



ORGANIKO - Revamping organic farming and its products in the context of climate change mitigation strategies - LIFE14 CCM/CY/000990

<http://organikolife.com/en/>

2° Training Course: Organic farming, Certifications and Control

FEDERBIO– Rome, Via Livenza, 6-00198

Rome, 1° March 2017

9:30 – 13:30

Vincenzo Vizioli, AIAB President



**In
collaboration
with**



«The correct application of the organic farming methods against the climate change»



SUSTAINABILITY

- Nowadays acting in a sustainable way means modifying behaviour and energy consumption models
- The organic farming modifies the behaviour to resources and environment of the producer
- And of the consumer citizen that appreciates territoriality and seasonality and that adopts correct eating habits.

THE ORGANIC FARMING IS THE SUSTAINABLE MODEL OF FARMING

Climate BIO Friend

Production system and eating model contribute to the greenhouse gas emissions reduction (Freyer e Weik 2007)

Greenhouse emissions with different farming and eating systems

	Farming and eating systems	Food consumption Kg fresh product pro capite/year	CO₂ (E)* (Kg pro capite/year)	Kg CO₂ – E saving from the scenario 1	%
S1	Conventional farming and current eating habits	644	1230	--	--
S2	Organic farming and current eating habits	644	856	374	30.4
S3	Conventional farming and correct eating habits	723	1031	199	16.2
S4	Organic farming and correct eating habits	723	742	489	39.7

CO₂ Equivalents – quantity of different energy sources calculated as potential CO₂ emissions.

BASIC PRINCIPLES OF ORGANIC FARMING

- 1. Conservation and, more often, implementation of the organic substance to improve the physical-chemical and microbiological fertility of the soil;**
- 2. Increase of the farm system complexity, especially with farming solutions that enhance the agricultural and environmental diversity together with the realization of ecologic infrastructures**

**THAT IS...THE CARE OF SOIL AND ABOVE THE
SOIL BIODIVERSITY**

TECHNICAL ACTIONS THAT THE FARM HAS TO SYSTEMATIZE IN ORDER TO ACHIEVE SIGNIFICANT RESULTS WITH THE ORGANIC FARMING

- **The balanced fertilization organic-based**

The organic farm fertilization is based on the organic balance

- **Efficient crop rotation**

Depending on the fertility, the soil covering, the infestation control and the environmental diversity

- **Soil protection**

Limit the soil erosion, manage the mineralization and encourage the SO accumulation

- **Intercropping**

To encourage the synergistic effects, the soil covering and the under-soil occupation

- **Variety choice**

Species and variety suitable to the pedoclimatic conditions and the method adopted

- **Ecologic infrastructures building**

Inclusion of hedge and masts, and the introduction of the grassing-over in order to encourage the biodiversity

CROP ROTATION

**Beyond the possibility to come under the regulation and obtain the certification,
to do or not to do a good crop rotation means
doing or not doing the organic farming**

**The rotation recognition is the first and necessary step to
set up the conversion phase.**

The excessive specialization:

- causes the fertility and biodiversity loss;
- trivializes homogenizing the landscape;
- destabilizes the environment.



The participatory and evolutionary breeding entrusts to biodiversity the adaption to the climate change

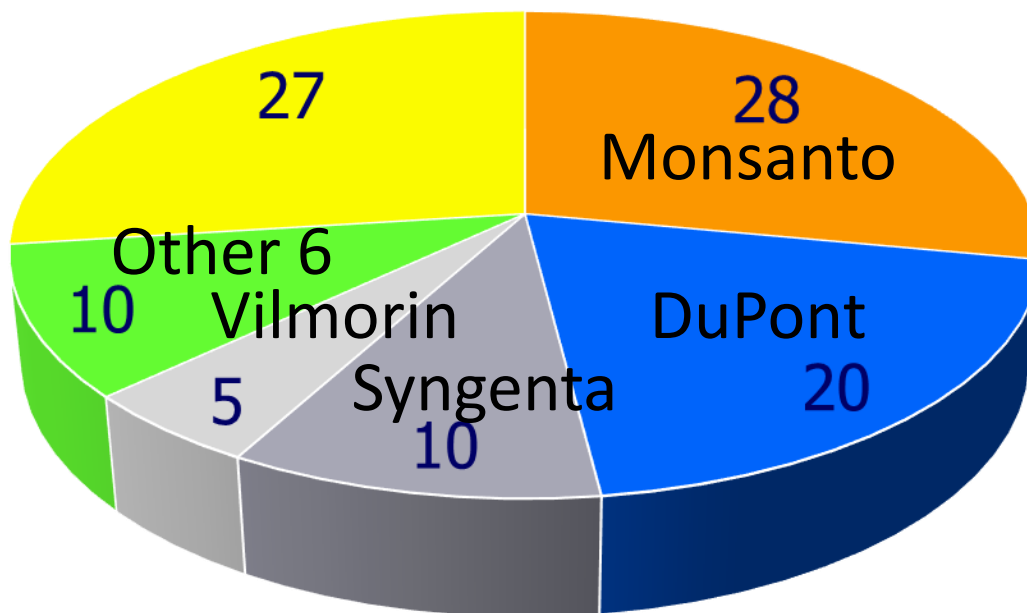
The variety choice is one of the problems that the farm has to deal with, finding selected seeds for an other agriculture method.

