# Cypress

Botanical information

Family: CUPRESSACEAE. This family contains several genera and species, many of which, like the cypress itself, are present in our environment for their ornamental use. The only native plants of this family in Catalonia, present in forests and wild habitats, are from the genus *Juniperus*. In this sheet, we describe the cypress - the most abundant species in the inhabited environment - although when we study the pollen in the air, we cannot distinguish by its shape which plant of the family it comes from.

Cypresses are evergreen trees that can reach up to 30 metres in height and, depending on the species, have a very elongated conical or columnar shape, with a dense crown of branches near the trunk, or a pyramidal shape, with a lax crown and branches spread around the trunk.

The leaves are very small, like scales of 1-2 mm, and are arranged in rows fully covering the twigs. The flowers are grouped in small structures called cones. The male cones are cylindrical, about half a cm long, and the female cones are spherical and half a cm in diameter. The latter, if fertilised, is transformed into a woody, spherical, woody pseudo-fruit, about 3-4 cm in diameter, green at the beginning and brown when ripe.

They are found planted in squares, parks and gardens and are common in cemeteries and as "fences" on roads and barriers to protect crops from the wind in the countryside.

Fig. 1. General view of a cityscape with cypress trees and detail views (middle) of branches ending in male inflorescences and (top right) of galbulus (fruits) and (bottom right) branches ending in female inflorescences.

Scientific name of most representative species: *Cupressus sempervirens*, *C. arizonica*, *Juniperus oxycedrus*, *J. communis*, *J. phoenicea*, *Thuja* sp., ...

Common names:
English: Ciprés, Arizona cypress, Cade, Juniper, Thuja
Català: Xiprer, Xiprer d'Arizona, Càdec, Ginebró, Savina, Tuia,...
Castellano: Ciprés, Ciprés de Arizona o arizónica, Enebro de miera, Enebro, Sabina, Tuya, ...
Euskera: Altzifrea, Arizona altzifrea, Hego-ipurua, Ipar ipurua, Miter feniziarra, ...
Galego: Cipreste, Cipreste de Arizona, Cimbro-galego, Cimbro, Sabina, ...

Aerobiological information:
Cypresses pollinate during winter and early spring; in autumn in the lowlands and late spring and summer in the mountains, these pollinations coincide with those of *Juniperus* in the natural environment.

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

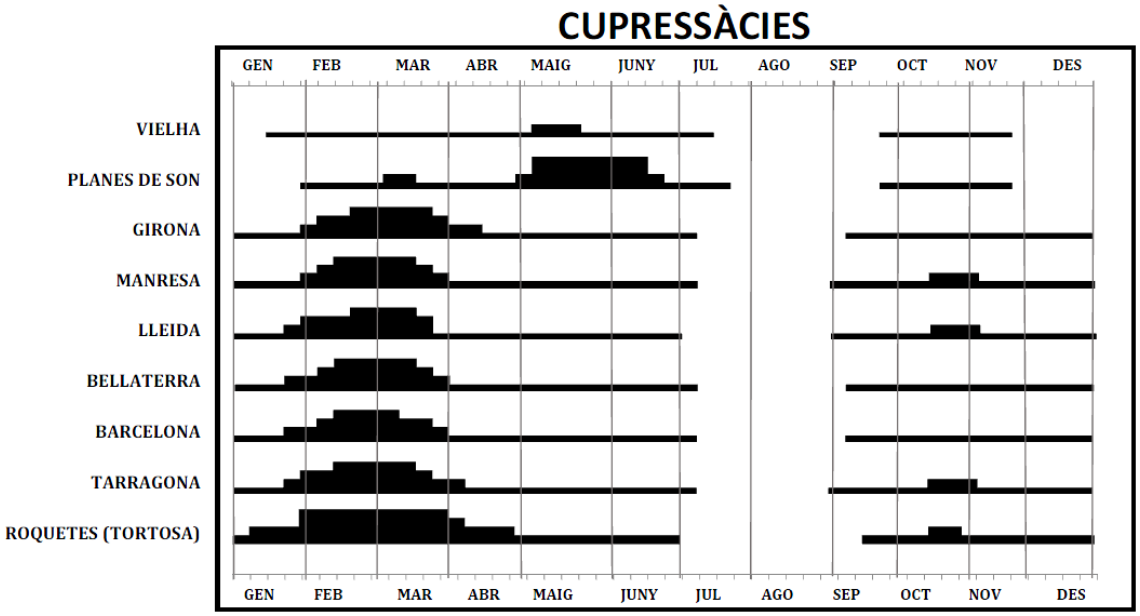
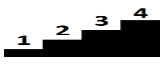



Fig. 2. Comparative dynamics of Cupressaceae pollen levels in Catalonia and allergy risk.




| Levels | Concentrations | Allergies |
|---|---|---|
| **1.** Low | Little important | Rare |
| **2.** Medium | Medium | Possible risk |
| **3.** High | Very high | Important risk |
| **4.** Very high | Maximal | Maximal risks |

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

Medical information:
Pollen from different species of the Cupressaceae family can cause symptoms as they are cross-reactive.

Cypress pollen and pine pollen are not cross-reactive. The lesions that sometimes appear on the skin in pine forests are not related to this pollen either. These lesions are generally due to the presence of the processionary pine caterpillar.

***Advice for people with allergy to Cupressus pollen and other Cupressaceae 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.