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Ihr Zeichen	Unser Zeichen	Durchwahl	Datum
			15. November 2022

Umsögn um frumvarp til laga um breytingu á lögum um dýravelferð, nr. 55/2013 (bann við blóðmerahaldi)

53. mál, lagafrumvarp
153. löggjafarþing 2022–2023.
Frumvarpið er endurflutt, sjá 15. mál á 152. þingi - velferð dýra.

Written by Dr. Esther Müller, Head of the Academy for Animal Welfare, Scientific department of Deutscher Tierschutzbund e.V.
Neubiberg, 15.11.2022

Ég mæli eindregið með samþykki þessa frumvarps um bann við blóðmerahald í heild sinni.

Deutscher Tierschutzbund e.V. strongly supports the ban of the production of PMSG as it is not possible to take blood from semi-wild horses without causing stress, pain and fear and without using force. The extraction of blood from pregnant mares is associated with highly relevant consequences on animal welfare.
Trough the use of PMSG in intensive farming of sows, further animal welfare problems are caused (e.g. higher piglet mortality, several negative consequences on the sows health). Since several alternatives are available for the synchronisation of oestrus (synthetic hormones and zootechnical measures), the production of PMSG is not necessary and the cruel conditions of production are not justified.
The claim that techniques to control oestrus and ovulation could also help mitigate the impact of factory farming on climate and the environment is based on a false understanding of productivity. For further details, please see the attached documents.

Compliant with the EU Parliament and because the new regulation of August does not bring any significant improvements and is thus insufficient to ensure the protection of mares, Deutscher Tierschutzbund is also calling for a ban on the import and production of PMSG.

Þar af leiðandi fer ég Dr. Esther Müller þess á leit við stjórnvöld á Íslandi að þau banni samstundis blóðtöku fylfullra hryssa, svokallaðra blóðmera, á Íslandi.

Virðingafyllst,

Dr. Esther Müller
Geschäftsführung Wissenschaft Deutscher Tierschutzbund e.V.

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10.2021

Impact of the use of hormones (esp. eCG, GnRH-Analoga, hCG,) on pig welfare

The use of hormones in intensive farming of sows for economic reasons is very common. These hormones regulate the fertility cycle of sows and synchronise the individuals to the same level of oestrus. This management leads to a high facilitation of working processes by creating homogeneous pig groups in every section and minimising individual handling of the animals. Furthermore the hormones ensure an increase in performance per year. After weaning of the piglets the sow comes in heat earlier by using hormones and can be inseminated earlier than under natural conditions. This leads to a higher number of piglets per sow each year and to an increased economic efficiency of the farm.[1]

Application range of hormones [2345]

- Induction of puberty: earlier age of first insemination and synchronisation of cycle of gilts
- Synchronising of oestrus and ovulation within a group of gilts/sows for simultaneous insemination of the whole group
- Initiating the birth in the whole group at the same date
- Shorten the duration of birth
- Optimize the milk production of the sow (to be able to nurse more piglets)
- Initiate the next heat of the sow sooner to reach more litters per year
- Increase the litter size

First of all there is no medical indication for the frequent application of hormones in sows. In truth the practice only serves economic interests by stimulating and accelerating physiological processes in sows and this may not be a reason for the application of a medicine. Taking this into account, the application without medical indication has to be generally rejected.

Welfare problems

The increase of the reproduction performance to the maximum level with the focus on bearing more and larger litters per year extremely stresses the sow's organism

[1] Brüssow, K.-P., M. Wähner (2011): Biological and technical background of estrus synchronization and fixed-time ovulation induction in the pig. Biotechnology in Animal Husbandry 27, 533 - 545,

[2] Pozzi, S. P., Rosner, A. (2009): Hormonal therapy in sows (Sus scrofa domestica): a review. Israel Journal of Veterinary Medicine 64(4):95

[3] Fries et al. (2010): Induction and synchronization of ovulation in sows using a Gonadotropin-releasing
Hormone Analog (Lecirelin). Anim. Reprod, v.7, n.4, p.362-366

