

## Veterinary treatment in organic husbandry

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### Abstract

*The organic farming regulations put emphasis on the preservation of animal health by prophylaxis in the agriculture. The No 5 of the regulation EC 1804/99 (EC organic regulation) Appendix I B defines the veterinary treatments in organic animal husbandry. The veterinarian can use any medicine, which is effective for the indication and the animal species. If possible, effective homeopathics, phytotherapeutics or the like should have priority.*

*Problems of implementing the EC organic regulation into the daily farm practice arise mostly from the doubling of the withdrawal period and the restriction of the numbers of treatments. The strict ban on prophylactic treatments is not mentioned any longer in the new regulation 834/2007, which shall apply as from 1st January 2009.*

*Clarification of the guidelines for animal treatments in organic farming seems to be useful for farmers, veterinarians and boards of control.*

### Introduction

Recommendations regarding a husbandry, appropriate to the animal species, consider causal connections between health and husbandry. For organic farming the objectives for animal husbandry were aligned in the year 2000, when the EC regulations [*Council Regulation (EC) No 1804/1999 of 19 July 1999 supplementing Regulation (EEC) No 2092/91*] concerning livestock production came into force. The appendix I B No 5: "*Disease prevention and veterinary treatment*" defines that the animal health shall be based on principles like the choice of appropriate breeds and of animal-fair husbandry practices, high-quality feeds, regular use of outdoor-run and pasturage. The new regulation (EC) No 834/2007 mentions additionally "hygienic conditions". The principles should limit animal-health problems so that they can be controlled mainly by prevention.

This is possibly until today an unrealistic perception. No constant better flock health in organic farming could be shown so far in the reality. Apart from other problems, the outdoor husbandry arises the risk of the occurrence of endoparasites, livestock infections and even zoonotic infections (Bennedsgaard et al., 2003, Conraths et al., 2005, Hovi et al., 2003, Schnieder, 2003).

Problems in animal health are usually various. A larger variation in the status of animal health is found in between individual organic farms than in between the conventional and the organic system (Sundrum, 2004). Presumably good animal health depends very much on the personal priority and skills of the farmer and it overlaps with other

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farm options like labour capacity, personal interest, surface area indoors and outdoors, and equipment supply.

Other causes for insufficient animal health in organic farming may be e.g. the restrictions of the number of treatments and the lack of medical prevention. In some cases there is to be a substantial deficit in knowledge of the veterinarians concerning strategic problem-solutions in organic systems. There is a certain scepticism in some veterinarians concerning the organic farming. Others are unassured about restrictions of therapy. Unsatisfactory interaction between farmer and veterinarian is described as well (Hertzberg et al., 2003, Hammarberg, 2001, Hovi et al., 2003, Leeb and Baumgartner, 2000, Sundrum, 2004, Vaarst et al., 2003).

The presentation of some problems, -information gaps and misunderstandings is the aim of the following paper, as well as the promotion of the scientific discussion.

## Regulations and problems

Most important current EC organic regulations for the animal treatment are:

- First of all there is a treatment requirement. Sick animals must "*immediately*" get treated. Thus, a farmer acts adversely to the regulation, if he does not give treatment to his ill livestock.

- Secondly, the organic farming favours complementary medicine, because these are to support the defence mechanism of the organism, without leaving chemical residues in dung and food. Homeopathic and phytotherapeutic products are to be preferred provided that they actually have a therapeutic effect on the animal species and the illness. But: "*chemically-synthesised allopathic veterinary medicinal products or antibiotics may be used under the responsibility of a veterinarian*" if the alternative treatment "*is unlikely to be effective*".

Particularly the effectiveness is pointed out. If the efficacy is not given free of doubts, the familiar remedies are to be used. E.g. the vets in Sweden are not allowed to use homoeopathics (Hammarberg, 2001).

The opinion that the treatment of organic livestock is permitted exclusively with "alternative remedies" is far common. This cannot be deduced from the EC regulation. Otherwise the organic husbandry gets a reputation of not treating sick animals in an appropriate way (Hammarberg, 2001). The use of chemotherapeutics is currently inevitable to prevent animals from suffering or distress in organic farming.

However the use of chemical medicine is to be limited to the indispensable minimum. The principles of "good veterinary practice" contain a similar passage. The demanded effectiveness of alternative medical treatments may also depend on the experience of the therapist. Advanced training in complementary medicine for veterinarians is possible, but in each regard costly and time-consuming.

The farmers already broadly apply various forms of the complementary medicine. Although the scientific proof for the effectiveness could not be offered so far, in the perception of the farmers many different remedies and concepts "proved" its efficacy (Leon et al., 2006). If farmers prefer to use unlicensed "alternative remedies" rather than treating their animals with licensed chemical drugs this is not acceptable in food producing animals.

