

## Pollen Allergy?



Scanning electron microscope image of pollen grains from a variety of common plants

Pollen in plants is used for transferring haploid male genetic material from the *anther* of a single flower to the *stigma* of another in *cross-pollination*. In a case of *self-pollination*, this process takes place from the anther of a flower to the stigma of the same flower. The actual pollen allergy is called *hay fever*, which is caused when pollen is dispersed through the air, because pollen is fine it can be carried for great distances through the air current. It also is easily inhaled as it comes in contact with nose, mouth and nasal passages. If a person has a pollen allergy, he may be affected by pollen in different allergy seasons from different type of plants. Spring blooming plants include oak, birch, hickory, pecan, and even some grasses produce pollen mainly and cause allergy.

The immune system normally defends the body against harmful invaders, such as viruses and bacteria, to ward off illnesses. In people with pollen allergies, the immune system mistakenly identifies the harmless pollen as a dangerous intruder and begins to produce chemicals to fight against the pollen. This is known as an allergic reaction, and the specific type of pollen that causes it is known as an allergen. The reaction leads to numerous irritating symptoms, such as sneezing, stuffy nose, and watery eyes. Some people have pollen allergies year-round, while others only have them during certain times of the year. For example, people who are sensitive to birch pollen will usually have increased symptoms during the spring when birch trees are in bloom. Similarly, those with ragweed allergies will be most affected during the late spring and early fall.

Pollen allergies can trigger allergic reactions, which affect the sinus and respiratory tract of those with this allergy. Symptoms can include watery eyes, runny nose, rhinitis, sore throat, coughing, increased mucous, headaches and asthma. One of the best ways to combat pollen allergies is to understand which pollens you are allergic to. An allergist is able to easily test you for various types of trees, weeds, and grasses, and provide you with a list of pollens that affect you adversely.

Dr. Naveed Shuja Rana, Ph.D  
Assistant Professor Biochemistry  
Lahore Medical & Dental College, Lahore  
Assistant Editor  
Pakistan Journal of Medical & Health Sciences (PJMHS)  
Email: rananaveedshuja@gmail.com Cell, 03334205687