GREEN FACTS

INFOSERVICE
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Sustainable Animal Husbandry:

Animal well-being and efficiency

The protection and efficient use of our natural resources is an issue that is discussed across all scientific, political and social levels.

Just as anywhere else, also stakeholders in animal husbandry and food production are required to utilise resources in a sustainable manner, to produce food for a growing world population with as little losses and as productive as possible.

It is a fact that keeping animals which have a genetic and physiological potential for high performance is sustainable, as it allows for saving resources and reducing emissions.

There are studies, for example, giving evidence that rearing pigs with high daily weight increases of 900 grams only cause 50% of the green house gas emissions of those pigs which only achieve 500 grams of weight gains per day.

If an improved feed conversion is achieved, amongst other factors the reduced amount of feed needed leads to a reduction of the area for fodder as well as savings with regard to harvesting and storage cost. Emissions can be reduced at the same time. That allows for a more efficient use and protection of natural resources such as soil, water or air.

If feeding efficiency in pig keeping is to be increased, breeding must be tackled first. In addition to genetic factors, however, interactions between digestion characteristics, animal behaviour, nutrient use efficiency and feed quality play an important role.

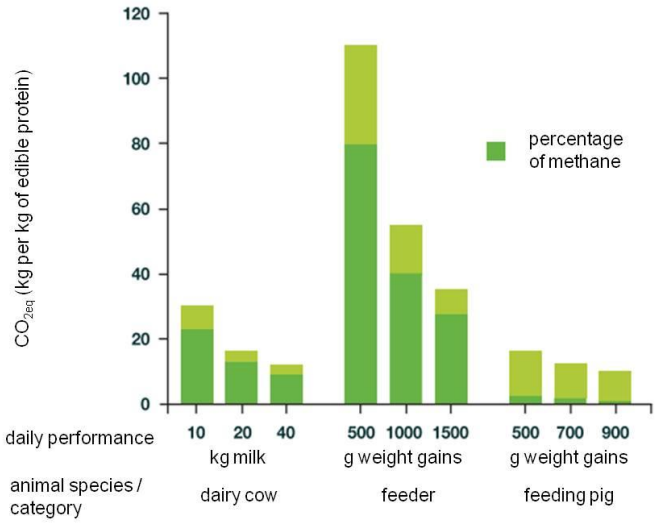
In brief: Without a composition of high quality feed components and a feed and husbandry management according to the needs of the animals, there is no chance to use the genetic potential to full extent. In addition, scientists are closely looking at improved nutrient use efficiency by means of feed additives such as amino acids for example.

Conflicts of goals between reaching genetic potentials on the one hand and animal welfare and health on the other, however, are conceivable as well. Further studies will be necessary to clarify details.

If sustainability in animal husbandry is to be improved, science-based approaches are needed in order to appropriately balance objectives of efficient resource use, levels of performance and animal welfare.

The better the performance, the lower the emissions

Carbon footprints (kg CO_{2eq}) per kg of edible protein, depending on animal species / category and level of performance



source: Flachowsky et al. 2011

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