

Organic production of foods in the EU and HU

Short overview by Dr. Janos Molnar

Contain

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Terminology: eco, bio, organic?

- **Ecology production: (eco > ES, CZ, DK, DE, EE, HU, LT, LV, BE, PL, RO, SK, SI, SE)**
- **Biology production: (bio > BG, ES, CZ, DE, EL, FR, IT, LV, LU, NL, PT, SK)**
- **Organic production: (organic > EN, EL, MT)**
- **It' same, but important:**
 - **Real needs, regulated, supported by EU**
 - **The organic logo guarantees**
 - **Consumer trust: Certification and confidence**
 - **Short food supply chains**
 - **The respect for the environment**
 - **Growing production**

The essence of organic farming

- **Way of producing food** that respects natural life cycles
- **Crops are rotated** so that on-site resources are used efficiently
- **Chemical pesticides**, synthetic fertilisers, antibiotics and other substances **are severely restricted**
- **Genetically modified organisms** (GMOs) are banned
- **On-site resources** are put to good use, such as manure for fertiliser or feed produced on the farm
- **Disease-resistant** plant and animal species adapted to the local environment are used
- **Plant protection rules:** life of soil, prevention of pests' development, collection of wild plants

Regulations of organic production and trade in the EU

- **New: Council Regulation (EC) No. 834/2007** aims:
 - sustainable cultivation systems
 - a variety of high-quality products.
 - greater emphasis on environmental protection
 - more attention to biodiversity
 - higher standards of animal protection
 - consumer confidence
 - protecting consumer interests
- **Implementing: Commission Regulation (EC) No. 889/2008**
- **For imports of organic products from third countries: Commission Regulation (EC) No. 1235/2008**

Quality of organic products

- **Quality is important** to both producers and consumers
- **Quality is guaranteed** by the presence of EU organic logo on the food label
- **It can only be used** if the producer respects all rules on organic farming
- Taking part in an **organic certification scheme** that requires submitting to **controls & annual inspections**
- **The EU organic policy** is taking into account these expectations of consumers

Evolution of organic farming

- **Production increase:** 2002 – 5.6 mha, 2014 – 10.3 mha
- **Top 5 countries (proportion of land):** AT-19.3%, SE-16.5%, EE-16.3%, CZ-13.5%, IT-11.5%
- **Top 5 countries (in absolute terms):** ES-1.71mha, IT-1.38mha, FR-1.12mha, DE-1.03mha, PL-0.66mha
- **Top organic crops:** olives-35%, grapes-21%, nuts-13%, citrus fruit-3%, other fruit-10%, other permanent crops-18%
- **Socio-economics:** 255 000 organic producers, women-22% of organic farming managers: LV-41%, LT-33%, AT-31%, farmers under 55: 66% in organic farming, 34% in conventional sector, value: 24 billion € in 2014

Support for organic producers

- **Before starting** organic activity the competent agricultural authority in the member state can provide information which support measures are available and give advice in general
- **Control bodies** entitled to run control on each organic farm and investigate whether the production is according to the standards
- There are at least **two years of conversion period** in organic farming before a product can be marketed as organic
- **Legal requirements** set out in the EU Regulation offer a guarantee that organic products respect all the rules

Organic farming in Hungary

Control bodies:

- **Biokontroll Hungária Inspection and Certification Nonprofit Ltd.** (founded in 1996, nowadays covers 90% of organic farming in HU)
- **Hungária Öko Garancia Ltd.** (founded in 2005, nowadays covers 10% of organic farming in HU)

More than 1300 farmers are producing organic products on **110 000 ha** for today

National Action Plan accepted in 2014 for development of organic production

Organic farming is not an easy way of agriculture production, but promising ...

Substances of crop or animal origin

(889/2008/EC)

- **Azadirachtin** extracted from *Azadirachta indica* – Insecticide
- **Beeswax** - Pruning agent
- **Gelatine** - Insecticide
- **Hydrolysed proteins** – Attractant
- **Lecithin** - Fungicide
- **Plant oils** (e.g. mint oil, pine oil, caraway oil). - Insecticide, acaricide, fungicide and sprout inhibitor
- **Pyrethrins** extracted from *Chrysanthemum cinerariaefolium* – Insecticide
- **Quassia** extracted from *Quassia amara* - Insecticide, repellent
- **Rotenone** extracted from *Derris* spp. and *Lonchocarpus* spp. and *Terphrosia* spp. - Insecticide

Micro-organisms (cont. (889/2008/EC))

- Micro-organisms used for biological pest and disease control
 - **Micro-organisms** (bacteria, viruses and fungi)
- Substances produced by micro-organisms
 - Spinosad - Only where measures are taken to minimize the risk to key parasitoids and to minimize the risk of development of resistance
- Substances to be used in traps and/or dispensers
 - **Diammonium phosphate** - Attractant, only in traps
 - **Pheromones** - Attractant; sexual behaviour disrupter; only in traps and dispensers
 - **Pyrethroids** (only deltamethrin or lambda-cyhalothrin) - Insecticide; only in traps with specific attractants; only against *Bactrocera oleae* and *Ceratitis capitata* Wied.
- Preparations to be surface-spread between cultivated plants
 - **Ferric phosphate** (iron (III) orthophosphate) - Molluscicide

Other substances from traditional use in organic farming (1 (889/2008/EC))

- **Copper** in the form of copper hydroxide, copper oxychloride, (tribasic) copper sulphate, cuprous oxide, copper octanoate - Fungicide. up to 6 kg copper per ha per year For perennial crops, Member States may, by derogation from the previous paragraph, provide that the 6 kg copper limit can be exceeded in a given year provided that the average quantity actually used over a 5-year period consisting of that year and of the four preceding years does not exceed 6 kg
- **Ethylene** - Degreening bananas, kiwis and kakis; Degreening of citrus fruit only as part of a strategy for the prevention of fruit fly damage in citrus; Flower induction of pineapple; sprouting inhibition in potatoes and onions
- **Fatty acid potassium salt** (soft soap) - Insecticide
- **Potassium aluminium** (aluminium sulphate) (Kalinite)
 - Prevention of ripening of bananas

Other substances from traditional use in organic farming (2 (889/2008/EC))

- **Lime sulphur** (calcium polysulphide) - Fungicide, insecticide, acaricide
- **Paraffin oil** - Insecticide, acaricide
- **Mineral oils** - Insecticide, fungicide; only in fruit trees, vines, olive trees and tropical crops (e.g. bananas)
- **Potassium permanganate** - Fungicide, bactericide; only in fruit trees, olive trees and vines
- **Quartz sand** - Repellent
- **Sulphur** - Fungicide, acaricide, repellent
- **Calcium hydroxide** - Fungicide Only in fruit trees, including nurseries, to control *Nectria galligena*
- **Potassium bicarbonate** - Fungicide

Thanks for your attention!