## HOT NEWS

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## 'OF ALL THE GALL' HORNED OAK GALL IN PIN OAKS

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One of the dictionary definitions for 'gall' is as follows.

Gall: brazen boldness coupled with impudent assurance and insolence

Surely reading this would be enough of an insult that even a marginally, self-respecting insect such the gall wasp should feel enough shame to desist in the gall-making practice. But apparently not so for the tiny gall wasp (Cynipidae: <u>Callirhytis cornigera</u>), that is responsible for the horned oak gall growths in pin oaks.

Most galls that form in oak trees, and there are quite a number, do not cause significant harm to the tree. They are many and vary widely in size, shape and color. The galls are formed by the plant as a result of chemicals injected by these insects. The plant response is a gall, actually plant tissue, around the developing insects thereby providing them both food and protection.

Even though they may become a bit of an eyesore, galls are most often small and because they are plant tissue, they do not cause enough damage to be of any real concern. Most times, they do not even justify any chemical or cultural treatment.



Horned oak gall in pin oaks

The horned oak gall may be one exception. In response to horned oak gall wasp infestation on the twigs and small branches of pin oaks, irregular, hard, woody masses, begin to grow. These can easily reach 3 inches or more in diameter as they grow around the eggs and larvae of the wasp. After 22 months, the characteristic horns of the horned oak gall develop and grow out of the gall tissue. A single wasp larva develops in each horn.

**PURDUE EXTENSION** 

Pin oaks are the primary host for the horned oak gall wasp. If left unchecked, these galls can grow together and cause death of the twigs and branches where they congregate. Highly infested young trees may even die, as a result of these insects.



Gall clipping

Most consider it impossible to stop the growth and spread of horned oak galls. Chemical insecticides applied to the foliage or even systemic insecticides injected into the tree or the soil have shown little effect in slowing the spread.

Perhaps, physical removal is the best control strategy against these pests. When found in low numbers and while they are quite small, galls may be removed by pruning. The debris should be destroyed in a manner that will not allow the continued survival of the insect inside. Smashing, hammering, grinding, freezing, burning, and pulverizing when used separately or in combination, are all effective and creative methods. Any are considered fitting responses to the 'galling' behavior of this insect.