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Plant Tissue Sampling Protocol

Plant Tissue Sampling

Soil and plant tissue analyses highlight mineral imbalances that might be affecting the health of pasture or animals that feed on it. Tissue analysis at the vegetative growth stage provides an excellent opportunity for the application of nutritional products to correct for any nutritional deficiencies.

Pasture tissue tests complement soil tests and allow important trace nutrients like cobalt, selenium, copper and iodine to be adjusted for improved animal health. Using both herbage and soil testing will provide a better overall picture of the farm nutrient status for an improved fertility programme.

1. Collection of Sample – Timing and Growth Stage

Timing is extremely important as interpretation guidelines are established at a specific growth stage for pasture crops. Correct timing is also especially important as some nutrient levels can change fairly rapidly and any significant differences in time of sampling can lead to a variation in the interpretations. If possible avoid sampling after fungicide or nutrient spray applications, as this will contaminate samples.

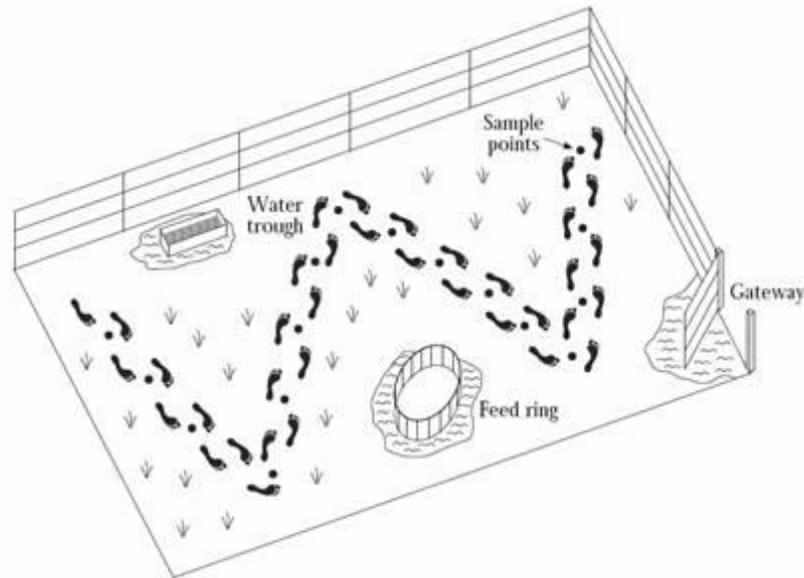
The optimum sampling time for pasture samples is generally during the active growing cycle, that is, during the spring or autumn flush.

If you have a weed concern, a plant tissue analysis can provide valuable information about functional nutrient deficiencies. Collect 50 weed leaves from a representative area.

2. Collecting the Sample

Design your sampling plan similar to the W-sampling plan as detailed below. Take samples along the same plan you use to collect your soil samples. Try to ensure that the sample is representative of what the livestock are consuming. Avoid gateways, troughs and stock camp areas.

Using a pair of clean rust-free scissors or shears, collect 15 to 20 small handfuls of grass (about 5cm/2 inches from the ground) from sites throughout the sampling area and combine in a paper bag.



- ≈ Each sample should be taken from a uniform section of the pasture on the same soil type.
- ≈ Complete the details on the analysis request form and include Growth Stage

3. Care of Samples – Collection and dispatch

Samples can be contaminated by some fungicides and nutrient sprays, which may give incorrect laboratory results. Wash hands and preferably use a paper bag to collect sample. Avoid the use of plastic bags for plant tissue samples because of moisture condensation and possible breakdown of the samples. Wherever possible, please collect and dispatch samples by the first half of the week to ensure that the samples arrive at the laboratory before the weekend. Always mail samples on the same day as they are taken from the paddock.