[4] De Jong, E., Jourquin, J., Kauffold, J. et al. (2017): Effect of a GnRH analogue (peforelin) on the litter performance of gilts and sows. Porc Health Manag 3, 6

[5] Naskar, S., Kadirvel, G., Khan, M.H., Lamare, A. (2012): Effect of PMSG followed by hCG on estrus synchronization in weaned sows. Exploratory Animal and Medical Research, Vol. 2, no. 1, pp. 51 – 55

and leads to severe welfare problems.[6] For the uterus it is not possible to involute and recover between two litters which enhances the risk of endometrial problems and those concerning all reproduction organs.[7] In that case again hormones are used as treatment and to support a weakened reproduction caused by bad husbandry conditions, stress, bad hygiene or other diseases. All that leads to fertility problems which are the main reason for an early departure of the sow to be slaughtered. Furthermore the high frequency of injections causes stress, pain and the risk of skin/tissue damage with associated punctual inflammations in the sow.

The hormones can also lead to a surplus of suckling piglets (especially by eCG). Large litter size leads to a decreased animal welfare in piglets and sow. It is associated with increased piglet mortality, caused by undernourishment or management reasons. But also in surviving piglets there is a high risk of suffering caused by teat competition and an inadequate access to milk. Starvation and long-term detrimental effects to health are the consequences just like the occurrence of low birth weights.[8] At least the application of hormones in a usually very early age of the sow and inducing puberty in an unnatural stage of development has negative effects on the whole hormone balance of the sow and for that can have a negative impact on its development and mental state.

From the view of animal welfare the health problems and their acceptance for the benefit of financial gains must be rejected.

Besides the welfare issues the use of hormones must also be rejected for environmental reasons. Excretions of the sows still contain traces of hormones which can enter surface and ground water and further contaminate the drinking water.[9][10][11][12][13] In general the synchronising of the sow's oestrus has advantages from the view of animal protection: it is a precondition for holding sows in stable groups to prevent severe fights for ranks and associated lesions caused by mixing of sows after weaning. But in animal-friendly farming systems (e.g. organic farming) the use of fertility hormones for this purpose is not necessary and prohibited as a general rule. There are alternate methods to control the reproduction and synchronise the sow's oestrus

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[6] Rutherford, K.M.D., Baxer, E.M., Ask, B. et al. (2013): The ethical and welfare implications of large litter size in the domestic pig. Project Report 17, Danish Centre for Bioethics and Risk Assessment, 146

[7] Kiracofe, G. H. (1980): Uterine involution: its role in regulating postpartum intervals. J Anim Sci ;51 Suppl 2:16-28.

[8] Rutherford, K.M.D., Baxer, E.M., Ask, B. et al. (2013): The ethical and welfare implications of large litter size in the domestic pig. Project Report 17, Danish Centre for Bioethics and Risk Assessment, 146

[9] Combalbert, S., G. Hernandez-Raquet (2010): Occurrence, fate, and biodegradation of estrogens in sewage and manure – Mini-Review. Appl. Microbiol. Biotechnol. 86, 1671 - 1692

[10] Khanal, S. K.; Xie, B.; Thompson, M. L.; Sung, S.; Ong, S. K.; Van Leeuwent, J. (2006): Fate, transport, and biodegradation of natural estrogens in the environment and engineered systems. Environ. Sci. Technol. 40, 6537-6546

[11] Kolok, A.S., M.K. Sellin (2008): The environmental impact of growth-promoting compounds employed by the United States beef cattle industry: History, current knowledge, and future directions. Rev. Environ. Con-tam. Toxicol. 195, 1 - 30

[12] Hakk, H., F.X.M. Casey, Z. Fan, G.L. Larsen (2009): A review of the fate of manure-borne, land-applied hor-mones. In: Henderson, K.L., J.R. Coats (eds.): Veterinary pharmaceuticals in the environment. ACS Sym-posium Series 1018, American Chemical Society (ACS), Oxford Univ. Press, 11 - 25

[13] Johnson, A.C., R.J. Williams, P. Matthiessen (2006): The total potential steroid hormone contribution of farm animals to freshwaters: the United Kingdom as a case study. Science of the total Environment 362, 166 - 178

which are only feasible with more effort (and workload) in high welfare standards and holding conditions: animal friendly environment (enrichment, space, mobility, light, temperature, air) adjusted nutrition, good health, intense contact to a boar and other sows in heat.[14]

The use of hormones to minimize workload and to optimize economic gains has highly negative effects to the welfare of sows and so we call for a ban of the use of hormones for others than medicinal indications.

