

WHAT SHOULD VETERINARY SURGEON KNOW ABOUT ORGANIC FARMING

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Introduction

Organic livestock production is suitable especially to the principles of environmental friendly and ecological sustainable agricultural production.

On organic farms, which are working on the basis of eco and bio production, the farmers deliberately are not using some chemicals, mineral fertilisers, synthetically chemicals for protection of the plants, some disinfectants and different food additives. They are avoiding alophatic drugs and medicines for curing animals, avoid antibiotics and hormones and are using to animal welfare suited technology of farming. Because animal production in Slovenia is an important part of economy and agriculture the conditions for organic farming are good too. Organic farming is aiming at balanced relation between soil, plants, environment and animals in a farming system to achieve safe and healthy food for their consumers. So the organic farming and the consumers expectations for a concept of good quality of food are identical.

Consumers interest is to cover interests of a wide range of demands from the naturally produced goods as a whole i.e. on animal friendly, society just and environmental friendly basis to get healthy products and makes possibly for the consumers to buy on the perception, that such food is more healthy and better testing.

So consumers expect that the impact of organic farming production influences food quality. Organic producers food standards in Slovenia are especially for animal products, not quite well defined and performed and in the praxis in details introduced, so there is a many work to do on the designation of the standards, which embody. The environmental impact on food quality production which would encourage ecologically society just and ethically just production which can guarantee safe and healthy food on the one side and to achieve better income for the farmer on the other. This two expectations i.e. safe food for the consumer and good economy for organic farmers are in some situations in conflict.

The conditions for organic farming in Slovenia

To understand why the conditions for organic farming in Slovenia are so perspective we have to consider and analyse the agricultural, economical and social basis, which will enable in the future quick development and growth of organic farming.

If we consider the facts that Slovenia is a small country, with very small farms which count in average 5 cows per farm and that 70% of them has not quite 5 ha, where more then 52% is under forest and where more than 70% is situated in the alpine and sub-alpine region, and where only 25% is organized on farms with 10 ha or more. Beside this as small farms are scattered all over Slovenia, we can establish that this situation is favourable for organic farming production. The animal production counts about 680.000 cattle. 70% of animals are cattle, sheep and goats. Agricultural inhabitants count only 7,6%. The gross social income per capita is now at 11.600 from while of 486.000 ha of agricultural land, organic farms cover 8.900 ha what makes 2% of arable land. If we compare these data's to some European countries, we can see that Slovenia is on the place 8-10.

Because of high part of small farms which are situated in mountains and touristic regions Slovenian program of development of organic farming in the plans emphasise quick development of organic farms which includes better income for producer and which will count over 25%.

Table 1: Organic farming in some European countries

Country	% of agricultural land
Austria	11,3
Switzerland	11,0
Italy	7,9
Finland	6,6
Denmark	6,5
Sweden	6,3
Germany	4,1
United Kingdom	4,0
Slovenia	2,0
Country	% of agricultural land
Holland	1,9
Portugal	1,8
Spain	1,7
Luxemburg	1,7
Belgium	1,6
France	1,4
Greece	0,6
Average European Union	3,2

Organisation of organic farming in Slovenia

In Slovenia there are already some organisations, which are working on the development and problems of organic, farming. There exist already some regional societies for promotion the organic farming with the Union of Slovenian organic farmers association on the top. Beside this there exist an Institute for sustainable development of organic farming in Ljubljana. In these organisations there are prepared in according with the EU directives some rules how to implement some protective marks as Biodar and Demeter, which are used mainly for vegetable and fruit products (about 80%). In spite of Directive 2092/91 (January 2005) and some own Slovenian prescriptions in our Society for animal and environmental hygiene we discuss about the fact, that in these documents there are some chapters which refer to the activity of the veterinary profession. Till now veterinary authorities and veterinary organisations such as Veterinary Chamber of Slovenia did not cooperate with above mentioned organisations. So it exist a lack of effective inspection and therefore the consumers do not believe in the higher quality of products in this case in the production of animal organic products.

As our Slovenian Society for Animal and Environmental Hygiene is interested in promotion of animal organic farming, we intend to cooperate with veterinarian authorities and organic farming producers. So our programme, which started in last year, includes endeavours in organising workshops, round tables, discussions, symposiums about the organic farming programs, to implement veterinarians into active cooperation.

Works in organic farming which address veterinarian profession

The activities for this part of action where veterinary profession has to cooperate are many. As we have said before, organic farming demands special knowledge and transparencies of work and sustainable production, which protects before environmental pollution.

