

# Growing Pepper in Nigeria



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Peppers are used in stew and some local dishes all over the country although the types and quantities utilized vary in different areas.

## Varieties commonly produced

The following varieties are widely grown in this country.

Bird peppers—atawere (*Capsicum frutescens*)

1. Cayenne pepper or red pepper—Sombo (*Capsicum frutescens*)
2. Atarodo (*Capsicum annum*)
3. Tatase (*Capsicum annum*)

The fruits of these types of pepper vary in size, color, shape, and pungency. They are all hot as bird pepper and cayenne pepper. Both bird pepper and cayenne pepper are used either fresh or dried; atarodo and tatase are mostly used fresh.

## Seedling production

### NURSERY PREPARATION

Select a good soil medium for raising seedling. The soil should be rich, well-drained and free of diseases and insect pests. A soil mixture consisting of compost and topsoil in equal proportions can be used in making seed beds or filled in trays (30 x 45 x 8 cm) to produce the seedlings. Press the soil quite firmly in the tray allowing a space of 20 cm watering. Make beds of about 1 meter long. Allow 1 metre path between beds. The bed surface should be level to avoid erosion. In the absence of appropriate soil mixture apply 1 kg or 3 small milk tins of 15:15:15 compound fertilizer per bed of 10 sq. metres or if available 2–4 head pans of well-rotted farm yard manure or poultry manure plus 1 milk tinful of superphosphate and 2 milk tinfuls of sulphate of ammonia.

### BED FUMIGATION

It is usual to treat nursery soil mixture with fumigant to kill pests, fungi, weeds, etc. in the soil. VAPAM is recommended at the rate of 1 liter to 20 liters of water per bed of 1 m x 10 m. When used, wet soil heavily to a depth of 15 cm and cover with palm fronds. Do not sow seeds until after 9–10 days after treatment. In the absence of fumigants, apply heat treatment by burning trash on the beds and removing the ash.

### SOWING

Water the nursery well a day before sowing. Make drills about 5–10 cm



**A method of fumigation**

apart across the bed and sow about 100 seeds per drill. Cover lightly. Thin the seedlings to 1 per 2.5cm of drill 15–20 days after sowing. Alternately holes can be made at 4 x 4 cm apart on the bed and 3–4 seeds dropped in each hole. The seedlings are later thinned to one per hole. Similarly seeds can also be drilled or planted in specific spacing (4 cm x 4 cm) in the tray.

### SHADING

Provide shade in the nursery to protect seedlings from hot sun and heavy rains. A palm frond on a one-half meter pole framework is adequate. Remove half of the fronds 30 days after sowing and the rest 40 days later so as to harden the seedlings before transplanting.

### WATERING

Water the seedlings every morning. Reduce quantity and frequency of watering during hardening of seedlings. Generally watering should be moderate. Over-watering may make plants soft and susceptible to diseases such as damping off.

### **Disease and insect control.**

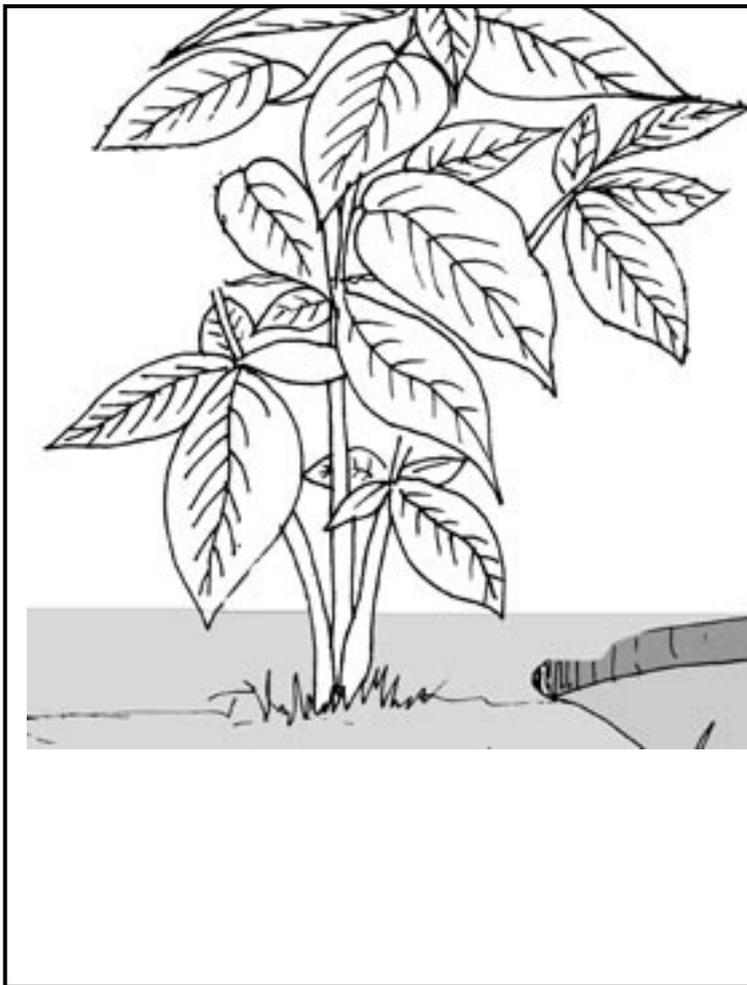
The seedlings should be sprayed regularly with insecticides like Ambush and fungicide Diathane for control of insect and diseases before they are transplanted.

