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Lecture 9 (1): Organic Animal Husbandry: Definitions and General regulations

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What is this lesson about?

- Introduction to the prinicples of organic animal husbandry as defined in the EU with special focus on:
  - Animal breeding
  - Housing
  - Feeding
  - Health prevention

Lesson is limited to the following species:

- Dairy and beef cattle
- Pigs
- Laying hens

What is organic animal husbandry?

- rearing of livestock by usage of organic and biodegradable inputs from the ecosystem in terms of nutrition, health, housing and breeding of animals
- widely based on own fodder production
- usage of synthetic inputs e.g. feed additives, genetically modified organisms is strictly prohibited
- certification is needed, if marketing as “organic”
- lesson is limited to EU regulations for organic agriculture (Council Regulation (EC) No 834/2007 and Commission Regulation (EC) No 889/2008) , but more labels and standard for organic farming and products exist

Importance of animal husbandry in OA

- Economic importance: usually generates >50% of organic farms' turnover
- Ecological importance: contribution of animals on organic farms to nutrient recycling
  - especially ruminants' ability of processing grassland and leguminous forage plants (legumes= the backbone of organic crop production due to their ability to fix atmospheric nitrogen)
  - animal manure as organic fertilizer → importance for conservation of soil fertility
- Ecological role of monogastric animals (e.g. pig and poultry): competing with humans food, at least to the extent they use protein sources suitable for direct human consumption

Goals of organic livestock farming

1. Establish environmentally friendly production systems
2. Sustain animals in good health
3. Realise high animal welfare standards
4. Produce products of high quality

(Sundrum, 2001)

Regulations (1)

Regulations specify conditions for

- Origin of animals
- Housing
- Access to open air areas (mandatory in OA)
- Welfare aspects
- Feeding
- Disease Prevention and Veterinary Treatment

Regulations: Origin of animals

- Selection criteria for breeds/ strains in organic farming:
  - Adaptability to local conditions
  - vitality and
  - resistance to diseases
- Avoid breeds/ strains with known specific diseases or health problems (e.g. PSE in pigs, difficult births requiring caesarean operations in cattle)
- Preference given to indigenous breeds/ strains

(Source: Commission Regulation (EC) No 889/2008 Chapter 2, Section 1, Article 8)

Regulations: Housing

- Insulation, heating and ventilation of the building shall ensure that air circulation, dust level, temperature, relative air, humidity and gas concentration, are kept within limits which are not harmful to the animals.
- The building shall permit plentiful natural ventilation and light to enter.
- Complete outdoor housing permitted in areas with favourable climatic conditions
- minimum surface for indoor and outdoor areas etc. for different species and categories of animals, are laid down in Annex III

Source: Commission Regulation (EC) No 889/2008 Chapter 2, Section 2, Article 10

Regualtions: Welfare (1)

- Operations not be carried out routinely in organic farming are:
  - attaching elastic bands to the tails of sheep,
  - tail-docking,
  - cutting of teeth,
  - trimming of beaks and
  - dehorning

Regualtions: Welfare (2)

- Reduction of any suffering for the animal to a minimum “by applying adequate anaesthesia and/or analgesia and by carrying out the operation only at the most appropriate age by qualified personnel“.
- Physical castration is allowed in order to maintain the quality of products and traditional production practices, but avoidance of suffering as described above is conditional
- No use of any type of electrical stimulation to coerce the animals during loading and unloading of animals
- use of allopathic tranquilizers, prior to or during transport, is prohibited
- Mutilation is prohibited

Source: Commission Regulation (EC) No 889/2008 Chapter 2, Section 2, Article18

Regulations: Feeding (1)

Feed meeting animals' nutritional requirements

Livestock in general:

- keeping livestock in conditions, or on a diet, which may encourage anaemia, is prohibited
- Fattening practices shall be reversible at any stage of the rearing process
- Force-feeding is forbidden

Herbivores:

- at least 50 % of the feed shall come from the farm unit itself or from other organic farms primarily in the same region (exception: period of transhumance)

Source: Commission Regulation (EC) No 889/2008
Chapter 2, Section 3, Article19

Regulations: Feeding (2)

Mammals:

- Young mammals should be fed on maternal milk in preference to natural milk, for a minimum period:
  - Bovines (incl. Babulus and bison species) & equidae: 3 months
  - sheep and goats: 45 days
  - pigs: 40 days

Pigs and Poultry:

- Roughage, fresh or dried fodder, or silage shall be added to daily ration

Regulations: Feeding (3)

Herbivores:

- Maximum use of grazing pasturage according to seasonal availability
- Min. 60 % of the dry matter in daily rations shall consist of roughage, fresh or dried fodder, or silage.
- Exception: in dairy production a reduction to 50% for a maximum period of three months in early lactation is allowed.