Organic farming should therefore be under special control of rigorous rules. In the EU Directive 2092/91 from 3.1.2005 include instructions, which address veterinarians too. Let us mention only some items from these directives, which deal with animal production, which are basic principles in organic farming.

- Organic animal production is bound and limited on the agricultural land which is self sufficient for disposal of manure according to the number of animals and land
- The number of animals per area is restricted
- Animals have to be fed species specific with organic produced food

- Feeding of young animals of mammals should be performed with mothers milk

These are only some items of organic production demands, but the paragraphs, which are dedicated to veterinarians, are focused on:

- Usage of herbal originated medicines and homeopathic medicines, which have priority
- Restriction of usage of hormones
- The stalls for animals should be build for animal welfare conditions
- There are many other limitations and directives referring to sick animals management
- The age of slaughtering animals, the lowest age of animals which are slaughtered
- It is prescribed which chemicals are allowed for disinfection and nutrition
- It is forbidden or prescribed, how to use allopathic medicines, antibiotics, etc.

Discussion

In this short survey we can see, that many activities, which concern organic farming, belong to the activities of veterinary profession. So veterinary profession is involved in the activity form the producers to consumers. In the process of converting or implement the farmer's production to organic farming system there is need of improvement and alteration of production process and product quality of the animal originated food.

The farmers are motivated in greater income from organic farm products and the consumer is awaiting healthy food.

As we can establish in Slovenia, where the majority of farms are small and in mountainous regions they need higher income to survive. So the veterinarians too have to cooperate with advisory organisations, inspectors, legislative department and schools.

With the development of organic farming there is a need for organic production certification and legislative development to assure the consumer to believe and to have confidence in higher quality of organic farm products.

Quality control

The quality control moved from farms and agricultural associations to certification bodies, where veterinary profession should be present beside the consumers associations who are cooperating in the quality control. There is difference in the areas of controlling the quality. At first the farmers and control association are more interested in the control of the processing for high quality, whereby consumers are interested beside quality control in the process issues like environmental burdening and animal welfare. While most of work till now

was carried out in Slovenia on product quality of organic produced fruit and vegetable (about 80%) very little information is available of the products of organic produced food from animals. So on this point veterinary profession has to start to cooperate, so that quality of animal products shall get certification and that the consumer will believe in higher product quality and the producer would achieve higher prices of the products. So as legislative control of standards and official certification systems in some countries have developed, clear divisions between the control and supervision of the processing and product qualities have to be established.

While process quality is determined by the certification system, the control of production quality have to be based on testing regimes which are specified as essential to agreement by conventional legislative mechanisms such as environmental health regulative and others.

So we must promote information, which will improve the basis in which we can control food quality and safety of organic livestock production. Till now all conclusions for products, which originate from livestock production, which now are limited, because of some lack of research data's i.e. homeopathic medicines, hormone use, antiparasitic medicines, disinfectants in acute cases of an outbreak of an infection etc., remain limited.

Organic breeding goals for animal production

And species demanding specific feeding, which ensures naturalness, is expected to improve animal welfare and indirectly influences the quality of food (stress influence on quality of meat). A solution to perform species specific feeding urges to more moderate production, which is programmed in the programme of development of Slovenian agriculture. So we must take care on milking cow herds where the milk production exceeds 8-10.000 kg milk. So in challenge of specific feeding trends are to find compromise between the genetic capacity to produce and the diet itself. This leads to selection of herds with suitable breeds for organic farming.

Restrictions in using chemicals and hormones as well as medicines

The limit in use antibiotics and other allopathic medicines leads to better quality of organic produced food, with not so high risk of residues and antimicrobial resistance. On the other side the quality of products can be negative affected by restriction of some medicines and use of vaccines. So the production could be affected positively or negatively. On the other side limitations to use routine medicines for prophylaxis, may force farmer to improve technology by improvement of overall quality of stress less life.

Conclusion

Taking in consideration that Slovenia has good condition for development of organic farming on our farms which are very small and in mountainous regions, there is possible to achieve quickly development of organic farming. This corresponds to the tendencies of EU which are regulated on environmental protection as emissions of ammonia and others, together with organic farming in touristic regions. In connection with the development of organic farming there exist possibilities to form many new working places in this region. In this area we can establish a lack of knowledge especially of the veterinary profession on environmental and animal hygiene, alternative medicine, homeopathic management, the use of different chemicals, organic feeding, animal welfare, ethology, etc.

So we think that new curriculum addressing organic farming should be implemented to our schools. Beside this investigation of the effect of organic farming on food quality will be very important to get knowledge about practical application of organic farming

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