What Plant Is Causing My Allergies?

Leimone Waite, Master Gardener, Feb. 28, 2020

Q: I am new to the Redding area and these past couple of weeks my allergy symptoms have become intense. Do you know what plant might be causing my allergies?

A: Pollen from trees and plants are a major trigger for many allergies causing mild to major discomfort to those who suffer from them. An allergy is the bodies defense system reacting in an extreme way to a very small amount of a specific substance, called an allergen. You are not alone in your suffering from pollen allergies. According to the Asthma and Allergy Foundation of America (AAFA), 54 million people each year are affected by allergies caused by plant pollen.

The plants with the greatest impact on allergies are those trees, plants and grasses that are windpollinated. These plants release pollen usually in the spring or fall which is carried by wind (up to 20 miles) to the female flowers of their various species. This plant reproductive strategy of creating large amounts of pollen and scattering it by wind, creates an outdoor environment saturated with pollen for brief periods of the year. Because of the large amount of pollen in the air, it is hard to avoid coming into contact with the allergens. Attractive, brightly colored flowers that are pollinated only by insects rarely cause the allergy problems of these wind-pollinated plants.



Slo-mo video of intense pollen bomb after tree gets cut down (Photo: Timberline Outdoors, LLC)

According to University of Arizona Cooperative Extension, "Trees that can cause pollen allergies include: juniper, cypress, mesquite, mulberry, cottonwood, pecan, sycamore, desert broom, elm, walnut, oak, olive, and palm. Pines also produce pollen, but it is generally not considered allergenic.

Offending grasses and herbaceous plants include: bermudagrass, johnsongrass, ryegrass, alfalfa, pigweed, cocklebur, lambs quarter, ragweed, and Russian thistle (tumbleweed)." This list is not all-inclusive but contains most of our worst allergenic pollen producers. The allergies you are suffering could also be caused by plant in your landscape that is not common. For instance, I am allergic to the pollen from the acacia trees.

It can be useful for allergy sufferers to know which pollen species are present at any given time so you can plan to avoid outdoor activities during these times. You might note that pollen levels are often given as part of the weather report on television. Pollen levels are determined by conducting a pollen count. Pollen counts measure the amount of airborne allergens present in the air at the time of sample collection.

The American Academy of Allergy, Asthma and Immunology (AAAAI) has a network of pollen counters across the United States. Each counter works under the direction of an AAAAI member and the counter must first pass an intensive certification course. Counters use air sampling equipment to capture airborne pollens. You can find the site nearest to Redding at https://www.aaaai.org/global/nab-pollen-counts/western-region. Unfortunately, the closest station is in Roseville, which is about two weeks ahead of us for plants blooming and they do not have any pollen data available yet for this year.

Here are a few strategies for reducing pollen exposure:

- Dry clothes in an automatic dryer rather than hanging them outside;
- Limit outdoor activities during the peak pollen seasons; stay inside during peak pollen times (10 a.m. to 4 p.m.);
- Restrict outdoor activities during dry days with high winds;
- Shower after spending time outdoors to remove pollen from hair and skin;
- Use air filters and clean regularly, or run an air conditioner and change the air filter frequently;
- And wear a dust mask when mowing the lawn, gardening, or raking leaves.

For more information on trees that cause allergies, strategies to limit exposure to pollen and furcating maps for high pollen counts check out the Pollen website at <u>https://www.pollen.com/</u>.

The Shasta Master Gardeners Program can be reached by phone at 242-2219 or email mastergardener@shastacollege.edu. The gardener office is staffed by volunteers trained by the University of California to answer gardeners' questions using information based on scientific research.