[14] Einarsson, S., Sjunnesson, Y., Hultén, F. et al. (2014): A 25 years experience of group-housed sows–reproduction in animal welfare-friendly systems. Acta Vet Scand 56, 37

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Stand: November 2022

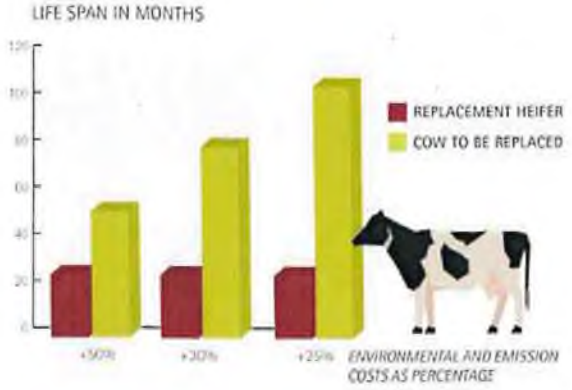
The impact of estrus and ovulation control techniques in factory farming on climate and the environment

The livestock sector is estimated to contribute about 14% of anthropogenic greenhouse gas emissions (18% taking into account land use, land use change, and forestry), 63% of reactive nitrogen mobilization, and to consume 58% of human used biomass globally [Pelletier and Tyedmers 2010].

With regard to greenhouse gases, production, processing and transport of feed account for about 45 percent to total emissions in the sector. Enteric fermentation is the second largest source of emissions, contributing about 40 percent - in the form of methane. Cattle and dairy cows emit most of the enteric methane (77%), followed by buffalos (13%) and small ruminants (10 percent). [Gerber et al S.15 ff]

Pork production is estimated to emit about 9 percent of the livestock sector emissions. The most relevant factors here are feed and fertilizer production, which primarily cause nitrous oxide emissions. Manure storage and processing are the second largest source of emissions, representing 27.4 percent, mostly in from of form of methane. [Gerber et al S. 35 f]

The claim that estrus and ovulation control techniques could contribute to mitigation is based on a a wrong understanding of productivity. Simply wanting to keep fewer high performance animals per time unit falls short. Take the example of cattle or dairy cows, which are considered to be the main sources of greenhouse gas emissions in the lifestock sector: Cows that produce 5000 liters per year usually live longer than cows that produce 10000 liters per year. Latter are more susceptible to disease and burn-out. They are therefore removed from operation ahead of time. The younger the cows are that are removed from an operation, the more her life cycle overlaps with her replacement and the more cows have to be raised to replace them [Idel 2020, S.46f]. That means we have more animals, more resource consumption and more emissions. Therefore, high-performance breeding, which includes estrus and ovulation control techniques, does not lead to a better ecological footprint. The opposite is true - also with other animals in agriculture.



Source: Idel 2013/2020

Lit.

Pelletier and Tyedmers 2010: Forecasting potential global environmental costs of livestock production 2000-2050. PNAS Vol. 107 No. 43, 18371-18374 https://www.pnas.org/doi/pdf/10.1073/pnas.1004659107

Gerber et al 2013: Tackling climate change through livestock – A global assessment of emissions and mitigation opportunities. Food and Agriculture Organization of the United Nations (FAO), Rome.
https://www.fao.org/3/i3437e/i3437e.pdf

Idel 2020: The value of sustainable grazing for soil fertility, cliamte an biodiversity. In Häusling Ed. The myth of climate. 3rd Edition https://www.martin-haeusling.eu/images/publikationen/Klimawandel2020_EnglischeVersion_final.pdf