

SAMPLE COLLECTION GUIDELINES FOR FEED/FORAGE TESTING

Proper sample collection is crucial for proper interpretation of results. Collect a number of smaller samples to form a large composite sample that is representative of the field, cutting, or batch. If different regions of the field were treated differently, then separate composite samples should be submitted for each of the different region.

At least a pound of total composite sample should be submitted. The sample represents a large amount of feed so it is critical that the sample is representative of the whole. More sample is always better than too little, so when in doubt, collect more! Be sure to mark each bag legibly with forage/sample type and identification information.

Note specific for nitrate testing: Nitrate concentrations tend to be higher at the base of the plants, and higher in the stalks than the leaves. Grains, seeds and leaves do not accumulate significant nitrate levels. Plants with high stem-to-leaf ratios are the most likely to cause nitrate intoxication.

Bales (hay, balage, bedding) – Use a hay probe to take core samples. Randomly select 10-20 bales that are representative of a cutting/batch. Take several core samples per bale, and mix all the cores to make one large composite sample. Different cuttings, batches, or field should be sampled separately, and submitted as separate samples.

Silage and total mixed rations (TMR) – Freshly unload some silage material or freshly mixed TMR and collect large handfuls from 10-20 different locations. Mix to form a large composite sample.

Corn stalks – Cut the stalks at the anticipated harvest level and submit the entire part of the stalk that will be fed. Collect stalks from several areas of the field. 5-10 stalks are recommended. Stalks can be cut or folded prior to shipping. Alternatively, if shipping volume is an issue, only the bottom halves of the stalks could be submitted, but remember that the result will be higher than the actual overall average nitrate concentration for the entire plant.

Pasture grasses – Collect handfuls of forage from 10-20 different areas in the field. Cut the grass at the anticipated harvest or grazing height and submit the whole part of the plant that will be ingested. Mix thoroughly to make one large composite sample.

Grains – If possible, use a grain probe to take samples. If a grain probe is not available, collect approximately ½ to 1 cup full of grain from 10-20 random places as grain is discharged from a bin or from various depths and locations in a container. Mix thoroughly and submit as one large composite sample. **Note:** Grains do not accumulate nitrate, so nitrate testing is not typically performed on grains.