

Horned and Gouty Oak Galls

TREE DOCTOR TIPS

Horned and Gouty Oak Galls (*Callirhytis* spp.)

DESCRIPTION:

There are various species of wasps that may infest oak trees, but two common species include the horned oak gall wasp (*Callirhytis cornigera*) and the gouty oak gall wasp (*Callirhytis quercuspunctata*). These pests cause galls, or abnormal plant growths, found on foliage and twigs. Both wasps are similar in appearance with small, brownish-black bodies and wings and produce similar round shaped galls that vary in color from yellow-green to tan-brown. Horned oak galls have small, horn-shaped protrusions on the surface.

HOSTS:

Gall wasps can invade many species of oak trees, but horned wasps generally attack pin, scrub, blackjack and water oaks while gouty wasps invade pin, scarlet, red and black oaks.

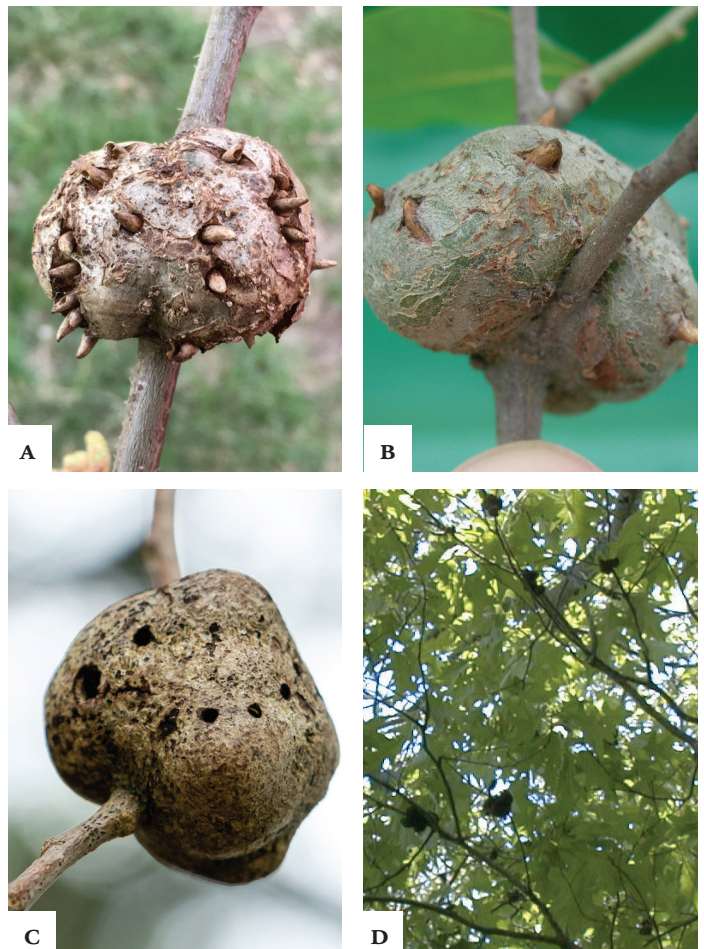
BIOLOGY AND SYMPTOMS:

The most obvious symptom of gall wasps is the gall itself. Galls usually form in clusters of spheres on twigs and foliage. The gall is made of plant tissue and forms when an insect produces certain chemicals, causing interference with normal plant cell growth. The wasps lay eggs in expanding tree buds and leaves in the spring. The larvae secrete the chemicals that produce the galls. Larvae then feed on gall tissue, pupate and emerge as adults. The adult horned oak gall wasps emerge from the horns of the galls.

Galls, when sporadic, do not normally cause severe damage to trees, but they mostly are just unsightly to homeowners. However, if the infestation is heavy, galls may interfere with water and nutrient movement inside the twigs, which weakens the tree.

MANAGEMENT:

If galls are found, simply pruning the infested twigs can help to stop the cycle. Galls on fallen twigs can also host the insect, so it may also help to collect and destroy fallen galls near infested trees. Once a gall has started forming, it is difficult to stop. Pesticides may be helpful in preventing gall wasps, but are not recommended for controlling current infestations. Consult your local arborist to see if your oaks may benefit from pruning or other oak gall wasp management services.



FIGURES A. & B. HORNED OAK GALLS FROM GALL WASP, *Callirhytis cornigera*
FIGURE C. GOUTY OAK GALL FROM GALL WASP, *Callirhytis quercuspunctata*
FIGURE D. CLUSTERS OF HORNED OAK GALLS VISIBLE WITHIN TREE

*The scientists at **The Davey Institute** laboratory and research facility support our arborists and technicians in diagnosing and prescribing based on the latest arboricultural science. For specific treatment and application details, your arborist may consult **The Davey Institute's Plant Health Care Book**.*

