Birch Tree
(Betula species)

There are over 20 different birches in the US, and if you add in the many varieties developed specifically for ornamental purposes, there are more than 40 kinds of birch trees and shrubs in the US. In the US, allergenic extracts are available for Spring, Paperbark, Red/River and White Birch. Since all birches are in the genus Betula, allergenically they all have significant cross-reactivity. Cross-reactivity means that if you are allergic to, say, White Birch, you will in all likelihood also demonstrate allergy to all the other birches.

Birch trees are among the most commonly encountered trees in the US. In terms of allergy, Birch is second only to Oak in causing tree allergies, and is one of the most studied pollen allergens in the world. Over 20 individual allergenic proteins have been identified from birch pollen. At least one of those major proteins is also known to occur in other trees pollens, specifically Alder and Oak, so some cross-reactivity should be expected. While a single birch tree may only pollinate for approximately 7 – 10 days in early spring, different trees and different types of birch can overlap and extend the actual birch pollen period for weeks. In addition, birch pollen has been shown the ability to travel great distances. One study from Denmark showed birch pollen had traveled all the way from Poland and Germany, hundreds of miles!

Birch pollen can be a severe allergen and has been clearly implicated as a major cause of allergy and asthma. In Western Europe, the incidence of allergy to birch is increasing at a faster rate than other aeroallergens. Birch allergy also has been shown to be a factor in the oral allergy syndrome – patients allergic to birch pollen have a higher incidence of food allergy to raw apples.