

# Get high quality soybean seed

## through good agricultural practices

For more information, contact your extension officer or:
Joseph Mudiope
Millennium Villages
P.O. Box 448, Mbarara, Uganda
Tel: +256 (0)38 226 009



#### Field selection



Select a field that did not have a legume crop (e.g. beans) in the previous season to avoid the carry over of pest and diseases from the previous season's crop.



Avoid waterlogged soils as seeds can rot.

Avoid steep slopes as rain can wash away fertilizer and seeds.

If possible, do not plant soybean in shaded areas because this reduces the yield.

# Land preparation



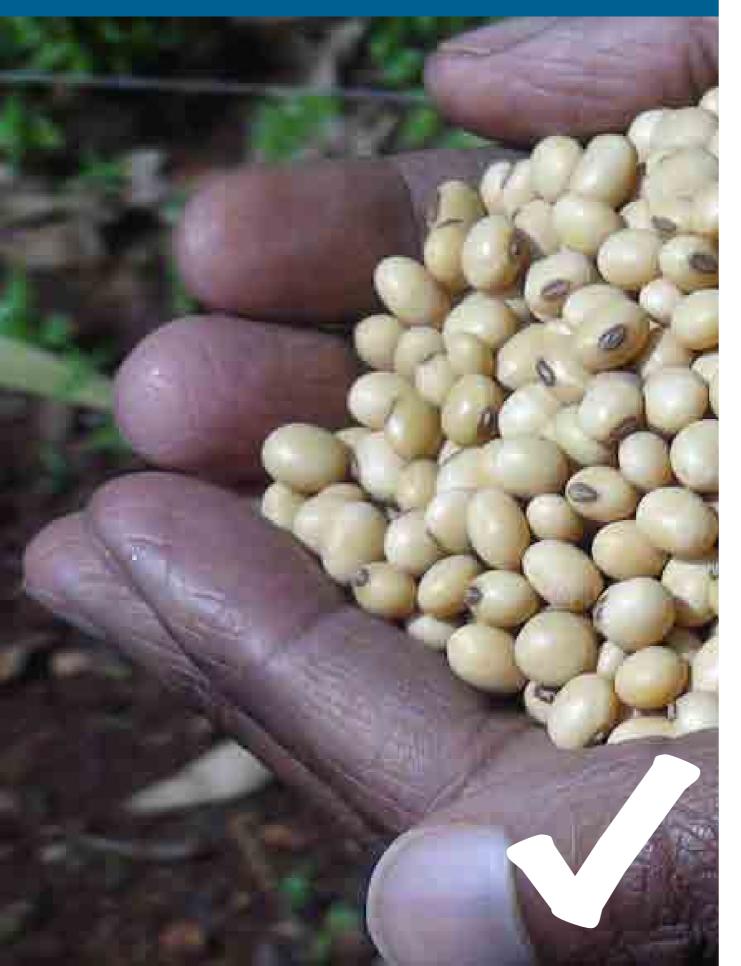
#### **Cut down any vegetation.**



Till or plough-in weeds and crop residues at least 1 month before the rains

Do a second ploughing/tilling just before planting to break up large lumps of soil.

#### Seed selection



Use improved certified seed for your area, or use good seed saved from the previous crop for a maximum of 2 seasons.



Do a germination test at least 10 days before the rains start.

Plant 50 seeds. If at least 43 germinate, the seed is good for planting. If only 30-40 seeds germinate, plant 4 seeds per hole at planting. Use new seed if less than 30 seedlings come up.

#### Inoculation



If available, inoculate your soybean seeds to help increase nitrogen in the soil.



Inoculate under a shade following recommended steps.

After inoculation, allow excess moisture to dry off the seed for 20-30 minutes under a shade, before planting.

Planting



Plant when the rains start (during the wet season). Mark planting holes 20 cm apart and 60 cm between lines. The hole should be 5 cm deep.



Apply one soda/beer bottle top of DAP per hole (80-100 kg of DAP per hectare). If decomposed manure is available, apply a handful per hole.

Do not let the seed touch the fertilizer directly. It will burn (scorch) and not germinate.

