



For Immediate Release

To: All Media

Date: 28 February 2019

Attention: News Editors / Agricultural writers

LET'S GROW NUTRITIOUS LEAFY VEGETABLES IN AN OLD MAIZE-MEAL BAG

Plant grown in bag system are growing vertically upwards which results in efficient use of space/land. Bag system can be used in places that have not being previously thought of as appropriate for food gardens, such as small gardens, paved land and balconies. The bag is able to hold water for longer time, without water and nutrients draining into soil. Plant leaves are not in contact with the soil resulting in less effort to clean the leaves before marketing or consumption. In order to plant vegetables in a bag system, the following are required: empty maize-meal bag (80, 50 or 25 kg bag), soluble fertiliser, growing medium (compost, sawdust or soil with good drainage), watering can and seedlings.

Steps to follow:

- Moisten the growing medium with water to allow good distribution of water during irrigation
- In an 80 kg of maize meal bag you can plant on average up to 56 plants
- Fill a maize-meal bag with the moistened growing medium such as sawdust, compost
- Use a sharp blade to cut openings in the bag at a distance 20 cm x 10 cm for planting holes to transplant leafy vegetables such as kale, rape, mustard spinach, Swiss chard, spinach, beetroot and lettuce
- Push the seedling root plug into the planting hole in the maize-meal bag
- Make sure that the bag is upright to allow the uniform distribution of water
- Make sure that the growing medium doesn't dry-out and water the plants from the top of the bag and the water will drain downwards to benefit the lower plants
- Complete nutrient solution can be applied on a weekly basis to supply plants with nutrition. Dissolve 1 gram per litre of water of soluble fertiliser for each of the following fertilisers, Multifeed and Calcium Nitrate)
- Plants can be watered every second day (e.g. in 80 kg bag 60-90 L water can be applied per week)
- Plants should be exposed to the sunlight for the process of photosynthesis to take place



Figure 1. Transplant seedlings in a bag/sack system



Figure 2. Leafy lettuce growing in a bag/sack system



Figure 3 Swiss chard 'spinach' growing in a bag



Figure 4. Mustard spinach growing in a bag system

Agricultural Research Council – Vegetable and Ornamental Plants, Roodeplaat is offering accredited hydroponic vegetable production training course. For more information, contact Ms Tsholo Tselapedi: (012) 808 8000