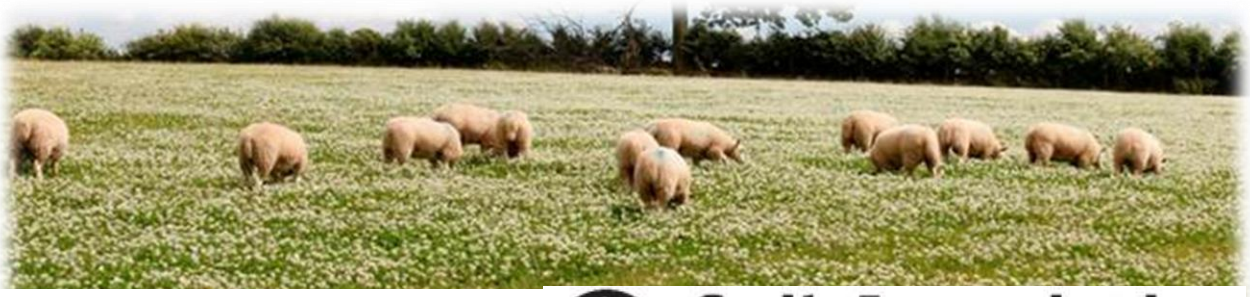


Scottish Farming Innovation Network | **Soil Association Scotland**

Supported by the Duchy Originals Future Farming Programme

FIELD LAB REPORT: Feeding Silage to Pigs

Meeting 2 – Thursday 14th August 2014

The pig field lab will run during 2014/15, and will look at the potential of silage to help maintain good liveweight gain, improve carcass quality, improve gut health, and reduce the cost and environmental impacts associated with feeding imported soya.

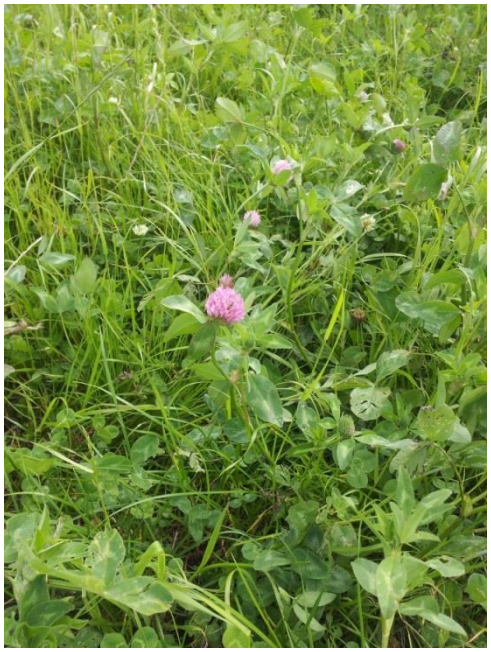
The second meeting of the field lab took place in August and was attended by 8 farmers, stockmen and field lab researcher Gillian Butler. The main purpose of the meeting was to discuss the practicalities and logistics of the trial and of the feeding system that would be used, and to establish the study parameters and data collection methodologies.

We started by discussing some considerations for selecting an appropriate batch of pigs, and which factors would need to be taken into account. The two batches of weaners will be selected from a larger group of animals that are of similar age, size and parentage (to reduce the effect of genetic variation playing a part in growth rate differences) and animals will be both Tamworth and Duroc x Tamworth gilts.

The two groups will consist of 15-20 weaners each, and finish within 3-4 months of the start of the trial. Group A will receive Peelham's normal ration of peas, beans & home-grown wheat or barley; and Group B will receive the same ration plus chopped home-grown red clover silage fed on an ad-lib basis.

Pigs will be weighed before being split into groups so that animals can be paired as closely as possible, and then re-weighed during the trial

and again before slaughter. All pigs are EID tagged which will allow data to be recorded for each individual throughout the trial, and all animal will also be tested and treated for intestinal parasites at the start. The amounts of the mixed ration and silage offered to both groups will be monitored througout the trial, with an assessment made for wastage



The practical aspects of feeding silage outdoors without generating excessive waste was also discussed in detail, and a system of feeding was designed in which silage will be chopped into a tote bag or similar for easy transport to the field, and then fed from a modified feeding structure to minimise silage being trampled into the ground. Pigs in Group B will initially be fed silage every day for a short period to establish optimum feeding frequency, which will be informed by daily visual observation records of how quickly silage is being eaten (which may shorten as pigs get used to the new diet). Visual assessments of wastage and leftovers will also be carried out at each feeding to calculate how much silage is being consumed. A number of silage bales will be weighed during the trial to establish a representative bale weight to further help calculate how much silage pigs are getting. The group also decided that weather should also be recorded daily throughout the trial in case this has an effect on outdoor feeding patterns.

The silage which will be used in the trial has been grown on farm and will be baled from a 2nd cut on a single field, which will give the best chance of the crop being fairly uniform. The field which will be used was selected by field lab participants during the meeting as having the leafiest stage of growth and high levels of clover. Non-representative or poorer bales (containing less clever and hence possibly less protein) will be removed and used for feeding sheep or cattle on the farm, so that the trial has silage of a consistent quality as far as possible. Samples will be taken of the silage at cutting (due to happen very soon after the meeting) and for every 3rd bale fed during the trial; and frozen to be tested later for nutrient quality.

As some preparatory work still needs to be undertaken before the trial can begin it is expected that the trial proper will begin in mid-late September, and continue for up to five months until all animals have been slaughtered and data analysed. Analyses of liveweight gain, fat quality, gut length and intestinal parasite load will be undertaken at the end of the trial period.

One of the field lab participants made an offer to help with logistics & preparation of the trial site (eg building new pig arcs), which was accepted with appreciation.

The third meeting of this field lab will take place in October 2014 (date tbc), and is open to all who are interested. You can find further details on **our website.**

For more information or to provisionally book a place please contact Colleen McCulloch at cmcculloch@soilassociation.org or call 0131-666-2474.

Scottish Farming Innovation Network
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