



## Galls made by Wasps

*Hymenoptera: Cynipidae*

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Cynipid wasp gall, Ronald F. Billings, Texas Forest Service, Bugwood.org

Gall wasps attack primarily oak trees, and are found on roots, flowers, and acorns, but especially the leaves and twigs. Roses and brambles (blackberries and raspberries) also are attacked by gall wasps. These insects have complicated life cycles, and the galls they produce occur in an endless variety of shapes and colors. In some species, alternate generations produce distinctly different galls.

**Damage and Control:** Controlling wasp galls is difficult, and even systemic insecticides rarely give control. The good news is that most galls are harmless to the tree and it is best to accept galls as curiosities of nature--enjoy watching their development if you are interested; simply ignore them if you are not. Pruning out heavily galled portions of a plant is sometimes feasible and may help reduce populations of the gall insects. Galls are abnormal growths of plant tissue induced by insects and other organisms. Gall-making parasites release growth-regulating chemicals as they feed, causing adjacent plant tissues to form a gall. The parasite then develops within the relative security of the gall. Several different groups of insects and one family of mites have developed the ability to

induce plant galls. In addition, there are a few galls produced by nematodes, bacteria, fungi, and viruses. Dozens of additional wasp-induced galls occur on oak, rose, and brambles. Many of the insects are not well studied, and the galls do not have accepted common names. The wasps that emerge from the galls will not sting humans.

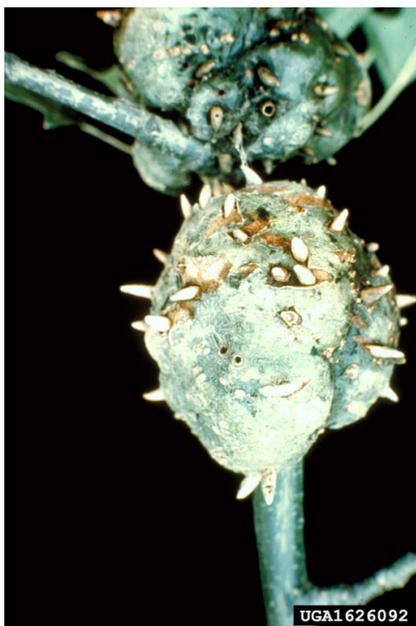


Oak Apple Galls are golfball-sized growths with thin shells and spongy cores. A single larva develops inside each gall. Oak Apple gall Image Citation: William M. Ciesla, Forest Health Management International, Bugwood.org

in May, when the wasps are inside, is the only known effective control. Horned oak gall Image Citation: John A. Weidhass, Virginia Polytechnic Institute and State University, Bugwood.org.



Wool Sower Galls are white, spongy fibrous masses with yellow, seed-like capsules throughout. A gall-wasp larva develops within each capsule. Wool Sower Gall Image Citation: Eric R. Day, Virginia Polytechnic Institute and State University, Bugwood.org



Horned Oak Galls are hard, woody swellings on oak twigs. Small horns protrude through the surface of the gall, and a single gall wasp develops in each horn. Gouty Oak Galls are similar to the horned oak gall, but lack the protruding horns. These two galls are the only wasp galls known to cause economic damage and, in some cases, if left unchecked will cause death of the tree. Pruning the galls off the tree



Oak Spangles resemble small buttons on the surface of oak leaves. Other wasp-induced leaf galls on oak resemble blisters, beads, or fuzzy balls. Many times these galls, also called Oak Button Galls, will fall from the tree and land on cars, decks, and sidewalks below, making a sticky mess. Oak button gall Image Citation: Jim Baker, North Carolina State University, Bugwood.org