

Foraging of pigs in outdoor areas

Problem

To reduce the risk of nutrient losses from free-range pigs, it is important to limit stocking density and to reduce nutrient inputs from concentrated feed.

Solution

Stimulating pigs' nutrient intake from foraging. Utilising available biomass is an obvious strategy to improve the sustainability of free-range systems.

Benefits

Improved utilisation of foraging crops reduces the use of concentrated feed, thereby decreasing feed costs, risk of nitrate leaching and greenhouse gas emissions.

Practical recommendation

- Root foraging crops, like Jerusalem artichokes or sugar beet (photo 1), can cover more than 80 % and 50 % of the energy requirements of pregnant sows and growing/finishing pigs, respectively.
- Protein-rich foraging crops like Lucerne or grass/clover can provide 100 % of the lysine and methionine requirements of pregnant sows and 30-40 % of the lysine and methionine requirements of growing/finishing pigs when including estimated contribution from foraged soil organisms like earthworms (photo 2).
- If pig producers adopt restrictive feeding (limited access to concentrated feed) to stimulate foraging behaviour, it is important to reduce competition for feed by allowing adequate time and space for feed consumption.
- As continuous access to attractive foraging crops stimulates pig foraging behaviour, it is important to consider and develop competitive moveable fences/systems.



Photo 1: Sugar beet is a suitable foraging crop. Photo: Anne Grete Kongsted



Photo 2: Un-ringed pigs can easily turn the grass clover sward searching for earthworms, etc. Photo: Anne Grete Kongsted

Applicability box

Theme

Pigs, Feeding and ration planning

Context

Relevant for all regions allowing free-range pig production.

Application time

In Northern Europe, it is a challenge to grow winter crops suitable for direct foraging. A few foraging crops are frost-resistant, e.g. Jerusalem artichokes; however, frost can compromise the availability of the tubers.

Equipment

Moveable fences/rotational paddock systems are preferable to stimulate pig foraging behaviour and to reduce the risk of nutrient hotspots due to uneven spatial deposition of pig faeces and urine.

Best in

Pregnant sows and growing/finishing pigs.

Further information

Video

- Check the following video: [Foraging growing pigs](#) (Danish narration)

Further reading

- Studnitz, M (Ed), 2019: Feeding monogastrics 100% organic and regionally produced feed. Knowledge Synthesis. OK-Net EcoFeed. H2020-project. <http://orgprints.org/34560/>
- Kongsted, AG et al., 2016: Slagtesvin på friland – Afgrødetilbud, fourageringsadfærd, plantedække, produktionsresultater og miljøeffekter (In Danish) www.dca.au.dk

Weblinks

- Check the [Organic Farm Knowledge](#) platform for more practical recommendations.

About this practice abstract and OK-Net EcoFeed

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Project website: ok-net-ecofeed.eu

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