

Pollen – a necessary irritant  
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Have your eyes been watering? Do you have the sniffles in the morning when you wake up? Chances are the cause of these irritating symptoms is pollen. The past several weeks have been especially heavy with the powdery stuff. The yellowish dust is coating cars, boats, outdoor furniture and bodies of water. But even worse, it is causing a lot of people misery and discomfort. In the United States alone, over 40 million people are affected and suffer from seasonal allergies.

Wikipedia defines pollen as “a fine to coarse powder containing the *microgametophytes* of seed plants, which produce the male gametes (sperm cells).” Each grain of pollen has a hard coat that protects the cells within while it is moving around during the pollination process.

Plants reproduce by releasing millions of pollen spores which then travel to other plants. Some plants may rely on insects to pollinate them, however many rely solely on the wind. When this happens, the air is full of the pollen dust and people and animals inhale it while breathing.

Before flowers can produce any fruit, they must be pollinated. Pollen carries all the genetic information that determines the plant’s characteristics. It is produced in a plant’s male reproductive area or stamen. From there it travels down the pistil to the ovum. All of this is the “pollination process” and once this happens, seeds are developed, which is called fertilization.

Pollen grains don’t all look alike. Some are spherical while others are winged. Depending on the plant type, pollen grains come in varying sizes and look different on the surface. Of course, pollen grains are extremely small and most range from 24 to 50 micrometers, which means they can only be seen with the aid of a microscope. It is possible to see pollen with the naked eye when it is piled up on the flower or when there are enough grains to coat a surface.

Even though the study of pollen or Palynology is quite fascinating, those little microscopic orbs cause their share of problems. Many people suffer from allergies to pollen. While drifting along, the wind often causes pollen grains to come in contact with the sensitive nasal passages of both humans and animals. Those that suffer from allergies could be miserable for weeks. And for us in Florida, allergy season begins early.

Trees generally pollinate in January in the Sunshine State, while grasses usually wait until April. Usually by July relief from pollen is felt by those who suffer from it. But once late summer arrives, ragweed is in full swing and the pollen grains once again take flight. But take heart, there are some steps you can take to find relief from the sneezing, runny nose, scratchy throat, watery eyes, coughing, wheezing, tiredness and headaches.

Pollen counts are highest from 5a.m. through 10 a.m. so keep outdoor visits and activities to a minimum during those hours. Keep the windows in your car and house closed up and don’t use window or attic fans if possible. If mowing the lawn irritates your sinuses, consider hiring someone else to do that chore for you.

If you purchase trees or plants for your yard, make sure to look for the species that don't aggravate allergies. Elm, Hickory, Olive, Pecan, Sycamore, Walnut and female species of Ash, Box Elder, Cottonwood, Date palm, and Maple are some good choices for trees. If possible avoid Bermuda, Johnson, Kentucky bluegrass, Orchard, Sweet vernal and Timothy grasses for your lawn. These types of grasses are found to cause allergies in more folks than other types.

For the most part, the more flashy the flower, the less likely it is pollinated by wind. Brightly colored, fragrant species are usually reliant on bees, butterflies, hummingbirds and other critters for the pollination process. Wind-pollinated plants are generally not as showy as others are. These plants consist of feathery-looking flowers. Many trees and grasses rely on wind for pollination. So, if pollen is a problem for you, try to avoid wind pollinated varieties of plants when possible.

If none of these practices work for you, it may be necessary to take a trip to your doctor. Chances are you will be tested to find out what the cause of your symptoms is. Once you know what the problem species are, avoidance to the culprit may be much easier. Also many medications are available that will give some relief.

Even though these pollen grains may cause us a fair amount of misery, they are essential to the reproduction of plants. Without the wind to carry pollen and the insects and birds that assist in the pollination process, we would be very hungry and our earth certainly wouldn't be the beautiful, colorful place that it is.