

Background information about Hay Fever and Birch Pollen

Birch pollen is the most important allergenic tree pollen in the UK, and affects about 25% of hay fever sufferers. The season typically lasts for about four weeks in any one area and occurs between mid to late March and the middle of May depending on location and weather. The season usually starts very suddenly with counts soaring from nothing to very high in a few days in severe years. So people who are allergic to Birch pollen can have a sudden attack of hay fever with little or no warning. Birch pollen cross reacts with several other pollen types from closely related trees, including Alder, Hazel and Hornbeam. Alder and Hazel flower earlier in the year, often in January, and can prime people causing more severe reactions to Birch later in the year.

Birch trees tend to have alternating high and low pollen production years so some people may not have symptoms every year. As their symptoms are not a regular seasonal occurrence they may not realise that they are allergic to Birch pollen. For this reason they may think they have a cold and treat their symptoms inappropriately, so it is important for people to be aware of their allergy triggers.

Many people associate hay fever just with grass pollen in the summer months and do not know about allergy to other types of pollen including the trees and weeds. In

some cases this lack of knowledge extends to planners and landscape gardeners who often plant Birch trees in parks, streets and built up areas because of their attractive appearance, quick growth and soil improving capacity. However extensive planting with these trees increases the local pollen count notably and can result in an increase in sensitisation and symptoms in the residents.

Birch pollen allergens cross react with certain foods because they have similar proteins. Most frequently this happens with raw apples and stoned fruits to cause itchiness and swelling in the mouth. This phenomenon is known as oral allergy syndrome. Cooked fruit does not cause a reaction.

Birch pollen is not only an important aeroallergen in the UK but also across much of Europe. However the amount of Birch pollen needed to cause symptoms in allergic people differs regionally. It has been found that the amount of allergen on the pollen varies with factors such as climate and air pollution, typically with pollen from urban areas being more potent than that from rural locations. Research indicates that this is due to several factors including biological stress on the trees and interactions between air pollutants and the allergenic proteins on the pollen grains.