



Vegetable production: manure and other organic fertilisers

Manure

Animal manure can be used to keep the soil fertile or to make it more fertile.

It contains all the food (nutrients) plants need, namely nitrogen, phosphorus, potassium and most trace elements.

The nutrients of different types of manure differ.

The number and kind of nutrients depend on:

- the type of animal or bird the manure comes from and the food it ate
- whether straw is used as bedding
- how the manure is handled before it is used.

Animals that eat lucerne, good quality hay, silage and concentrates will produce better manure than animals that graze in the veld only.



Types of manure

Poultry manure is the best, then sheep, horse, cattle and, lastly, pig manure.

As poultry manure contains much nitrogen, it must be used carefully.

Apply sparsely (150–200 g/square metre) and dig in well before planting the crop.

Do not use poultry manure when you are planting a root crop.

Do not plant carrots in manure or compost-rich soil.

Bedding

Bedding contains many valuable nutrients, especially nitrogen, as it absorbs urine.

Soiled hay and straw is the best bedding to use because:

- it absorbs large quantities of moisture
- it rots easily when worked into the soil or compost heap.

It is better not to use sawdust, which is sometimes used as bedding for horses and pigs, as it takes very long to decompose.

Handling manure

If manure is not handled correctly, it may lose its value.

Rain on unprotected manure washes out many of the nutrients.

Manure should be covered or worked into the soil as soon as possible.

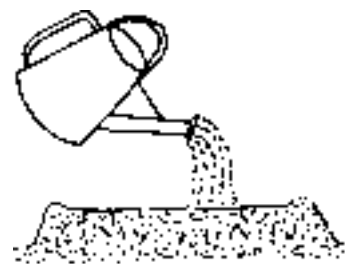
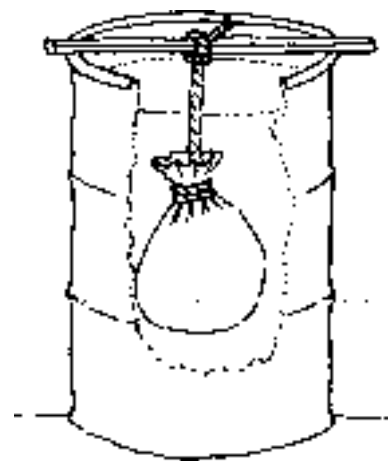
Liquid manure

Liquid manure is usually applied to the plants while they are growing, in other words as a topdressing.

It is easy to prepare and good for most vegetables.

Prepare it as follows:

- Put a bucket of manure in a hessian sack.
- Hang the sack in a drum of water.
- Part of the manure will dissolve in the water.
- After 2 weeks fill a bucket or watering can a quarter full of the dissolved manure and fill up with water.
- This bucket full of liquid is enough for 1 square metre (1 pace long by 1 pace wide).
- A bed which is 1 pace wide and 10 paces long therefore needs 10 watering cans of liquid manure.



Other organic fertilisers

Seaweed

Seaweed is easy to gather at the coast.

It contains many nutrients for plants.

First wash off the salt and then use the seaweed as a mulch round the plants.

Dig it into the soil when the season is over.

Bloodmeal and bonemeal

Bloodmeal and bonemeal are suitable to use in addition to other fertilisers.

Bonemeal works relatively slowly but has a long-lasting effect.

It is a good idea to add a few bones and some blood to your compost heap.

If an animal is slaughtered, its blood can be collected, dried and added to the compost heap.

For further information contact your nearest extension officer

Compiled by the Directorate Communication of the National Department of Agriculture

Printed and published in the Republic of South Africa by the National Department of Agriculture and obtainable from the Resource Centre, Directorate Communication, Private Bag X144, Pretoria

1997