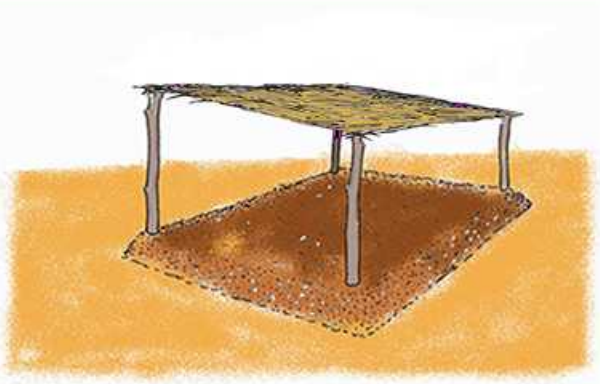


Stage 4: Erect a shade (1.2 m high at the front and 0.8m high at the back) over the bed and cover the seed bed with papyrus mats, grass or banana leaves

5. Seed Sowing

- Sow the pre-treated seed on the seed bed;
- Cover the sown seed with a thin layer soil but they should not be seen;
- Water immediately after sowing;
- Thereafter water twice a day (morning and evening);
- Seeds germinate after 4-5 days;
- Remove seedlings form the seed bed to polythene pots when reach 3-4 cm tall (after one and half months); and
- The pots are filled with forest soil

6. Filling of polythene pots with soil

- Collect forest soil and leave it for 2 weeks to allow weeds to germinate from it;
- Cut the polythene in lengths of 4 inches;
- Fill the pots with forest soil; and
- Water the pots before transplanting the seedlings from the seedbed.

- Keep the seedlings in the transplant bed for one and half months; and
- Plant seedlings in the field immediately after heavy rain.

8 Advantages/ Benefits:

- Seedlings readily available to the farmer;
- Seedlings raised can be sold to generate money or to increase family income. Each seedling can be sold at 100/=, while 1 kg of seed can be sold 20,000/=.;
- When planted in the field and managed properly, they can increase crop yields; and Trees planted provide readily available fuel wood to the family

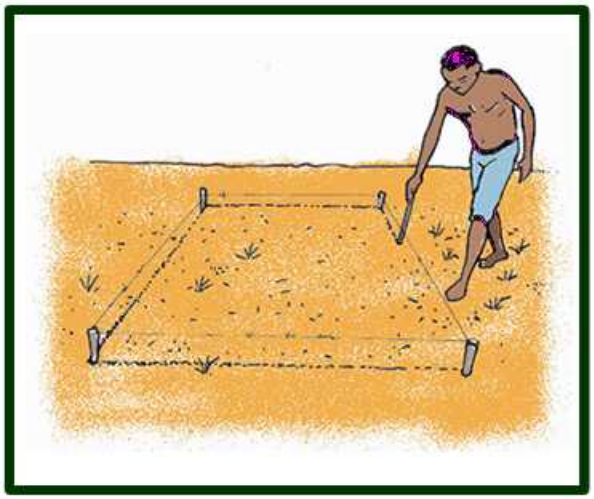
NARO

For more information Contact:

The Agroforestry Programme Leader,
Forestry resources Research Institute
(FORRI),
P.O Box 1752,
Kampala.

Published March 2003

RAISING *Calliandra* TREE SEEDLINGS



NARO

1. Introduction

Calliandra trees can increase crop yields by between 40 – 60% and milk yields by one and half times. Calliandra is a small leguminous tree that attains a height of 1.7 m. It grows well in most parts of Uganda especially in areas with annual rainfall of 1,000 mm and non acidic soils. Farmers like Calliandra because:

- it grows fast and sprouts after cutting;
- it reduces soil and water run-off;
- it has excellent fodder for livestock;
- it has good fuel wood; and
- it increases soil fertility.

Production of Calliandra seedlings will require the following inputs: -seed, sand, forest soil, implements such as hoes, spades, pangas, polythene tubing, papyrus mats, watering cans, Eucalyptus poles and nails.

2. Seed Collection

- Collect seed from mature Calliandra trees when the pods have started to turn brown in order to avoid shuttering of seed;
- Dry the pods in the sun in a sack;
- Thresh the pods and separate the seed from the residue;
- Store the seeds in tightly closed tins and; and
- The seed can be sown immediately or stored for several months

3. Seed Pre-treatment

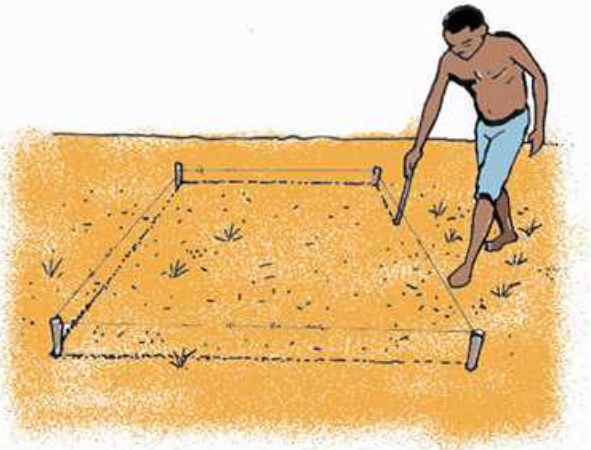
- Calliandra seeds have a hard coat, so when sown untreated will germinate after two weeks;
- For quick germination soak the seeds in cold water overnight;
- Soaking is complete once most of the seeds have swollen;
- Sow the seed immediately after pre-treatment; and
- Never boil the seed as this kills them

4. Seed Bed Construction

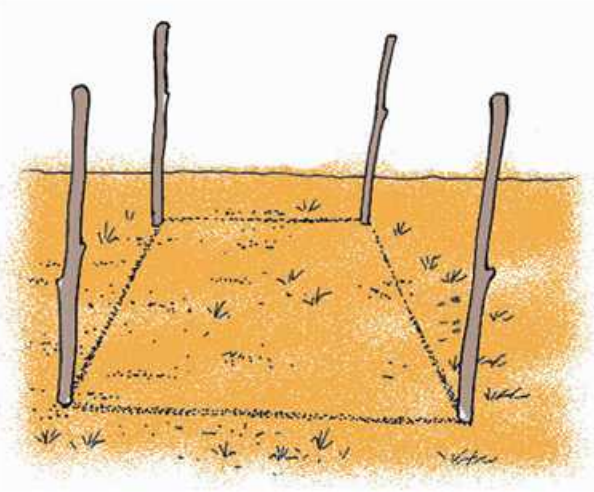
Seed bed construction requires the following:-

- Eucalyptus poles (small size of 4 cm diameter);
- Papyrus mats; and
- Sand.

Stages of seed bed construction are:



Stage 1: Mark area (1 m wide and 8-10 m long) where seed bed will be constructed,



Stage 2: Erect eucalyptus poles in the marked area,

Stage 3: Fill the marked area with sandy soil up to a height of about 4 cm,