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ENGINEERS WITHOUT
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CAMEROON

Practical Guide

NON-TIMBER FOREST PRODUCTS
(NTFPs)

GNETUM SPP.
Gnetaceae

Gnetum spp.

gnetum



Name in local languages:

Bassa : Kok

Bulu : okok

Ewondo : okok

Pidgin : eru

Nzime : koko

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Also referred to as *okok*, *éru*, *koko*, or *ékok* by certain ethnic communities in Cameroon, *Gnetum* spp is a liana of the Gnetaceae family whose leaves are intensely harvested by the populations of the forest area.

Regeneration:

Cultivating the *Gnetum*

Stage 1

Constructing and installing a propagator

- Construct and install a propagator using bamboo or wood by following the illustration above. To do this, assemble the frame, seal the bottom and the four sides with a transparent plastic sheet and leave a flap that can be closed.
- Fill the bottom of the propagator with the culture medium for the cuttings made up from:
 - half a wheelbarrow of sand
 - one wheelbarrow of gravel
 - a mixture made from one half-wheelbarrow of sawdust and one half-wheelbarrow of sand.

All of these elements must be spread out across the bottom of the propagator. The propagator must be installed on a flat surface, close to water and should be shaded by a canopy made from posts cut from the forest and covered with straw.

Stage 2

Taking cuttings from the forest

Gnetum does not reproduce effectively from seeds and therefore cuttings should be used. These should be taken very early in the morning or at sunset from stems with mature leaves. The cuttings should have a maximum size of 8 cm and 2 to 4 leaves cut in half.

Stage 3

Placing the cuttings into the structure.

Using your fingers make some small holes. These holes should be spaced 3cm apart from each other. Then, delicately place the plantules into their individual holes and sturdy the bases by patting around the bottom of the cuttings. Remember to spray them with water every day and be sure to close the propagator afterwards. It is also important to weed when necessary and never disturb the soil around the cuttings.

Stage 4

Removing the cuttings from the propagator

After a month you will need to move the cuttings out of the propagator and transfer them into small plastic bags as follows:

- With the aid of a plank, carefully dig around each cutting so that the roots are contained within the lump of earth to be moved.
- Transfer each cutting into a bag half-filled with a mixture made from 2 parts ordinary earth, 3 parts chernozem (compost) and 1 part fine sand. Top-up the bag with ordinary earth.
- Place the pots back into the propagator and water every day for 2 weeks.

Stage 5

Separating the Plants

Whilst the plants are in the propagator:

- During the first week the propagator should only be opened at night.
- During the second week the propagator should only be opened during the day.
- In the third week, lift the cuttings out of the propagator and place them on the ground in the shade.

For four weeks the plants should be watered every day. Then they will be ready for planting.

Stage 6

Select and prepare a site to plant the Gnetum

Whilst preparing the plants in the nursery you will also need to prepare a site in which to plant them. This should have a lot of shade and be on solid ground.

WARNING: Avoid marshland.

Stage 7

Planting the Gnetum

The Gnetum should be planted at the start of the rainy season. There are two ways it can be planted:

- In a pure culture. Here, Gnetum is the only plant in the area, planted 1m x 1m apart giving 10 000 stems of Okok/hectare.

- Mixed with other cultures. These should be spaced 1m x 2m apart allowing 5000 stems of Gnetum/hectare.

Dig some holes and place compost at the bottom, remove the lump of earth from the bag surrounding it and place it in the centre of the hole. Fill the rest of the hole with earth and pat around the plant to stabilise it. Put a stake at the foot of each planted Gnetum and direct the plants towards the stake by attaching them as they grow. It is preferable to use stakes that are able to enrich the soil such as Leuceana or Calliendra, in which case the living stakes should be planted 5 or 6 weeks before the Gnetum spp plants are introduced into the plantation.

Stage 8

Harvesting the Gnetum in a sustainable way.

Harvesting takes place between the ninth and twelfth months and should be done by removing only the leaves from the stem. By leaving the stem standing, new leaves will be able to develop increasing the amount of annual harvests. Up to 4.5 tonnes of Gnetum can be picked per hectare.

Only the matured leaves should be picked. These are distinguishable by their rough consistency and their dull, green colour.

Marketing:

Gnetum leaves are sold in packets of whole leaves (even attached to the stem on which the leaves have been harvested) or in piles of chopped leaves.

Gnetum leaves are very perishable and can be kept for three days from fresh. Spraying the leaves with water will prolong their freshness for up to six days helping them to arrive at the market in a good condition. Drying the Gnetum leaves will preserve them for even longer.

Many types of people are involved in the Gnetum trade: harvesters, retailers, wholesalers and permit holders who contract out their special permits. A special permit is essential for traders who transport large quantities of Gnetum.

Source: In this practical guide, ESB has developed the work of the Capacity Building Programme (CBP).