



**bristle gall wasp** (*Andricus albicomus*)
Small, conical galls with an opening at the tip. Covered in stellate hairs on a short pedicel. Usually on leaf undersides.





pinched leaf gall wasp (*Andricus bakkeri*) Small, tan to red basket-shaped galls with pinched tips on leaf undersides. Relatively hairless.





**clustered gall wasp (***Andricus brunneus***)**Small, tan to reddish, pear-shaped and fuzzy galls most often growing in clusters on the midrib of leaf undersides.





**spindle gall wasp** (*Andricus chrysolepidicola*) Small to large, spindle-shaped galls within young twigs. Persisting on twigs indefinitely.





**club gall wasp** (*Andricus coortus*)
Large, rounded bud galls at the tip of young twigs. Fairly smooth and lightly fuzzy.





**fimbriate gall wasp** (*Andricus opertus*)
Small galls in spring on midrib of leaf bases, producing spines. Starting red then fading to brown.





**California gall wasp** (*Andricus quercuscalifornicus*) Very large, tan, ball-shaped galls on young twigs. Often remaining on twigs for a few years.





**round gall wasp** (*Burnettweldia washingtonensis*) Medium, round galls on twigs. Tan to brown, fuzzy and wrinkled, growing singly or in clusters. Remaining on twigs.





**speckled gall wasp** (*Cynips mirabilis*)
Medium, round galls, speckled and lightly fuzzy, attached to the undersides of leaves, often on the midrib.





honeydew gall wasp (*Disholcaspis eldoradensis*)
Small, red galls fading to brown, growing in rows on twigs.
Galls appear to sit on top of twigs rather than burst from.
Galls secrete a honeydew that attracts ants, bees, and wasps.





**twig gall wasp** (*Disholcaspis mellifica*)
Small, red galls fading to brown, rupturing from slits in twigs, growing clustered in rows. Galls secrete a honeydew that attracts ants, bees, and wasps.





**dried peach gall wasp** (*Disholcaspis simulata*) Medium, rounded galls on stems with nippled tip. Very fuzzy, drying in time from reddish to tan and brown, losing fuzz.





**jumping gall wasp** (*Neuroterus saltatorius*)
Tiny, oval galls scattered between veins on leaf undersides.
Often abundant, mostly jumping off leaves in summer.





**Undescribed plate gall wasp #8**Small, saucer-shaped galls on undersides of leaves. Reddish to tan or yellow, with a brown protuberance in the center.





**ball-tipped gall wasp** (*Xanthoteras teres*)
Small, spherical galls atop a tubular stalk on leaf undersides.
Reddish and loosely covered in branched hairs.

## **Gall Wasp Diversity**

Gall wasp diversity is high in North America. Oak trees in western North America host numerous wasp galls, with highest diversity in California. This guide covers most of the oak gall wasps that can be found from the Willamette Valley to British Columbia.

## What is a Gall Wasp?

Gall wasps in the family Cynipidae are tiny insects that induce galls on plants. These galls are abnormal growths that enclose the eggs of the wasp, providing food and shelter for the developing larva. How the wasps force the creation of the galls is not well understood. The shape of the gall is unique to each wasp species. Most species have alternating generations of both males and females, and females only. The most noticeable galls (and the ones covered in this guide) are usually in the female-only, or agamic, generation.



Adult female of Andricus quercuscalifornicus with eggs visible through abdomen.

## **Parasites and Predators**

Oak galls are subject to invasion or predation from a number of different sources. Many are parasitized by Chalcidoid wasps which inject their eggs into host galls. *Cynips mirabilis* galls are frequently parasitized by an inquiline moth that feeds on the interior of the gall.





Chalcidoid wasp (Aprostocetus sp.)

Photos of *Andricus opertus* by Don Wirtala. All other photos and guide design by August Jackson.

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## Oak Gall Wasps of Mount Pisgah



