## **Pest Alert: Crimson Spire Oak Gall Wasp**

By: Andrew Miller, Master Horticulturist at Designs by Sundown

**History:** The Crimson Spire Oak (*Q. robur x Q. alba*) is a prized tree in the Colorado Landscape. They are known for being hardy, drought tolerant, can withstand heavy winds, fast growing, mildew resistant, and limited insect pressures. Stem swelling galls were first noticed in Douglas County and images were sent to Colorado State University for identification. Samples were also sent to the USDA/Smithsonian for identification. Gall expert Miles Zhang, a postdoc with USDA, was able to ID the wasp to (Genus: *Andricus*). **Being that this is an unknown species not matching any recorded gall formation in the US, a molecular study project has been opened with the USDA/Smithsonian.** 

**Description:** Adult Gall Wasps insert their eggs inside the stem, most commonly near the terminal bud of the new growth. Larvae hatch and release unique chemical signals which cause growth of the stem to swell around the larvae and create a distinct gall. Larvae will grow and develop inside the protection of their gall. In early spring, as temperatures rise, the adult wasps emerge from the gall creating a noticeable exit hole. Wasps are smaller than the size of a pinhead, but gall formations can measure anywhere from 1" to 6" in length and approximately 3x the width of the stem.

**Locality:** The occurrence of this wasp has only been recorded in Northern Douglas County and South-Western Arapahoe County. Only a handful of Crimson Spire Oaks have been documented with galls present.

**Recommendation:** Primary damage is **AESTHETIC**, however severe gall masses on occasion have caused stem dieback. The Crimson Spire Oak is still a valuable landscape tree and is not recommended to be removed from planting plans.





We Would Like Additional Samples!

If Sighted, Please Contact: **Andrew Miller** | 303.725.0453 | <u>amiller@designsbysundown.com</u> Observation and discussion can be found here: <a href="https://www.inaturalist.org/observations/114327445">https://www.inaturalist.org/observations/114327445</a>