

Artemisia

Botanical information

Family: COMPOSITAE (original name) or ASTERACEAE (updated name), a family that groups together a large number of species, almost all of them pollinated by insects and recognisable by the way their flowers are grouped - in inflorescences, with the characteristic shape of a daisy. *Artemisia* is part of the subfamily Asteroideae, where some species are air-pollinated (anemophilous), including *Artemisia* and *Ambrosia* (ragweed).

The genus *Artemisia* consists of herbaceous or shrubby plants between 20 and more than one metre high. The leaves are very narrowly cut, often dark green on the upper side and white on the lower side, sometimes covered with white hairs. The flowers are small, grouped 10-12 in flower heads distributed along terminal branches with intermingled leaves.

It is found on roads and roadsides, riverbanks, uncultivated and poor soils, and even on saline and lowland soils in the high mountains.



Fig. 1. Overview of a roadside margin with flowering sagebrush and mink detail of some flowering branches (inflorescences in capitulum and leaves) and leaves.

Scientific names of representative species: *Artemisia absinthium*, *A. alba*, *A. barrelieri*, *A. campestris*, *A. herba-alba*, *A. verlotiorum*, *A. vulgaris*, entre otros.

Common names:

English: mugwort, wormwood, sagebrush

Catalán: artemisia, donzell salvatge, artemega, altimira

Castellano: altamisa, artemisa, absintio, ceñidor, hierba de San Juan, madra, tamarajas

Euskera: belarmin, erle-belarr, harjo, ario

Galego: artemexón, axenxo, herba da Nosa Señora

Aerobiological information:

Artemisia pollen is present in the air during autumn in most areas of Catalonia, except in mountain areas, where pollination occurs in summer. In the Lleida area, pollen is also present in winter, although in very low concentrations.

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>.

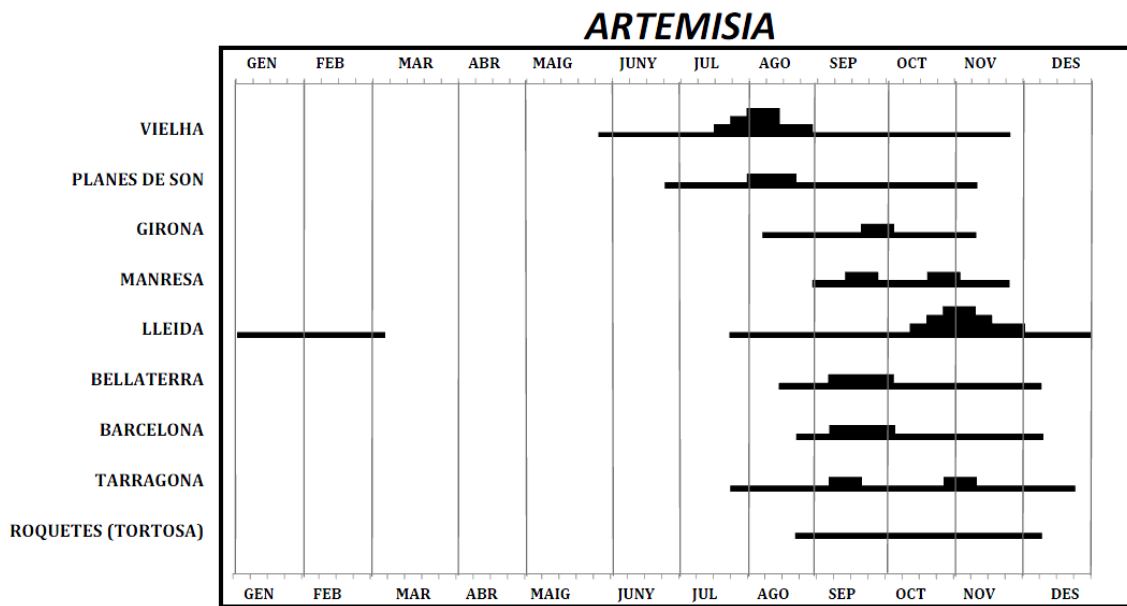


Fig. 2. Comparative dynamics of Artemisia pollen levels in Catalonia and allergy risk.

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

It causes allergies in summer and autumn (July to October).

People allergic to artemisia may have a reaction to certain foods: honey, sunflower seeds or litmus seeds, chamomile (in infusions or eye washes), celery, carrots, and some spices or condiments. In some patients, a reaction occurs when eating certain fruits such as apples, melon, and watermelon.

Many species of the Compositae family (*Taraxacum*, commonly known as dandelion; *Chrysanthemum*, commonly known as daisy; *Helianthemum*, sunflower...) also have allergenic pollen, but they are less important in allergy because they are pollinated by insects, and therefore the concentration of pollen grains in the atmosphere is much lower.

Tips for people with allergy to artemisia 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.