the welfare of the plant. The dispersal and propagation of mistletoe is largely dependent on birds that eat the berries but do not digest the seeds. Studies suggest that seeds are most likely to survive and grow if a bird deposits them on the same species of tree on which the parent plant lived.

Although the effort to obtain water and minerals, or even space itself, is intense and highly competitive among most plants, mistletoe does not encounter such problems. Tree limbs, a ready source of water and minerals for this unusual little plant, are available throughout the South, and its absence from the uppermost branches of a tall oak is probably because no bird has dropped a seed there. Mistletoe may not kill a tree outright but it certainly weakens it over time.

The use of mistletoe as a romantic lure stems from England at least as early as the 1500's. In 1520, William Irving wrote that a young man should pluck a berry each time he kisses a young girl beneath the mistletoe. When all the berries are plucked off the mistletoe it no longer has romantic powers. A version of the tradition persists today in secular Christmas decorations but we don't worry about the berry thing. As a matter of fact it may be best to make sure the berries are not present because of their toxic qualities.

Mistletoe has an interesting story behind its name. Several hundred years ago, it was thought that the mistletoe plant was formed spontaneously from bird droppings. Of course no one thought to look inside the bird droppings for a concealed seed. However, due to this error, the plant was given the name mistletoe which translates literally in English to "dung-on-a-twig." I think we should stick to the name mistletoe because "meet me under the dung-on-a-twig" doesn't set the right mood.

For more about this topic or other horticulture related information, please contact Tony Glover, Regional Extension Agent-Home Horticulture, Home Gardens and Home Pest Management at the St. Clair County Extension Office at (205) 338-9416 or email [gloveta@auburn.edu](mailto:gloveta@auburn.edu).

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