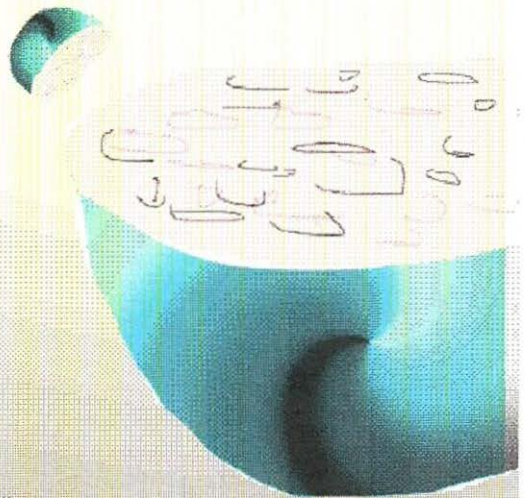




GUIDE ON PRODUCTION MELON



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THE PRODUCTION OF MELON (EGUSI)

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Introduction

'Egusi' melon (*Citrullus Lanatus* Kuntze) is an annual herbaceous climber which belong to the plant family

Cucurbitaceae

It does well in dry hot environment and does not do well in humid or damp environment because of serious foliage disease and pests leading to poor fruit quality.

It is a crop that is usually used as a cover crop in that it covers the field early enough to reduce the cost of weeding.

Site Selection: 'Egusi' melon do perform best on damby – loam soil, that is well drained. They do not perform well in acid soils. As a guide, soil suitable for maize is also good for 'egusi'.

Varieties: Grow varieties adapted to the local conditions in your area.

Four main seed types locally available in the country and where they are commonly grown are:

- Bara - Eastern and Northern states
- Serene - Eastern states
- 'N' - Niger, De, Delta states
- 'g' - Niger, De, Delta states

There are however variation in seed size, seed shelling percentages and seed yield

Recommended 'egos' melon seed varieties which are high yielding are available at the National Horticultural Research Institute (NIHORT), stations (Ibadan, Kano Badauda and Mbato).

Land Preparation:

Land should be well prepared by ploughing and harrowing or soil well loosened with help of hoe. Land should be weed and stone free. Land could be ridged or left flat. Minimum tillage (only the side or spot of where the seed is introduced is tilled) is also recommended.

Time of Planting

The seeds are generally sown at the beginning of rains (April/ May) or towards the end of the rainy season (August. september in the northern states and September-December in the southern states).

They could generally be sown at anytime if sufficient water is available. They also do well under irrigation.

As a rule, Egusi do not do well if planted at the middle of the season when too much water is available.

Method of Planting:

The seeds are sown, 3-4 per hole with a spacing of 2m within rows and 2m between rows (ie. 2m x 2m) and 1x1m may also be used.

After germination, which is usually within 4-7 days the plants should be thinned to 2 per stand.

Egusi 'melon' is usually grown in mixture with cereals such as maize, millet or sorghum, when wider spacing is used eg 1x4m. Higher yield usually obtained in sole cropping. Generally about 7kg of seeds is needed to plant one hectare. This gives a plant population of 10,000/ha.

Fertilizer: Egusi response to Nitrogen fertilizer, but better to use compound fertilizer.

Fertilizer recommendation is 30kg N, 30kg p₂o and 30kg k²o/ha. This recommendation can be obtained by applying.

1. 150kg/ha (3 bags) of Ammonium sulphate plus;
150kg/ha (3 bags) single super phosphate and 50kg/ha (1 bag) muriate of potash. OR
2. 200kg/ha (4 bags) of NPK 15:15:15
The fertilizer should be applied 2-3 weeks after planting in a ring form around each plant, 1.5cm deep and 5-7cm away from plant base and should be covered.

In mixed cropping, the quantity made be reduced. It also response to farm yard manure.

Weeding:

One or two weeding may be necessary before the plant covers up. Care should however be taken to avoid damaging

the vines during weeding.

Pests and Diseases:

An important disease that attacks 'egusi' melon is the Anthracnose which produces brown necrotic spots on leaves. This can be controlled by spraying with the use of Benlate at the rate 0.6kg/ha which is equivalent to 15g (i.e./1.2 standard match box level full) per 10 litre at water weekly interval.

Egusi 'melon is attacked by many type of insects which the most serious one is the fruit-fly which lays its eggs in the developing fruits of melons

Other insects whose adults and or Nymphs either gnawed and skeletonies the leaves while some larve bore and eat into the fruit which is known to allow secondary infection by disease organisms.

Another important insect that attacks Egusi 'melon' is the 'army' worm. This is usually noticed early in the season during a prolonged dry spell.

Insects can generally be controlled by the use of insecticide such as cymbush, at the rate of 40-50ml. 10: of water of 2 weekly interval. Clean weeding of farm borders can reduce the attack of "arm worm,".

For the control of disease and pests with the use of chemicals, they could be mixed together. Spraying should be done early in the morning or late in the evening.

Harvesting

Harvesting period ranges from 80-120 days.

The fruits are due for harvest when the vines are completely dry or when the fruit becomes brownish from originally green colour ie. When attach into the vine (neck) is dry.

Seed extraction: the fruit are usually collected.

Crack, break or beat with a stake. Then fruits are heaped together and left to ferment or not, In three or more days later, the pulp should have got rotten, when the seeds should be extracted by scooping them out. The seeds are then washed properly with water to get rid of the rotten pulp. Where water is not readily available up the seeds against fine sands and dry them. Yield expected is 500-1000kg/ha if the above recommended is followed.

Shelling process and Usage: 'Egusi' melon is usually shelled manually. However various prototype shelling machines have been developed which will be introduced to the market soon.

After stripping the seeds from the seed crate, which is usually done manually, they are ground for use in soups e.g. Egusi soup with leafy vegetable or okra.

The seeds are high in oil protein content. The oil is used in cooking (as groundnut oil). The residue after extracting the oil can be fried into melon seed-balls (very much

similar to kuli-kuli the groundnut cake),

SUMMARY

- Select a suitable site
- Grow high yielding variety
- Prepare land well
- Plant at correct time
- Use correct spacing
- Apply fertilizer
- Control pest and disease
- Keep field weeded before plant covers up
- Harvest fruit when vine is dry
- Extract seed



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