Source: Commission Regulation (EC) No 889/2008 Chapter 2, Section 3, Article 20

Regulations: Disease prevention (1)

Disease prevention

Prohibition of:

- use of chemically synthesised allopathic veterinary medicinal products or antibiotics for preventive treatment
- use of substances to promote growth or production (including antibiotics, coccidiostatics and other artificial aids for growth promotion purposes)
- use of hormones or similar substances to control reproduction or for other purposes (e.g. induction or synchronisation of oestrus)

Source: Commission Regulation (EC) No 889/2008 Chapter 2, Section 4, Article 23

Regulations: Disease prevention (2)

- Proper Cleaning and disinfection of housing, pens, equipment and utensils to prevent cross-infection and the buildup of disease carrying organisms
  - Products allowed listed in Annex VII
- Regular removement of faeces, urine and uneaten or spilt feed to minimise smell and to avoid attracting insects or rodents
  - Products allowed listed in Annex II

Source: Commission Regulation (EC) No 889/2008 Chapter 2, Section 4, Article 23

Regulations: Veterinary treatments

- immediate treatment of sick or injured animals, if necessary in isolation and in suitable housing
- Preference given to phytotherapeutic, homeopathic products, trace elements
- use of chemically synthesised allopathic veterinary medicinal products or antibiotics only allowed under the responsibility of a veterinarian, and if
  - a) measures above fail in combating illness or injury
  - b) if treatment is essential to avoid suffering or distress,

Source: Commission Regulation (EC) No 889/2008 Chapter 2, Section 4, Article 24

When does livestock lose its organic status?

- >3 courses of treatment with chemically-synthesised allopathic veterinary medicinal products or antibiotics per year
- when animals productive lifecycle is < 1 year: > 1 course of treatment with chemically-synthesised allopathic veterinary medicinal products or antibiotics
- Exception for this regulations:

Vaccinations, treatments for parasites and compulsory eradication schemes

What happens to the animals?

- have to undergo conversion period again in order to regain organic status or have to be marketed as conventional

Documentation is required (to be kept for the control body/ authority)

Source: Commission Regulation (EC) No 889/2008
Chapter 2, Section 4, Article 24

How long is the withdrawel period in organic farming?

- twice the legal withdrawal period
- If not specified: 48 hours

Source: Commission Regulation (EC) No 889/2008 Chapter 2, Section 4, Article 24

Some critical issues of EU legislation

- Purchase of non-organic „material“: animals, feed, semen (AI)
- ET-problem (direct use prohibited, but many ET bulls in dairy cattle breeds come in as semen via artificial insemination)
- For complementary treatment its effectiveness has to be proven for the species of animal
- Hormonal treatment (when is an animal defined to have a disturbed hormonal state?)
- Wide discretion given to the veterinarian(s)
- Veterinarians with experience in complementary medicine (phytotherapy, homoepathy…) are scarce
- Twice the withdrawal time (not with teat sealer for dry off in dairy cattle)
- Loss of organic status for animals and their products after several treatments (how is ONE treatment defined exactly?)

Literature

- Boelling, D. ,A.F. Groenb, P. Sørensena, P. Madsena, and J. Jensena (2003): Genetic improvement of livestock for organic farming systems. Livestock Production Science 80: 79–88
- EC (2008):COMMISSION REGULATION (EC) No 889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control. 84p
- IFOAM EU Group (2009): The New EU Regulation for Organic Food and Farming: (EC) No 834/2007 BACKGROUND, ASSESSMENT, INTERPRETATION. 68 p.
- Sundrum, A. (2001): Organic livestock farming- A critical review. Livestock Production Science 67: 207–215

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