

SIGNIFICANCE OF TRAINING OF ORGANIC ANIMAL HUSBANDRY IN MSC EDUCATION

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In Hungarian higher education became necessary to launch of the new education structure, the more-cycle degree system. This gives opportunity to realization of BSc, MSc, PhD and higher vocational training. Teaching program includes animal welfare studies at all levels of teaching. Running courses on Animal welfare and related courses in Hungary are presented in Table 1.

Table 1.

Running educational activities related to animal welfare in Hungarian higher education
(Szűcs et al.: 2007)

	Courses	Teaching levels
<u>Szent István University</u>		
<i>Faculty for Agricultural and Environmental Sciences</i>		
Department for Pig and Small Animal Production	Applied ethology of farm animals	Graduate, PhD
Department for Cattle and Sheep Production	Animal ethics	PhD
<i>Institute for Environment and Landscape Management</i>		
Department for Applied Ethology	Basics of animal welfare	Graduate
	Animal welfare	Graduate
	Living organisms and the stress	Graduate
	Treatment of animals	Graduate
<i>Faculty for Veterinary Science</i>		
Department of state veterinary medicine and agricultural economics	Animal welfare	Graduate
<u>Eötvös Lóránd University</u>		
Department of Ethology	Field ethology (practical)	Graduate
	Behavioural ecology (practical)	PhD
<u>University of West Hungary</u>		
<i>Faculty for Agricultural Sciences Mosonmagyaróvár</i>		
PhD School for the biological, technological, ecological, feeding and economical questions of animal production	Animal welfare issues and management	PhD
	Ecology in animal food production	PhD
	Biological principles in animal breeding and housing	PhD

	Courses	Teaching levels
<u>University of Kaposvár</u>		
<i>Faculty for Animal Sciences</i>		
Department for Aquaculture and Companion Animals, and Department for Poultry Production	Ethology	Graduate
Doctoral School of Animal Science	Ethology	PhD
<u>Károly Róber College</u>		
<i>Faculty of Agriculture</i>		
Department of Game Management and Animal Breeding	Animal welfare	Undergraduate
	Animal protection	

At the University of West Hungary in the framework of the training already announcing objects, that deal with the alternative and organic keeping technology. It is necessary to spotlight the change of student's view and attitude to the alternative keeping technology. The decrease of the pressure on the environment and the protection of animals can be achieved only with the help of agrarian like that, who secure proper knowledge in the BSc's and MSc's courses.

In the attachment to the agricultural engineering BSc studies is invited the organic animal husbandry specialization and subject. The aim of the object, that let the students recognize the importance of environment protection, biodiversity and the comprehensive explanation of animal welfare and organic approach. The students acquire the knowledge related to alternative production of cattle, horse, sheep, goat, pig and poultry.

The topics of the lecture are:

1. Gene conservation in animal husbandry
2. EU-regulations of animal welfare
3. Feeding and breeding practice in organic production
4. Effect of environment on the production
5. Possibility elimination of environment inculpatory factors in pig production
6. Effect of welfare on the production performance
7. Alternative poultry production
8. Respect of animal welfare in alternative poultry production
9. Production of organic cattle on the world, in Europe and in Hungary
10. Cattle strains suitable to organic production. Keeping technology guidelines in organic cattle production
11. Environment protection in pig production
12. Production of organic sheep meat
13. Production of organic sheep milk
14. Production of organic goat meat and milk
15. Keeping technology of pasture-fed horses

The topics of the seminar are:

1. Analyses of organic farms
2. Pasture-fed cattle meat production
3. Pig breeding
4. External features of pig
5. The effect of environment on the reproduction and fattening index in pig production
6. Pig strains
7. Alternative poultry production
8. Economic analyses of poultry production
9. Hen strains
10. Water fowl strains
11. Meat-type breed sheep and goats
12. Dairy breed sheep and goats
13. Keeping systems of goat
14. Production of pasture-fed horse meat
15. Horse strains

In the framework of MSc studies are invited “Animal welfare, animal protection” and “Alternative keeping systems” subjects.

