Preparation of tea manure from chicken droppings

Recognize the problem
Nitrogen deficiency is a serious problem to crop production in Zambia. It is caused by many factors some of which are related to bad farming practices such as burning of crop residues or their complete removal from the field. Continuous use of nitrogenous chemical fertilizer is very detrimental to soil.

Background
A quick natural source of nitrogen can be provided from tea manure which can be made from any manure including chicken manure. Liquid fertilizer or tea manure can provide crops with nutrients during the growing season. When applied properly, liquid manure is a very effective natural fertilizer that can be used as top dressing to support vegetative growth and fruiting by providing nitrogen. It is commonly used on vegetables but can also be used in maize and other grain crops. The quality of the liquid manure depends mainly on how well the animals have been fed.

Management
- To make liquid fertilizer from chicken manure you will require a 210L capacity empty drum (plastic drum is preferred), strong 50kg by volume sack or gunny bag (a porous nylon bag is the best), a strong pole, a rope and a small plastic (polythene) sheet to cover the drum.
- Place the manure (composted most preferred) in the sack. 50kg is required for a 210L drum.
- Put chicken manure until it is full and securely tie it with a rope
- Fill the drum three quarters full of water and hang the bag in the water from a strong pole placed across the top of the drum. Use a string to hand the sack from the pole
- Cover the drum to prevent nitrogen from escaping. Let it stand for 14-21 days.
- Stir the mixture in the drum every 3-5 days by partially lifting the bag in and out of the water several times using the pole.
- After 2-3 weeks the water will have turned dark and most of the nutrients will have dissolved into the water. The darker the colour the more concentrated is the mixture. It is then ready to use.
- Add 1 part of tea manure to 2 parts of water. However, if the tea manure is very much dark brown, use 3 parts of water for every 1 part of tea manure.

The recommendations in this factsheet are relevant to: Zambia

Authors: Albert Mate
Kasisi Agricultural Training Centre
tel: +260 977 428480 email: mate2albert@yahoo.com

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