In Syria, at the ICARDA, an Italian researcher, Salvatore Ceccarelli, developed and exported the **participatory breeding**, today inserted in different countries, also in the EU. This, apart from letting the farmers decide the characteristics of the variety to develop and cultivate, led to a new way of thinking about the seed work, that is the evolutionary breeding.

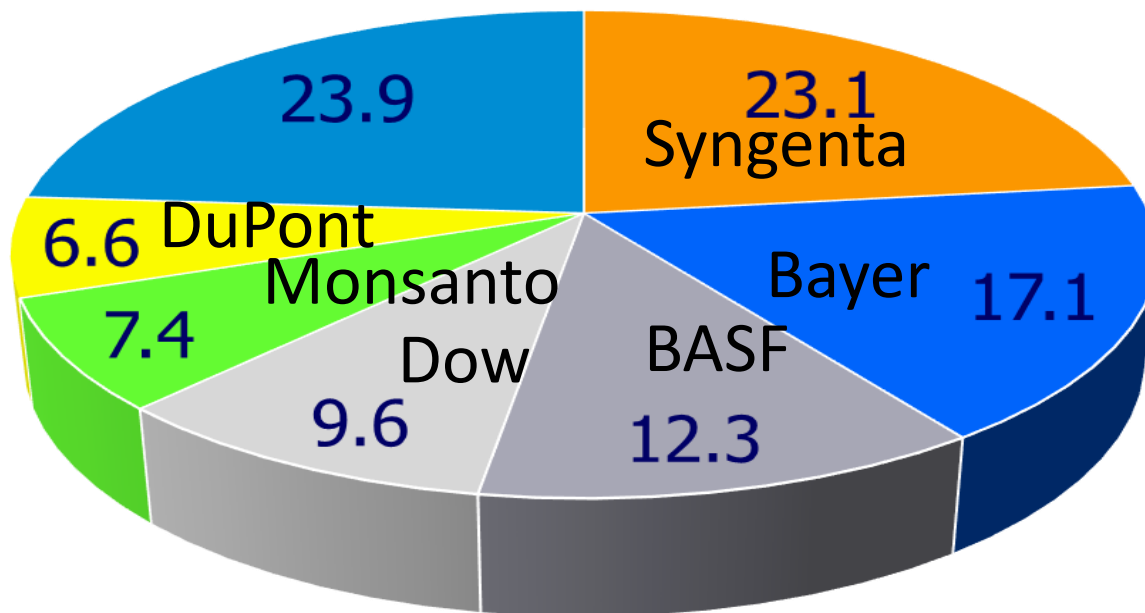


The evolutionary breeding is based on the opposite concept of GMOs. Instead of relying on a single gene, coding for particular characteristics, the adaption to the environment where it is grown, is entrusted to a wider genetic basis, born from the cross of thousands of variety and species that the farmers use to guarantee their future.

The global market of seeds



...and the pesticides one.



Effect to Biodiversity

The participatory improvement, because it is a very decentralized process, produces varieties that are:

- ❑ Different from country to country
- ❑ Different from village to village in the same country
- ❑ Different in the same village



The participatory improvement adapts the varieties to the environment instead of modifying the environment, and for this reason it is perfect for the organic farming.

Una manciata di **SEMI** può salvare
il Mondo
Aiutaci a coltivare **Biodiversità**



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