

Compost or Manure Sampling Procedure

WHY SAMPLE?

Compost and animal manure have long been used as a source of nutrients that are normally supplied in fertilizers. Due to the natural variation in raw materials and in environmental conditions the overall nutrient content in unknown. Farmers need to know the amounts of nutrients supplied to crops in compost or manure to properly adjust commercial fertilizer rates to meet crop needs.

WHAT YOU WILL NEED

- Plastic Sample collection bag, preferably a zip lock bag
- Plastic disposable gloves
- Clean core sampler to collect topsoil samples
- Screw driver and clean plastic bucket to remove and collect soil from the sampler
- Small spade to remove any excessive debris
- Sample collection bag, Submission Form, plastic pocket all available from Nutrient Advantage on 1800 803 453 or your local Incitec Pivot Agent or Dealer.

SAFETY WITH SAMPLING

Sampling involves physical work in the outdoors. A common sense approach is required, as for all work on farm, with due consideration to:

- Exposure to the elements, including the sun. Wear appropriate clothing, a hat, and sunscreen during the summer months, stay hydrated
- Composts and manures may contain harmful bacteria that could present a danger to human health. A precaution for handling these materials is to wear disposable gloves when sampling.
- Wash your hands between taking different samples, and before eating;
- Keep your back straight when taking soil samples and during lifting operations;
- Have a First Aid kit available

COLLECTING A COMPOST / MANURE SAMPLE

Manure and compost sample are not to be analysed as soil samples

Composts and manures are a mixture of biomass and/or other components which are not totally uniform in composition. Due to the variation of raw materials within a compost or manure pile, a representative sample made up of many sub samples combined need to be collected for testing purposes.

For the purpose of preparing this document, sampling procedures used have been recommended in the <u>Australian Standards AS4454 (2012) Composts</u>, soil conditioners and <u>Mulches</u> and are generally used for manure samples due to lack of specific standards for manures and other types of recycled organics

Compost or Manure Sampling Procedure

Sampling Protocol

- We recommend that a manure sample should be what is known as dry or solid manure which is generally dry matter with less than 20 percent moisture
- For best results samples should be collected in the field at the time of application or as close as possible to application. The manure is mixed and similar to what is applied, and losses during storage, handling and application do not need to be estimated.
- While a spade can be used to sample a manure pile, representative samples can be
 obtained using an auger or soil probe which can reach into a manure pile, at least 6
 inches below the surface
- It is necessary to take samples from various places in the manure or compost pile to obtain a representative sample.
- The number of sub-samples suggested are between 10 to 20 sub-samples from a batch:
- Place the sub-samples into a bucket or pile, break up any lumps
- Mix sub-samples batch thoroughly to make a composite sample for analysis.
- A composite sample of approximately 500 grams
- Place composite sample in a sealed (preferably zip lock) plastic bag
- Squeeze the bag and remove excess air and seal bag
- Put the bag in a second resealable bag to further ensure against leakage.
- Label bag with sample name and sample identification number or barcode
- Compost or manure samples should be sent to the laboratory as soon as possible after sampling to avoid nutrient loss or microbial activity.
- Refrigerate if the sample cannot be sent to the laboratory immediately



Compost or Manure Sampling Procedure

GETTING THE SAMPLE TO THE LABORATORY

- 1. Ensure that you have a minimum of 500 grams of dry material per sample in each zip-lock bag.
- 2. Fill out the appropriate Submission Form making sure to supply the correct customer account number.
- 3. Fill out ONE Form for a maximum of three samples taken from the pilie.
- 4. Ensure a test code is clearly indicated using the current Nutrient Advantage Price List.
- 5. Double check that the barcode numbers on the completed Submission Form match the barcode numbers on the sample bags (remember to keep one for your records).
- 6. Place all Forms in the clear press seal plastic pocket provided. Place the submission form and any tissue and soil samples into a Freight satchel and seal and deliver to:

Attn Sample preparation Nutrient Advantage Laboratory 8 South Rd Werribee Victoria Australia 3030

SUMMARY

For more information please contact Nutrient Advantage on Freecall 1800 803 453.

Submission forms, tissue and soil bags, freight bags and other materials required for sampling are available from the Nutrient Advantage Help Desk or from your local Incitec Pivot Agent. Submission Forms and current Nutrient Advantage product information are available on our website.

www.nutrientadvantage.com.au.







