

Liceo Linguistico Internazionale Goes Green

Sabina Magagnoli 29/04/2013



Liceo Linguistico Internazionale goes green and visits Dulcamara, an organic farm near Bologna.

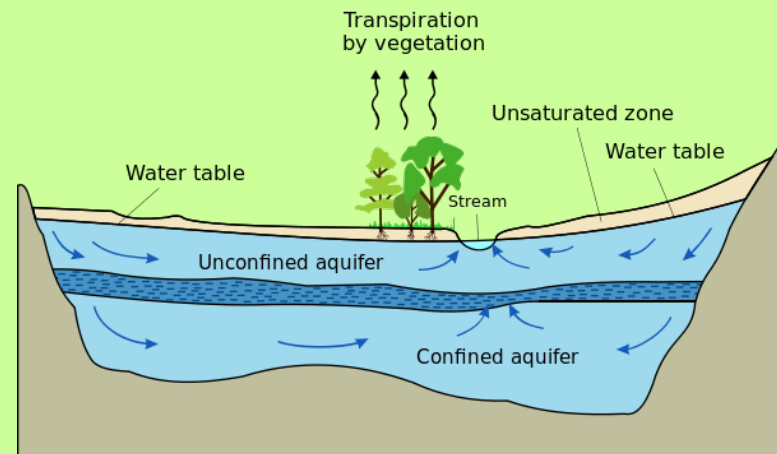
Here agronomist Matteo Pantosti, a permanent member of the Farm, explains what it means to be sustainable on his farm:





- Solar panels on the barn roof for energy
- Solar panels on the main building for heating in winter and hot water all year round
- Biological wastewater management:
the wastewater of the main building is discharged into a tank where specialised plants absorb the pathogenic /pæθə'dʒɛnɪk/ materials through their root hairs and purify the water, reused for irrigation
- They are also hoping to implement their system with geothermic and wind powered generators

Sustainability in Agriculture: traditional vs. organic systems



An organic farm doesn't use chemical fertilisers because, as they kill the living creatures on the plants, they have toxic effects on the human beings. In addition, often farmers exaggerate in the use of pesticides, to the point that the excess of chemicals filters from the fields to the aquifer /'ækwɪfə/, and pollutes our waters as well.



-  High hydraulic-conductivity aquifer
-  Low hydraulic-conductivity confining unit
-  Very low hydraulic-conductivity bedrock
-  Direction of ground-water flow

Sustainable organic alternatives to chemical fertilizers and pesticides



The Farm's Composter /'kɒmpɒst ə/

What is compost?



Compost is organic matter that has been decomposed and recycled as a fertilizer:

a key ingredient in organic farming. What we collect in our urban differentiated waste can called 'umido' would all end up here, because it is biodegradable /baɪəʊdɪ'greɪdəb əl/ = compostable.

Fava Beans for Soil Enrichment



Fava beans are nitrogen /'naɪtrədʒən/ fixers, and they replenish the soil with this vital nutrient.

Matteo explained that they plant fava beans and plow /plaʊ/ them back into the field after the growth has peaked for mulch /mʌltʃ/, making the field more nutritious for the seasonal vegetables that they plant later in spring.



Fava Bean blooming

Other organic strategies to avoid the use of chemicals



Ladybirds as Pest Removal Service Providers



Ladybirds eat aphids and other plant-sucking insects. Their nymphs are absolute meat-eaters, while their adults supplement the diet with pollen and nectar and seek refuge in flowers, so, to keep them around, an organic farmer must make sure there are flowers around.



A ladybird and its nymph

Herbicides vs. Weeders

The herbicides, commonly known as weedkillers, are pesticides used to destroy weeds chemically



Weeder: a tool designed to ease the task of removing weeds



In this case the weeds are also removed by hand

The Rare Breeds



Why rare breeds?



To maintain genetic variability /vɛəriəbɪlɪti/ against the market's tendency to select the breeds only according to their suitability to furnish a certain product.

These sheep have become rare because they are multi-purpose breeds,

they are suitable to furnish either wool or meat or milk or hides, but with relatively lower amounts because they are not specialised in one specific product, and this is the reason why they are considered 'unprofitable' and are disappearing.

The farm doesn't produce cheese not to deprive the lambs from their mothers' milk

The maintenance of these farm animals with the only aim of preserving them (instead of eating them or their produce, as it usually is the case) also raised the issue of Vegetarianism and Veganism



Vegetarianism and Veganism: two types of diet that are being studied as sustainable food alternatives for the environment and also healthier diets for us humans.



Our inspired organic artwork



Everything we have learnt about sustainable agricultural techniques, renewable energy, alternative diets and the final artistic touch, with the creation of a flower composition, have made the outing at Dulcamara a memorable one for all.