

Expert recommends town councils to design low-allergy impact green spaces

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Contributing to the diversity of plant species (avoiding the massive use of an only or a few species); using examples of native flora preferably instead of exotic species and promoting the participation of experts in the design of landscaped areas are some of the recommendations town councils should consider when designing green spaces with a low-allergy impact. That is the opinion of **Paloma Cariñanos González**, researcher of the [Department of Botany](#) of the [University of Granada](#), who takes part in the Master Degree in "Gardening, Landscaping and Public Space" organized by the [UGR](#). In Spain, between 30-35% of the population shows any type of allergy. A 20% of them presents allergy to pollen, a fact which has experienced an increase in the last years. In addition, pollen allergy is more frequent in women than in men; in children than in adults and in cities than in rural environments, due to the low-quality of the air for the presence of atmospheric pollutants.

Alternative species

The researcher of the [UGR](#) offers a list of alternative species to avoid plants of urban parks and gardens provoking allergy to the inhabitants. Floral species such as *Magnolia grandiflora* (magnolia), *Celtis australis* (hackberry), *Schinus molle* (pepper plant) or *Citrus* (orange and lemon tree), as well as species from the family of the aromatic (lavender, rosemary, sage...) are highly recommendable as ornamental plants, as they present a low-allergy impact. Besides, she recommends to carry out an appropriate pruning, observing latency periods and the sprout of new leaf buds.

According to Cariñanos González, species such as cypress trees, privets, elm trees, plane trees, daisies or grass are commonly used by the administration when it comes to design urban green spaces. "All of them have been described as allergen plants, and they provoke serious damage to the people who suffer such problem", says the [UGR](#) Professor.

Allergy causes

Some of the causes which contribute to the presence of allergies in the cities due to the existence of ornamental plants are the favourable meteorological conditions to the emission and presence of pollen in the atmosphere. "In general – says Cariñanos- temperatures between 20-25°C in spring and 50-60% humidity facilitate the emission of pollen. This, together with a moderate wind speed, makes diffusion even stronger". In addition, "town councils use too many examples for the ornamentation of parks and gardens, and they do not observe the minimum separation necessary for the examples to grow", says the expert.

The introduction of exotic species, which give rise to new types of allergy, and the interaction of the plants with other atmospheric pollutants, present in cities (such as ozone and carbon dioxide, as the particles derived from combustion in diesel engines may remain adherent to the surface of pollen grains increasing their allergen activity) are other of the factors which contribute to the allergic nature of the ornamental species.

Source: [Universidad de Granada](#)

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