London plane

Botanical information

Family: PLATANACEAE, consisting solely of the genus Platanus.

The plane tree is a large, majestic deciduous tree, easy to recognise by its bark, which peels off in irregular plates and varies in colour from grey to yellow to green. The leaves, which appear in spring and fall during autumn, are large and palmate, with 3-5-7-lobes. The male and female flowers grow in separate inflorescences on the same plant. They consist of small spheres, about 1 cm in diameter; the female ones are copper-coloured with small hooks, and the male ones are smooth and fade as pollen is released. The fruit is a sphere 3 to 4 centimetres in diameter, which remains on the tree until the following spring.

It is a common plant in urban and urbanised environments, planted in streets, promenades, parks, and gardens. It is also present on the margins of some roads and paths and grows beside some rivers. There are also some forest plantations.



Fig. 1. Overview of an urban walkway with shade plane trees and details of the leaf, male and female inflorescences and (below) the fruit, the bark of the trunk and an inflorescence releasing pollen.

<u>Scientific name (species)</u> *Platanus x hybrida* (es un híbrido de *P. orientalis* i *P. occidentalis*)

Common names:

English: Hybrid plane, London plane, London planetree

Català: Plàtan d'ombra, Plàtan de carrer, Plataner

Castellano: Plátano común, plátano de sombra, Plátano de Londres, Plátano de paseo.

Euskera: Albo, Platano arrunta. Galego: Plátano, Pradeiro.





Aerobiological information:

The common plane has spring pollination, short and very intense for about 3 - 5 weeks. Where there are many plane trees, pollen may be present in the air continuously, although in small quantities, and during autumn, when the leaves fall, pollen may be released again.

The pollen calendar is shown below, with information on the distribution of this type of pollen throughout the year at each of the stations of the Aerobiological Network of Catalonia (*Xarxa Aerobiològica de Catalunya*, XAC). For more information consult: https://aerobiologia.cat

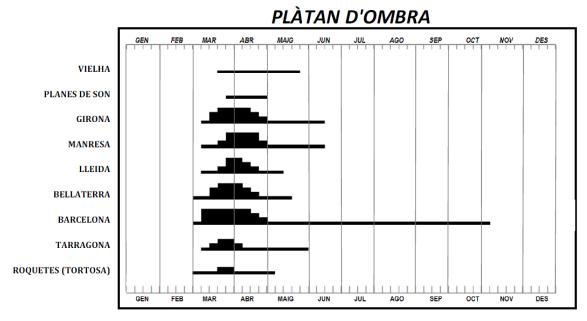
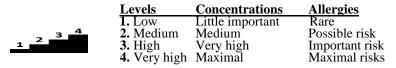


Fig. 2. Comparative dynamics of London plane pollen levels in Catalonia and allergy risk.



Remark: Near flowering plants, levels may be higher than indicated.

Medical information:

London plane pollen is responsible for a large number of allergies in early spring. These can start very abruptly because pollination is very sudden.

Coinciding with the pollination of the London plane, the fruits of the previous year are often scattered and the wind blows away the small seeds surrounded by hairs that formed the spherical fruit. Many people suffer from irritation (not allergy) during this dispersal.

People allergic to London plane pollen may suffer cross-reactions with some plant foods such as peaches, apples, nuts (hazelnuts, walnuts, peanuts...). Despite the name of the plant, there is no problem in eating bananas, which come from very different plants (a type of palm tree).





Tips for people with allergy to London plane pollen

- Be aware of (with a medical diagnosis) which pollen is causing the allergy.
- Keep yourself informed of the levels of allergenic pollen in your usual area and inform yourself of the levels in the areas where you plan to go. It is advisable to adapt voluntary trips (weekends, vacations...) to areas where the allergen that affects us is not present. The website https://aerobiologia.cat shows updated information on pollen levels in Catalonia and explains how to access information from other geographical areas. You can sign up (and unsubscribe) to receive the weekly newsletter at: https://aerobiologia.cat/pia/en/subscribe#newsletter
- If you notice "problems" outside the usual season, consult your allergist to see if sensitization to other allergens has occurred.
- Learn to recognize the pollen-producing plant that causes allergy and, above all, what its flower looks like, from the moment it begins to form and while it is releasing pollen.
- Have the plant that causes allergy located in the usual environment (home, school, work...) and avoid approaching it as much as possible when we see it starts to have open flowers and until the end of flowering.
- During the pollination season,
 - if you are outdoors, protect your eyes with dark circles and your nose and mouth with a handkerchief or a mask to help filter the air.
 - if you go by car, travel with the windows closed and with an anti-pollen filter; if you go by motorcycle or bicycle, follow the previous advice.
 - change your clothes when you get home and wash them before using them again.
 - dry your clothes indoors to avoid retaining the allergen that affects you.
 - wash your hair or avoid contact with the pillow when you go to sleep, as it will retain the particles that were in the air.
 - ventilate the rooms for 5-10 minutes, if possible before it gets light or early in the morning, because normally in this time slot there will be little pollen in the air.
 - wash fresh vegetables before eating them, as they may carry pollen grains.
 - be very careful on windy, dry and sunny days, as they tend to have higher pollen concentrations.
 - the central hours of the day are usually those with the highest pollen concentrations.
 - having a cold, environmental pollution, physical efforts, the presence of perfumes, tobacco, insecticides, lacquers... can aggravate the symptoms.



