Introduction

The results of any animal feed analysis are only as good as the samples taken. If the sample is not truly representative of the area, the result will be of little value. Correct animal feed sampling takes time, but following the guidelines detailed here will ensure that this time is not wasted.

How to take animal feed samples

Equipment

To take a silage sample you will need:

- A sampling tool
- A bucket or plastic sheet (for mixing the sample)
- Sampling bags and a waterproof marker pen

The best sampling tool is a corer.

When

Silage and hay samples should be collected before starting the winter feeding program to produce an initial ration. Thereafter samples of silage can be taken throughout the winter so that rations can be altered to accommodate the change in silage and stock performance. Silage sampling should not be done within 6 weeks of sealing the clamp to allow a stable fermentation to be achieved.

Where

Core samples should be taken from a minimum of three sites in the clamp. Make sure the corer reaches the bottom of the silo, as vertical variation within clamps can often be great. Face samples should be taken from side to side and top to bottom.
following a “W” pattern, with sub samples taken at each ‘point’ of the “W” (i.e. 5 samples). Grab samples from the face of the clamp will give the best indication of what animals are eating at a particular time. Grab samples from 3 or more bales are sufficient to give a representation of quality. These samples should be bulked together and thoroughly mixed. A minimum of 0.5kg should be sent to the laboratory in a well-sealed polythene bag. Remove as much of the air as possible before sealing the bag. Client name & sample id should be clearly marked on the bag.

Due to the nature of wholecrop and maize silage it may be necessary to take more grab samples in order to produce a representative sample suitable for sending to the laboratory.

For concentrates or compound feeds/pellets a representative sample should be taken from the bag or bags concerned. This should be submitted to the lab in a sealed polythene bag (approx. 300-400g is sufficient). When grains are urea treated it is important to mention this on the registration form. This will enable the lab to carry out the correct analysis for this treatment. It is also important to keep urea treated samples cool to prevent the loss of ammonia nitrogen.

Avoid

- any areas of the face which are moldy or damaged in any way, and this material is not being eaten, they should be omitted from the sample
- freezing the sample as this can cause disruption of fibre fractions due to the formation of ice
- posting samples on a Friday. When possible store in a “cool box” or fridge until dispatch to the laboratory

Registration Details

Please remember to send a copy of your registration details and analysis requirements when you submit samples to the laboratory. Registration forms can be obtained from the laboratory if required.
Where to send your samples

Please send your sample(s) and form(s) to:

Analytical Services Department
Central Analytical Laboratory
SAC Consulting
Bush Estate, Penicuik
Midlothian, EH26 0QE