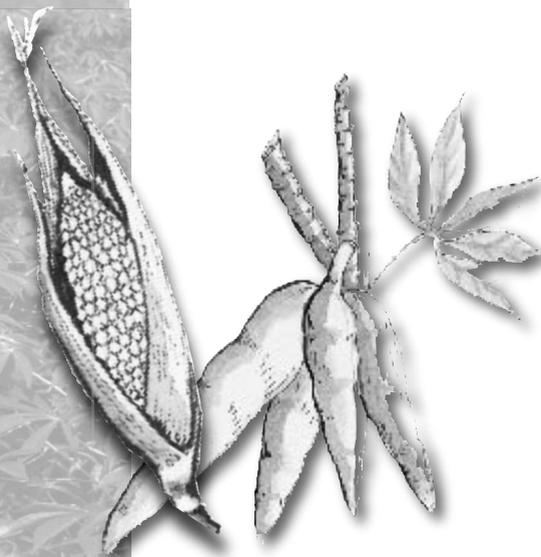


COMMERCIAL CROP PRODUCTION GUIDE SERIES

# Growing Maize with Cassava in Nigeria



United States Agency for  
International Development  
[www.usaid.gov](http://www.usaid.gov)

Information and Communication Support  
for Agricultural Growth in Nigeria  
[www.ics-nigeria.org](http://www.ics-nigeria.org)



# Growing Maize with Cassava in Nigeria

## Choice of Land

A well-drained, deep friable soil will support maize/cassava mixture.

## Land Preparation

### TRADITIONAL/MANUAL

**FOREST AREA:** Clearing of land should be done in January, followed by felling of trees and burning in February to allow seed-bed preparation to be completed after the first rains.

**SAVANNA AREA:** Clear land in February and incorporate residue into the soil where possible or arrange residue in rows to clear the seedbed area.

### MECHANICAL

To obtain a good seedbed, the use of heavy equipment (bulldozer) which will remove the top soil should be avoided. The land should be ploughed, harrowed and ridged.

## Recommended Varieties

### MAIZE

Western Yellow 1: TZSR-Y-1 (Streak Resistant), DMR-LSRY (Downy Mildew & Streak Resistant). *Check for other available varieties in "Growing Maize in Nigeria."*

### CASSAVA

TMS 30395, 50395, 30555 and 30572. If the end product is "Lafun", you may use any of the adapted local cultivars, MS-6, MS-20.

## Time of Planting

Maize should be planted as soon as the rains become steady in March/April in the rainforest areas, and May in the southern guinea savanna areas.

Cassava should be planted immediately, but not later than three weeks after maize planting.

## Seed Rate and Plant Population

### MAIZE

Plant at 90 x 45 cm with 2 plants per stand to give a population of 48,000 plants per hectare at a seed rate of 30.00 kg/ha using 2 seeds per hole.

### CASSAVA

Plant at 90 x 90 cm to give 12,300 plants per hectare. Cuttings should be from mature stems with about 5 nodes and 20–25 cm long.

*NOTE: Test the maize seed for viability before planting.*

## **Fertilizer Rate and Time of Application**

### **EARLY SEASON**

**FOREST AREAS:** Under continuous cultivation, apply 300 kg (6 bags) of NPK 25:10:10/ha, at planting as band or broadcast application, to give 75 kg N, 30 kg P<sub>2</sub>O<sub>5</sub>, and 30 kg K<sub>2</sub>O/ha.

**SAVANNA AREAS:** Apply 400 kg (8 bags) of 25:10:10, 100 kg (2 bags) of single superphosphate and 3–5kg of zinc sulphate per hectare at planting as band or broadcast to give a total of 100 kg N, 58 kg P<sub>2</sub>O<sub>6</sub>, 40 kg K<sub>2</sub>O, 14 kg S, and 1–2kg Zn/ha.

### **CAUTION**

- *The above fertilizer recommendation may be modified to suit the prevailing soil nutrient status.*
- *If the above fertilizer recommendation has been used repeatedly on the same field for more than two years, it is advisable to carry out soil test before any further fertilizer application.*

## **Weed Control**

### **MANUAL WEEDING**

First weeding should be done 2–3 weeks after planting maize, and the next one before the second application of fertilizer, while subsequent weedings are done as necessary.

### **CHEMICAL CONTROL**

Apply Primextra® or Lasso/Attrazine® at the rate of 5:1/ha i.e. 125 CC/10 (2 gals) of water pre-emergence.

## **Disease**

Plant maize early to minimize attack by disease and use recommended cassava varieties that are known to be resistant to the most important diseases as bacteria blight and cassava mosaic diseases.

## **Insects**

### **STEM BORER**

Stem borer attack should be controlled by applying 1.68 kg active ingredient of Vetox® 85/ha, i.e., 3 standard match box filled to the level per 4.5 liters (1 gal.) of water. Two applications, the first at 2 weeks after planting, and the second 2 weeks after.

### **GRASSHOPPER AND ARMY WORM**

Spray monocrotophos (Azodrin® or Nuvacron®) at the rate of 28 ml/10 litres (2 gals) of water when there is an attack.

## TERMITES

Termite hills in the field and surrounding areas should be located and destroyed. Apply Nogos 50™ to destroy termite hills at 25–4.5 liters of water per hill depending on hill size. For the control of the other pests and diseases of maize and cassava in this mixed crop, please refer to control measures in this crop of maize or cassava.

## Vertebrates

Rodents: Keep the plots and their surroundings free of weeds to minimize attack.

## Harvesting

CASSAVA: Spread the harvesting over consumption period or harvest as required over 12–18 months.

## Expected Yield

MAIZE: 1500–2500 kg dry grains/ha.

CASSAVA: 10–15 tonnes of fresh tuber yield/ha.

## Storage

CRIB STORAGE: Protect maize cobs with Actellic® at the rate of 1 part Actellic® to 5 parts of water, or 20 kg Actellic® (2%) dust/kg cob.

AIR-TIGHT CONTAINER OR SILO STORAGE: Dry grains should be protected with Phostoxin™ or Detia™ at the rate of 1 tablet/25kg maize (or 50 kg maize).

## About ICS-Nigeria

**Information and Communication Support for Agricultural Growth in Nigeria (ICS-Nigeria)** is a project which aims to increase the quantity and quality of information available for increased agricultural production, processing, and marketing and also strengthen the capacity of farmer assistance organizations to package and disseminate information and agricultural technologies to farmers for the alleviation of rural poverty.

**ICS-Nigeria** is funded by the USAID.



International Institute  
of Tropical Agriculture  
[www.iita.org](http://www.iita.org)