- Thirdly, the "preventive administration of chemically synthesised allopathic veterinary medical products or from antibiotics" is clearly forbidden in the current regulation. The drying-off of cows with antimicrobial mastitis-syringes is not regarded as a preventive measure, if a high risk of mastitis infection is documented. It is a therapeutic treatment in cases of subclinical chronic mastitis. More new infections at calving were found in untreated cows. The "prophylactic treatment" of newly bought calves with antibiotics may also be therapeutic if the probability of already being in

incubation of illness is high. The new EC-rules do not mention any longer a ban of prophylactic treatment.

Certainly by the organic farmer a particularly intensive awareness is demanded, because if a chemical-synthetic treatment begins too late the objective of reduced use of medicine is missed. Since then often treatment has to be longer and more intensively and in many cases no complete restitution is possible. This is conscious to most organic livestock farmers.

- Fourthly, hormones may be given only in the context of a therapeutic veterinary treatment of single animals. Induction or synchronisation of oestrus or shots of Oxytocin without prescription are prohibited. Vaccines and e.g. paramunity inducer (also genetically manufactured) are permitted. Farmers must document batch-specifically or animal-individually all applied "veterinary medicinal products". 30% of organic layer-farms had missing drug-reports.

- Fifthly, the doubling of the legal withdrawal period for chemical drugs in the organic farming is to improve the desired consumer protection: "*The withdrawal period... is to be twice the legal withdrawal period or, in a case in which this period is not specified, 48 hours.*"

The duplication of the withdrawal period and the 48-hours rule only concerns the *allopathic veterinary* remedies, thus everything that is not ranked among the homeopaths. This would concern also the phytotherapeutics. The registered 70 plants were intensively examined and possible residues were classified as without risk for humans. The 48-hours rule concerns as well medicinal products with a legal withdrawal period of 0 days. This affects e.g. the use of physiological NaCl infusion solutions. This is considered as "absolutely useless" (Tiergesundheit im Ökolandbau: Rechtliche Grundlagen, 2007).

The constant documentation of this kind of animal treatments and reliable adherence to the withdrawal period of at least 48 hours may be doubted.

The duplication of the withdrawal period is problematic also for the owners of "minor species" e.g. goats. The withdrawal time is at least 2 x 28 days on meat and 2 x 7 days on milk, if the used medicine is not registered for the species which is treated. The double withdrawal period is particularly difficult also in connection with mastitis treatment. 85% of the mastitis treatments in organic farms were allopathic and at least 14 % of organic farmers usually treat with intramammary syringe at drying-off. Milk of treated cows has to be withdrawn for 10 days; but if the birth takes place too early, the withdrawal period is for e.g. 94 days, depending on the remedy. In reality the withdrawal of milk for more than 4 to 6 weeks after parturition has to be questioned.

- And finally, the number of "chemically-synthesised allopathic veterinary" treatment courses is restricted. This means: Two treatment courses in fattening pigs and fowl inhibits the marketing as an organic product. A cow and its milk only get disqualified with the fourth treatment course per year. This regulation does not apply to vaccinations and treatments against parasites. A "treatment course" covers the period of the first application of chemical-synthetic medicine within a therapy up to the recovery of the animal. In case of a relapse of the same illness a second treatment may be summarized with the first treatment to one "treatment course". A daily practice' problem is e.g. the treatment of farrows which completely utilize the number of legal treatments, without the knowledge of the following fattening farm.

The current regulation could perhaps prevent a reasonable early, chemical-synthetic treatment. It may lead possibly to delayed, animal-protection-relevant disease pictures and accumulated mortality, if the farmer underestimate the problem in view of his financial loss. This section is discussed increasingly critically (Tiergesundheit im Ökolandbau: Rechtliche Grundlagen, 2007), because such conditions would run diametrically against the intentions of organic livestock production.

## Conclusion

Clarification of the guidelines for animal treatments seems to be useful for farmers, veterinarians and boards of control. The problems of the use of chemical-synthetic animal drugs in the daily practice of organic farming have to be discussed critically. The new Council regulation (EC) No 834/2007 defines only goals. The detailed rules for application will get fixed later by a "Committee on Organic Production". Feasibility of the rules and their impact on animal welfare is to be considered carefully.

The organic farming is in danger to lose the reliability in the consumer's perception, if the facts about outdoor keeping, animal health and medical treatment are left ignored. The correlation between costly labour and animal health and welfare should be proved scientifically and communicated to the consumer. He would achieve a better perception of the organic process of production and the required prices may become more reasonable to him.

Doubtless the objective of "less drugs" in organic animal farming could be reached in the future by long-term adaptation of hygiene, feed and husbandry-methods rather than by drugs. But denying today the necessity of chemical veterinary treatments will not help. Animal welfare has to be the major goal in organic farming.

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