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## Development of an animal-friendly feeding system for horned goats – preliminary results

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### **Abstract:**

In Germany, particularly in federal state Baden-Württemberg, dairy goat farming is becoming increasingly important as an alternative source of income (Statistisches Bundesamt, 2017). In feeding dairy goats there is a need for developing concentrate feeding systems adapted for horned goats, since dehorning is forbidden in Germany (Animal welfare act, 2019). Due to their species-specific behavior, agonistic interactions and horn-induced injuries are often found, especially while competition during feed intake. Injuries affect animal well-being, animal health, and result in economic losses (Leitner *et al.*, 2007). The project aimed to develop a functional and safe feeding system for horned goats. For further development of concentrated feeding systems, two different systems that are available for hornless goats were selected: A) the Lamking Double Box (LB) (Wasserbauer GmbH) and B) the Capra Box (CB) (Dedden/Hanskamp). One of each system was installed on two different farms in Germany (together 320 goats). Both systems differ fundamentally in the way they work. LB works with a sideways swinging door, whereas CB works as a walk through. To evaluate the feeding system, body condition scoring as well as incidence and type of udder and body injuries were evaluated before and after installation.

A first result is the functionality of the optimized feeding system in each farm, which will be presented during the talk. Data evaluation is still ongoing to be able to give sufficient information about both feeding systems in terms of animal well-being, animal health and economics.

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### **References:**

Animal welfare act (2019). Tierschutzgesetz in der Fassung der Bekanntmachung vom 18. Mai 2006 (BGBl. I S. 1206, 1313), zuletzt geändert durch Art. 101 G v. 20.11.2019.

Leitner, G., Silanikove, N., Merin, U. (2007). Estimate of milk and curd yield loss of sheep and goats with and intramammary infection and its relation to somatic cell count. *Small Ruminant Research* 74 (2008), 221-225.  
doi:10.1016/j.smallrumres.2007.02.009

Statistisches Bundesamt (Hg.) (2017) Land- und Forstwirtschaft, Fischerei - Viehhaltung der Betriebe Agrarstrukturerhebung 2016, Fachserie 3, Reihe 2.1.3