

What is Agricultural Pollution?

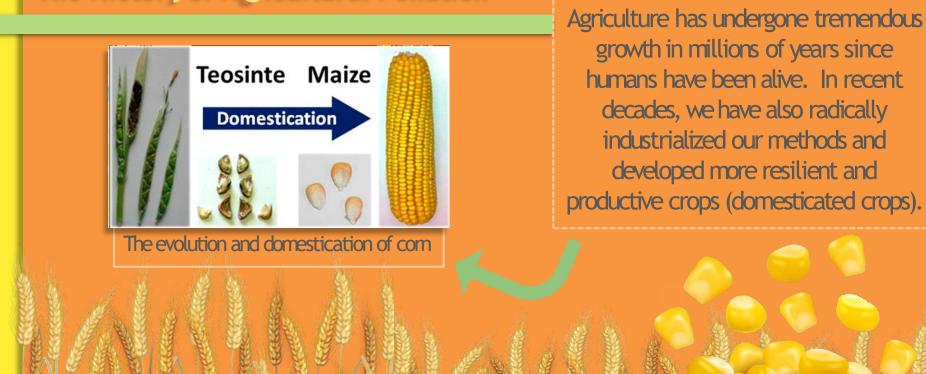
Agricultural pollution is the contamination we release into the environment as a by-product of:

- Growing and raising livestock
- Food crops
- Animal feed
- Biofuel crops
- POP's
- Pesticides





The History of Agricultural Pollution



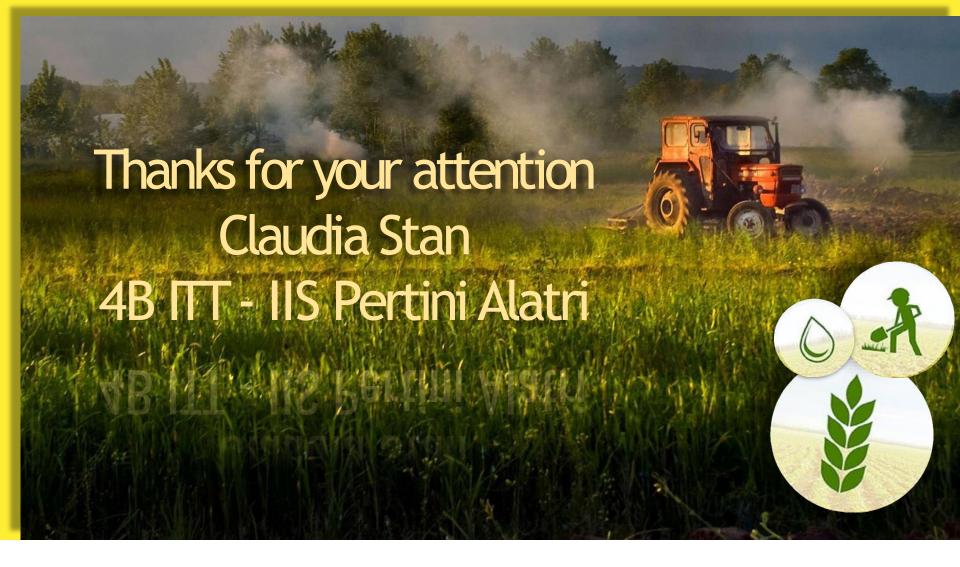
The different types of agricultural pollutants

How can agriculture (typically thought environmentally-friendly) be polluting?

- Livestock Animal Pollution: concentrated animal feeding operations, or CAFOs, is environmentally costly because of the transportation and slaughtering that the animals have to go trough.
- Livestock Water Pollution: the animal
 waste is usually disposed of by spreading it on land,
 and generally untreated. Operators are supposed to
 apply only the amount that crops can use but extra is
 Needed so more is added.
- Livestock Air Pollution: Animal waste combines with other air pollutants to create tiny (and deadly) solid particles. We humans inhale these particles, which can cause heart and lung disease.
- Fertilizers (Nitrogen fertilizers): healthy soil uses nitrogen efficiently. But sometimes soil becomes depleted of nutrients from it, so synthetic nitrogen has been created and POPs (Persistent organic pollutants)















Italy as an EU member state joined in 1962 the CAP. The EU Common Agricultural Policy (CAP) provides economic support for agriculture in EU member states, and attempts to encourage agricultural practices that support the environment. Italy responds to key national legislation and must apply EU regulations and directives dealing with biotechnologies and GMO crops.







The very turning point dates back to 1992, when the Rio de Janeiro Declaration influenced the CAP, by introducing 27 principles intended to guide countries in future sustainable development. The EU also introduced environment protection, through avoiding all forms of pollution, as a basic and qualifying element to obtain financial support through the CAP.











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HOW CAN AGRICULTURE CHANGE?

IT IS NECESSARY TO CHANGE THE WAY
FOOD IS GROWN AND CONSUMED BECAUSE
THE CURRENT ONE IS NOT VERY
SUSTAINABLE. WE THOUGHT OF THESE FIVE
IDEAS:

1) THE USE OF WASTEWATER PURIFIERS CAPABLE OF ALLOWING THE REUSE OF PURIFIED WASTE.

2) THE USE OF SATELLITES FOR REMOTE SENSING. THIS MAKES IT POSSIBLE TO OPTIMIZE INTERVENTIONS IN THE FIELD AND TO HAVE IMPORTANT INFORMATION ON THE HEALTH OF THE PLANT.





3) VERTICAL FARMING IS AN OPTIMAL SOLUTION TO REDUCE THE DEPLETION OF SPACE AND SOIL (HYDROPONICS)

4) USE OF A BIOGAS PLANT CAPABLE OF REMOVING BARN MANURE AND INDUSTRIAL WASTE



5) INSECTS REPRESENT A
NEW PERSPECTIVE FOR
AGRICULTURE. INFACT
LIVESTOCK IS RESPONSIBLE
FOR SIGNIFICANT GLOBAL
EMISSIONS AND
AGRICULTURAL TERRAINS
ARE NECESSARY TO
PRODUCE FORAGES.

Thanks for your attention

A FARM FROM MACCARESE

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