

Unsightly Galls on Oak Leaves Caused by Insects

Texas A&M AgriLife Extension Service — Galveston County Office



PHOTO BY William M. Johnson

Homeowners may encounter strange, misshapen growths on the leaves or stems of trees during late spring through fall. These growths, called galls, are often the result of the larval stage of very small wasps feeding on leaf tissue. Most galls rarely cause much harm to plants.

Every year I receive numerous questions about strange, misshapen growths on the leaves or stems of trees. These growths, called galls, are often the result of insect egg-laying or feeding. Galls themselves are tumor-like growths produced by the plant in response to chemicals injected into the plant by the larval stage of a gall-making insect. The shape,

size and form of the gall are determined by the precise “cocktail” of chemicals produced by each species of gall-maker. The mechanisms of gall formation and how these chemicals result in very distinctive and unique galls are still poorly understood. Most gall making insects are tiny wasps. By tiny, I mean smaller than a

gnat, smaller than a fruit fly, and, in some cases, as small as a grain of pepper. These wasps are harmless to people or animals.

The interesting thing is that each gall making insect makes a distinctive and unique gall — unique enough that it is possible to identify the gall-maker by its gall. If you want to look for galls in our area, most galls will be found on oak and hackberry trees. It’s not usually difficult to find multiple kinds of galls on a single tree.

So today, as you look out on the spring landscape, with its rapidly greening trees, you can be sure that gall-making insects are quite hard at work. Gall formation usually takes place in the spring, when leaves and flowers and stems are rapidly growing. However, the final results of this gall formation activity are not noticed until later into the spring and summer growing season. Only during this time of rapid cell division and growth can these insects alter plant cell division



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to direct plant tissue to grow a specific type of protective gall that will serve as a home for their developing offspring. Once a leaf or stem has stopped growing (i.e., cell division has stopped), these hormone-like chemicals can no longer affect the plant.

The purpose for insect-induced galls seems to be to provide a sheltered feeding site for the gall-maker. Because galls provide benefit for the insect at little expense to the plant (only a very few galls seem to affect plant growth or overall appearance significantly), this is sometimes referred to as a form of commensal relationship.

The two most commonly encountered galls that occur on oaks in this area develop on the underside of leaves. One gall looks like small grapes that range in color from red or yellow or creamy white. The other type of gall also occurs on the underside of leaves and looks like a collection of fuzzy lint or the end of a Q Tip. The good news for the gardener or tree owner is that most galls rarely cause much harm to plants.

Once a gall has formed on a plant, there is no need to kill the insect inside, as whatever energy loss will be suffered by the plant has already occurred. In addition, short of ripping the galls off the plant, there is no way to kill gall making insects inside their protective homes. So

it's always best to let sleeping galls lie, and worry about other, more productive things — like getting your taxes done by April 15.

Instead, as you gaze on the swelling buds and rapidly greening trees in your backyard, just take a minute to consider the gall-making insect. In addition to all the other rituals of spring, these tiny creatures are working like crazy out there to provide little bug caves, or retreats, for their offspring.

At a Glance

The Culture and Care of Palms

There are few groups of plants that can offer such distinctive beauty and presence in a landscape as palms. This factor along with increasingly more palm species becoming available to consumers has resulted in something akin to a palm craze. Whether you are new and starting your first landscape or an experienced palm collector just adding one more species, there are some basic guidelines that will make your growing palms much more successful.

Palm tree enthusiast and Galveston County Master Gardener O. J. Miller has over 17 years' experience with palms in our area. His presentation will include an introduction to palms, an overview of the exotic and commonly found palms at nurseries in our area, palm planting meth-

ods, palm fertilization, cold tolerance of various palms, and proper care.

The program will be conducted from 6:30 - 8:00 p.m. on Tuesday, April 15, at the Galveston County AgriLife Extension Office located in Carbide Park, 4102 Main, La Marque. There no charge for the program but pre-registration is required (e-mail GALV3@wt.net or phone 281-534-3413, ext. 12).

If you have visited an area nursery recently, you will likely be a bit overwhelmed with the sheer range of palm species offered. The program will include a discussion on the better varieties of palms for Galveston County and the surrounding area.

Nothing makes a statement in a Texas Gulf Coast landscape like a palm! The tropical appeal and graceful nature of palms can bring reality to your "dream" landscape.