Animal welfare, animal protection subject

In our days consumers and producers are demanding animal welfare and protection. The consumers wish to make sure that keeping technology applied in the animal production takes the current legal arrangements into consideration. The aim of the subject is definition of animal welfare and protection, the opportunities of the measurement, development and efficiency of animal protection and welfare.

The topics of the lecture are:

1. Definition of animal welfare
2. The five freedoms
3. Behaviour-physiology. The qualitative and quantitative methods of measurement of animal welfare
4. Estimation of animal welfare in practice (behaviour, physiological parameters, health condition, performance). Stressors.
5. Estimation systems to the different productive livestock
6. Context between the animal welfare and food quality, -safety
7. Animal welfare in the spotlight of economy and marketing. The animal welfare as “value added”.
8. Ethical respects: religions and philosophical tendency
9. The humanity's relation to the animals. Historical overview.
10. Effect of personality and treatment on the animal welfare
11. Development of producers' motivations: volunteership, stimulation
12. Animal transport
13. Slaughtering

Alternative keeping technologies

The subject covers the knowledge of different keeping technologies, as extensive, free-range and organic cattle-, pig-, sheep-, goat- and poultry production.

Gene reservation, breed collection

The necessary of gene reservation and breed collection are not obvious for many specialists. Our Institute hold important for that very reason to acquaint the MSc students with the significance of gene reservation. The subject deals with aspects of sustainable in context economy, production, science and culture, the conservation of biodiversity, the methods of gene reservation (propagation, breeding), production possibilities based on indigenous strains.

The topics of the lectures are:

1. Definition and methods of gene reservation, breed collection
2. Gene reservation and conservation of biodiversity on the world and in Hungary
3. Gene reservation of Hungarian cattle strains
4. Gene reservation of Hungarian pig strains
5. Gene reservation of Hungarian horse strains
6. Gene reservation of Hungarian sheep and goat strains
7. Gene reservation of Hungarian poultry strains
8. Gene reservation of Hungarian fish strains
9. Visit Hungarian gene reservation centres

*Capitalization of teaching materials provided by the LdV Pilot Project Promoting Quality Assurance in Animal Welfare * Environment * Food Quality Interaction Studies Through Upgraded E-Learning (WELFOOD).* WELFOOD has been an initiative of European Animal Welfare Lecturers and a *development project*, scheduled from 2004 to 2007 and funded by EU Commission Leonardo da Vinci Community Vocational Training Action Programme (Szücs et al., 2007) will be included into the curricula of MSc studies on Organic Animal Husbandry. Emphasis will be laid on skills in food quality assurance issues related to animal welfare x environment x food quality interactions required by public perception due to their role in food safety and security as well as ethical considerations. Significance and novelty of this area are in line with the recent developments in the EU and the rest of the world. WELFOOD is a multidisciplinary approach applied for the transfer of recent scientific findings and knowledge on the specific area of this pilot project. Driving force for the application of e-Learning will be dedicated to apply ICT having high didactic and added value and rapid transfer of knowledge in a fast and efficient way which is based on the Moodle Open Source e-learning platform (Modular Object-Oriented Dynamic Learning Environment).

Efforts towards further exploitation of achievements in WELFOOD Pilot Project has been continued in the “*A new approach on different aspects of welfare, environment and food interactions in Central and South-eastern Europe with the use of ICT (WELANIMAL)* Transfer of Innovation Multilateral Project Leonardo da Vinci Lifelong Learning which has been started in 2008 and lasts for two years (Bozkurt et al., 2008). In conjunction of WELANIMAL project products and results of training tools of WELFOOD will be used for further development curricula of MSc studies on Organic Animal Husbandry, too.

References

Bozkurt, Z. – Szűcs, E. – Sossidou, N. E. – Gaál, K. – Mishev, P. – Ciszter, L. – Venglovosky J. (2008): A new approach on different aspects of welfare, environment and food quality interactions in Central and South-eastern Europe with use of ICT. WELANIMAL Project LLP-LdV-TOI-2007-TR-002. Ecology and Veterinary Medicine. 7th International Scientific Conference, Proceeding Zborník Prednášok, Univerzita veterinárskeho lekárstva, Košice 22-23 April 2008. ISBN 78-80-8077-084-6. 8-11. p.

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