



Agro-One

Agronomy Services

September 2014



Greetings from Agro-One!

The summer is rapidly coming to an end and fall harvest will be in full swing before we know it. We hope everyone had a great summer! Here at the lab we are looking forward to a busy fall, full of soil samples, manure samples, and corn stalk nitrate tests. Follow us on Facebook for new services coming this fall and always feel free to contact Sally Flis (sally.flis@dairyone.com) for any question about our services.

Fall Manure Samples

Manure is a rich source of nutrients for crop growth. Fall manure applications are an important part of manure management, and so is knowing what is in the manure that is applied.



Applying the right amount of manure for crop production needs will save money and reduce the risk of nutrient loss to the environment. A typical cow produces 120 lbs. (54 kg) of manure per day. A 100-cow herd will produce 2190 tons per year, or about 1 million gallons of liquid manure, making

manure management a major farm enterprise. Environmental and water concerns will continue to place greater emphasis on nutrient composition, storage, handling, and time and place of spreading. Each manure source should be sampled at least once a year, and monitoring results over seasons or years will give you the best information about your manure.

Manure Sampling

The sample should be representative of the entire material being sampled. Storage areas should be sampled each time you are spreading. Daily spread operations should be sampled 4 or more times per year throughout the year to obtain a good average nutrient value. Where bedding is used, samples should include both bedding and manure. Sampling is best done from the spreader when manure is being loaded from the barn or storage. This will provide the most representative sample of the nutrient content at time of spreading.

Liquid storage: Agitate and thoroughly mix before sampling. Make a dipper by fastening a plastic cup to a broomstick. Take a sample or 2 from the tank spreader and place it in a pail. Do this for multiple loads. Then, mix the contents of the pail and take a subsample, placing it into a sample container. For larger liquid manure storages, it is good practice to take samples at different levels of the pit, or each time manure is spread. Nutrient concentrations in the manure will change as depth increases.

Solid manure storage: Sample while loading the spreader. Use a garden trowel and pail to collect a sample of manure from various spots on a load over multiple loads. A minimum of 5 loads should be taken and composited into a pail. Or, spread part of 5 loads over a tarp and take a sample from the tarp for each load into a 5-gallon pail. Mix thoroughly and take a subsample, placing it into a sample container.

Daily spreading: Use a garden trowel and pail to collect a sample of manure from various spots of the spreader. Sample the load(s) for 2 to 3 consecutive days. Or, place a 5-gallon bucket under the barn cleaner 4 or 5 times while loading the spreader. Mix the manure thoroughly in the bucket, take a subsample, and place it into the sample container.

For all sample types, be sure that the container is at least $\frac{3}{4}$ full, but no more, to allow room for expansion. Wipe container to remove any manure that may have spilled down the sides. The outside of the container should be clean prior to shipping. Secure the lid firmly. Tape if necessary to prevent spillage. If the sample is not being shipped immediately, freeze until shipping. Properly preparing the sample is very important to prevent ammonia loss.

An Agro-One manure analysis provides the following information to use as a basis for developing sound nutrient management plans or manure application rates: Total Nitrogen (N), Ammonia Nitrogen, Organic Nitrogen, Phosphorus (P), Phosphate Equivalent as P₂O₅, Potassium (K), Potash Equivalent as K₂O, Total solids (dry matter), and Density. Results are reported as percentages, lbs./ton, and lbs./1000 gallons. Analysis is \$35 per sample and results are generally available in 2 to 3 days. <http://dairyone.com/analytical-services/agronomy-services/manure/>

We also have drop off points for samples coming to the lab. <http://dairyone.com/general-resources/sample-transportation/>



Contact our customer service department today at 1-800-344-2697 x 2172 for more information or to order sample kits and forms. You can also order supplies by emailing your request to supply@dairyone.com or from our website <http://dairyone.com/shop/>

Agro-One offers state of the art analysis, timely turn around, outstanding customer service and is a strong supporter of the Certified Crop Adviser's Program.

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