Cover fertilizer with 2 cm of soil. Place two seeds per hole and cover with soil.

Management



Weed 2-3 weeks after planting and at 5-6 weeks after planting. (However, weed appropriately according to the amount of weeds).



Remember to earth up while weeding.

Avoid weeding immediately after it rains, as this could lead to transplanting the weeds.

Uproot plants that look different from the variety that was planted.

### Pests & diseases





Look out for crops that are infected by disease. Uproot and bury them away from the garden (e.g. weak and wilting plants, or rusty leaves).

If crop is attacked by pests (e.g. aphids), spray using recommended insecticides.

# Harvesting



Harvest when most (at least 85%) pods are brown (like dried banana leaves) and most leaves have fallen off the plant.



Harvest using a hand hoe or *panga* by cutting mature plants at ground level. Harvesting by hand pulling may remove the nutrients that soybean has added to the soil.

Leave as much plant material as you can in the garden to improve soil fertility.

#### Post-harvest



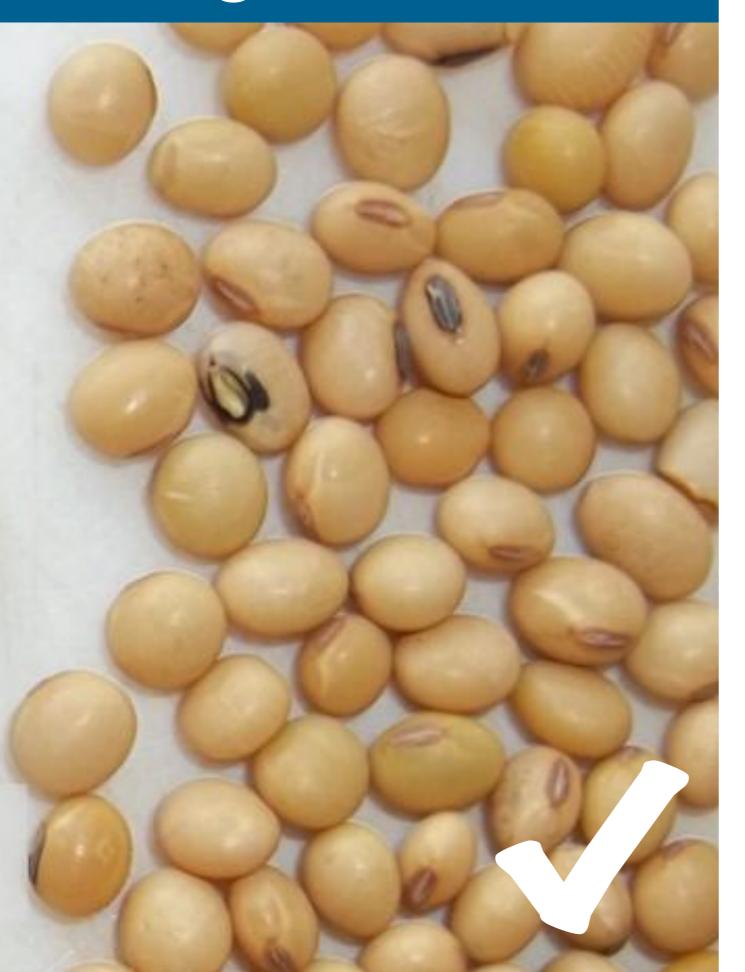
Dry the harvested plants on a clean dry surface (e.g. a tarpaulin) until they easily come out of the pods when threshing (2-6 days in sunlight).



Thresh plants on tarpaulin by beating gently with a stick.

Winnow to remove chaff. Sort to remove foreign materials and diseased and cracked seed.

# Storage



Dry the clean seed for 3-4 days to 13% or less moisture content (seed is sufficiently dry when it cracks into two or when the outer cover comes off easily when rolled with feet on a hard surface).



Store in clean bags and place bags on wooden pallets in a cool, dry place. High temperatures affect seed viability.

Seek advice on recommended methods to control rodents that attack stored soybean.



Working in partnership to create down-to-earth messages on integrated soil fertility management



