

ALLERGENIC POLLEN OF WEEDS IN NORTH EAST ITALY

Pierluigi VERARDO¹, Francesca TASSAN MAZZOCCO², Damaris SELLE³, Barbara DALL'ARA⁴, Stefania LAZZARIN⁵
¹ Regional Agency for Environmental Protection Friuli Venezia Giulia, Italy pierluigi.verardo@arpa.fvg.it
² Regional Agency for Environmental Protection Friuli Venezia Giulia, Italy francesca.tassan@arpa.fvg.it
³ Regional Agency for Environmental Protection Veneto, Italy damaris.selle@arpa.veneto.it
⁴ Regional Agency for Environmental Protection Veneto, Italy barbara.dallara@arpa.veneto.it
⁵ Regional Agency for Environmental Protection Veneto, Italy stefania.lazzarin@arpa.veneto.it



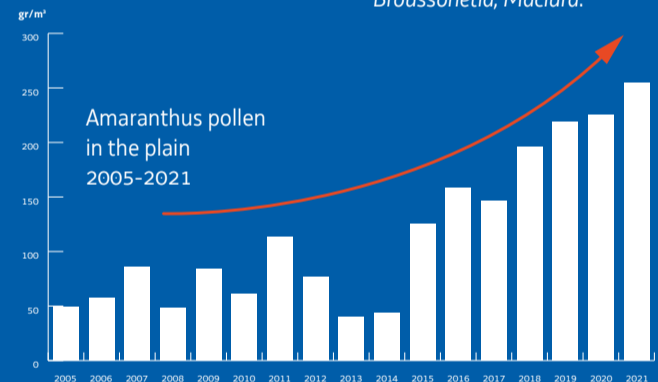
AMBROSIA AND AMARANTHUS: AN EVOLVING STUDY

The pollen grains of some weeds such as *Ambrosia* and *Amaranthus* are frequently detected by the palynologists of the Italian POLLnet network.

Ambrosia has been studied throughout Italy for years and its distribution shows that it is mainly present in the North.

Amaranthus has shown a significant increase in recent years, due to the pesticide resistance of this plant, a typical crop pest.

In recent years, specific courses and tests have been carried out to improve the competence of operators in the recognition of some taxa, such as *Ailanthus*, *Xanthium*, *Broussonetia*, *Maclura*.



SEARCH FOR NEW PLANTS

The reports of botanists have been useful in searching for new plants like *Baccharis*, *Impatiens*, *Senecium*.

Still other genera are not part of the Italian flora, but sometimes their pollen is found in the air due to transboundary transport phenomena from neighboring territories, where plants are present: this is the case of the *Iva* genus.

In the routine palynological monitoring, these taxa are often not considered individually, but the counts refer to generic classes "Other pollen grains" or "Other Asteraceae".



WEED ANALYSIS

In order to investigate the diffusion of many alien weeds, both quantitative sampling data and reports of their presence on the territory were collected; some information was reworked to obtain geographic distribution maps; the possible impacts on human health and the ecosystem were assessed as well.

In some cases, measures have been taken to contain the spread and consequent damage.

