

FIELD LAB REPORT: FEEDING SILAGE TO PIGS

Meeting 3: 2nd December 2015; Edinburgh New Town Cookery School

The Feeding Silage to Pigs field lab is running from 2014-2016. It is investigating if including silage in pig rations can:

- *Reduce production costs (in order to improve financial resilience)*
- *Improve gut health (in order to improve animal welfare)*
- *Reduce the reliance on soya as a source of protein (in order to reduce the environmental impacts associated with soya production)*

The purpose of this meeting was to evaluate if feeding silage to pigs had any impact on meat quality. If the pork produced in this way is inferior, there is little point in continuing with the practice.



Since the last meeting the production part of the trial has been completed: two groups of pigs of the same age, sex, and breed were fed two different rations. The control group (pork A) were fed a 'normal' ad-lib ration of proprietary feed (which includes wheat and soyabean meal). The experimental group (pork B) were fed around half their daily intake of proprietary feed, along with home-produced feed: ad-lib red clover silage and a restricted amount of barley.

Previous field lab meetings have been held on-farm and have looked at pig production. This field lab was held at Edinburgh New Town Cookery School in the main teaching kitchen where the 15 participants got a chance to see, smell, and taste pork from the trial. Participants tasted the pork 'blind': they did not know which production system was used to produce either type.

Students and staff from Queen Margaret University's [Gastronomy MSc](#) took part in this meeting: students on the course (who were trained chefs) cooked, and Charlotte Maberly (Gastronomy programme leader) designed the quality assessment criteria:

1. Appearance raw
2. Appearance cooked
3. Cooking quality
4. Aroma
5. Texture in mouth
6. Flavour

Overall there was no clear preference for pork from pigs fed silage or not. The comments for both types of pork were very similar.



The [results](#) of this session indicate that feeding silage to pigs is not detrimental to pork quality, and so this practice can be recommended; provided that clear financial, animal health, and environmental benefits can also be demonstrated.

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Next steps

Assessments will be carried out to determine the financial impact of feeding silage to pigs. The following things will be investigated to see if there what the differences are between feeding regimes:

- **Liveweight gain** – the amount of grams the pigs gained in weight per day
- **Killing out percentage** – how much of the carcass (as a % of the weight of the live animal) is sale-able meat
- **Cost per gram of liveweight gain** – what did the different rations actually cost, in terms of how the pigs performed (i.e. put on weight) on them
- **Carcass grade** – what was the quality of the carcasses, did they meet the abattoir's specification, or did they receive a penalty because they did not meet the specification

Several of the people involved in the field lab are looking to scale this up as a much larger research project with Newcastle University.

