

# I CONVEGNO ISTITUTO DI SCIENZE POLARI

Occurrence and fate of  
pesticides in different  
environmental matrixes

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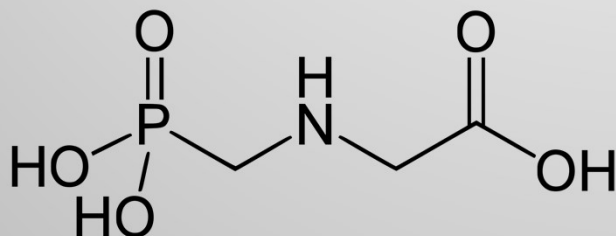
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**Pesticides/prodotti fitosanitari:** A “pesticide” is something that prevents, destroys, or controls a harmful organism or disease, or protects plants or plant products during production, storage and transport.

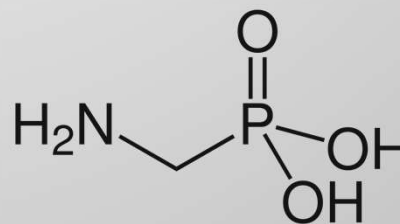
The term includes, amongst others: herbicides, fungicides, insecticides, acaricides, nematocides, molluscicides, rodenticides, growth regulators, repellents, rodenticides and biocides.

**Glyphosate:** commonly known by its original trade name Roundup, is the world’s most widely used herbicide. Glyphosate-based herbicides are manufactured by many companies in many countries.

glyphosate



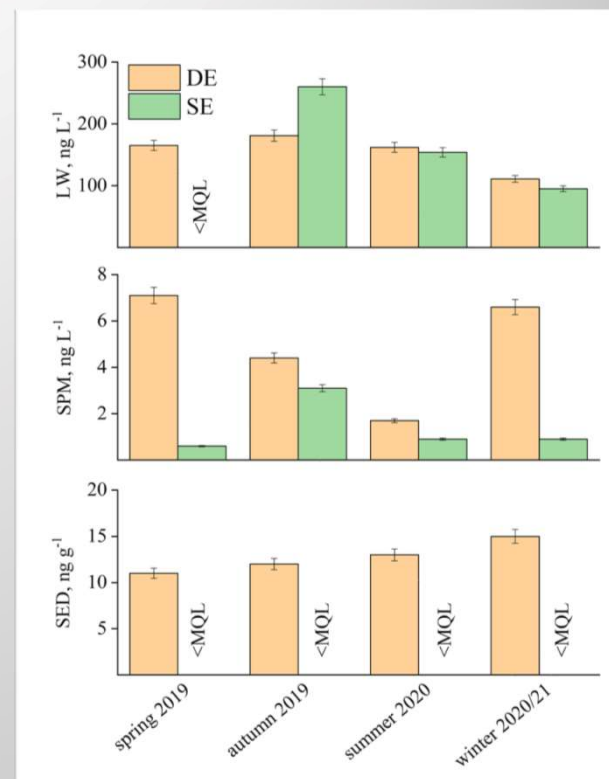
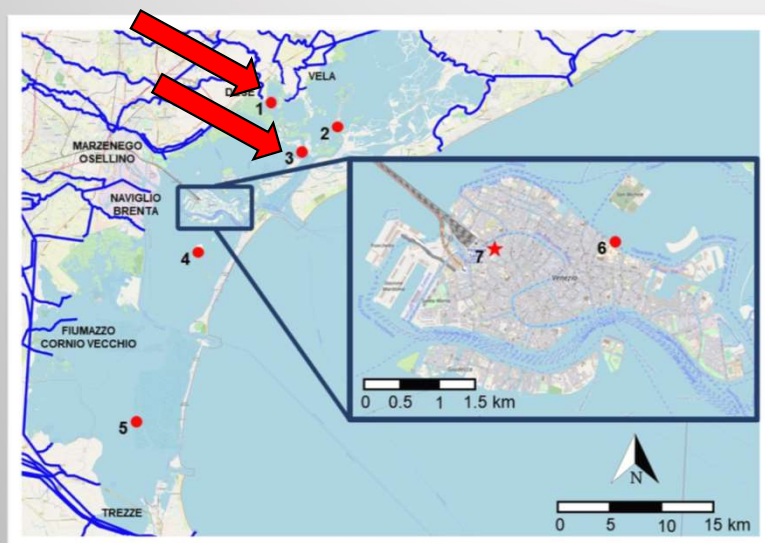
AMPA



### Case study n° 1:

Assessing glyphosate in water, marine particulate matter and sediments in the Lagoon of Venice (under review)

**Aim:** to develop the analytical method for pesticides in representative samples of dissolved, particulate, and sedimentary phases in the Venice Lagoon from spring 2019 to winter 2021, as well as to assess potential spatial distributions and seasonal trends in concentrations.





## Case study n° 2:

Determination of a wide range of pesticides in the aerosols and gases of Po'Valley

**Aim:** to determine the seasonal trend and risks for humans





### Case study n° 3:

Pesticides in the polar seawater in the framework of CASSANDRA project

**Aim:** to determine and quantify (?) the most widely used pesticides in the 75° parallel from South of Svalbard to Greenland.

**Scientific questions:** are they present? Are they able to undergo a huge long range transport from the sources to the Arctic? If so, which are the degradation products?