## Land preparation

Plough, harrow, and make beds a week before transplanting is done. Make beds 1.0 meter wide and of any convenient length.

## Transplanting

Transplanting seedlings on beds 1.0 meter wide and of any convenient length. The plants should be arranged in two rows on the bed. The rows are spaced 70 cm apart while the plants are spaced 50 cm apart in the rows. Water the seed tray and beds in the nursery before lifting the seedlings.



**Pepper plant after transplant**

## Fertilizer application

A complete fertilizer such as N.P.K. 15:15:15: can be carried out about 2 weeks after transplanting at the rate of one matchbox fertilizer to two plants.

Draw a circle round the base of the plant and carefully spread the fertilizer in the groove. Cover lightly with soil. The circle should be reasonably far from the stem of the plant. A distance of about 4 –7cm is all right.

The second application should be performed at 50% flowering. The application rate this is one matchbox per plant. Water the plant immediately after applying the fertilizer.



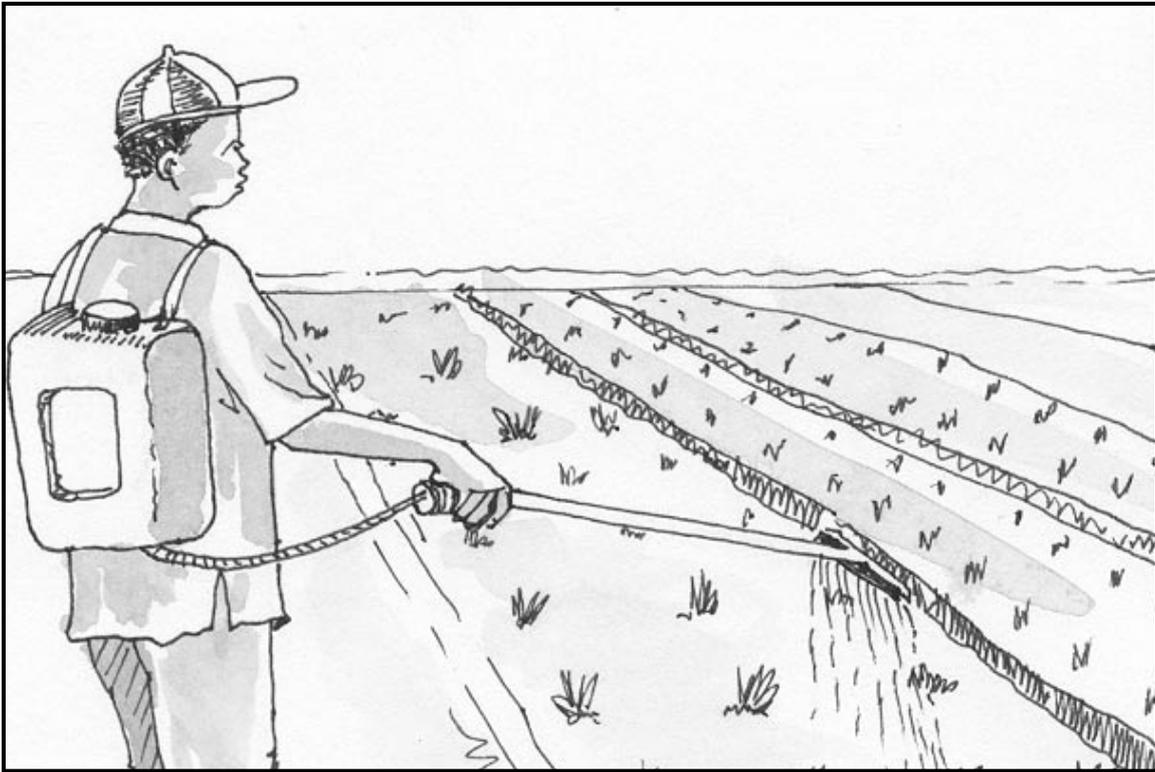
### **Fertilizer application**

### **Pests**

The most important pest of pepper is fruit fly (*Coratitis capitata*) which feeds on the fruit flesh leaving only the transparent skin. Borers (Lepidopterae spp.) are sometimes found in the fruits as well. Scales and mealy bugs occur mainly on the stems of older plants.ss

### **CONTROL**

- Spray every week with either of these two insecticides:
- Sevin 85 w.p. 10 gm/10 L of water.



**Spraying insecticide to control pests**

## **Diseases**

Bacterial wilt: This is a very serious disease of peppers.

The infected plants show wilting and death of the growing point and upper leaves.

### **CONTROL**

- Remove and destroy the affected plants
- Use disease resistant varieties

## **VIRUS**

Infected plants show the following characteristic symptoms of the disease:

- Reduction of size of young leaf with leaf curl, mottling and vein clearing.
- Puckering, deep mottling and curling inwards of leaves.
- Stunted growth and shorter internodes at an almost bushy top.

### **CONTROL**

- Practice crop rotation pepper should not be grown on the same plot 3 or 4 years.
- Fruit rot (*Collectotricum capsic*). This disease can sometimes cause a considerable loss of fruits.

## HARVESTING

Color is an important item of quality therefore fruits should be harvested when they are red or start to turn red, e.g. Atarodo and tatase fruits. Harvesting can be done once or twice in a week so as to allow enough time for ripening.

With good care tatase and atarodo can remain productive for 2 years but sombo and atawere can last four days.

## YIELD

Fruit yield of 3–6 tonnes is expected.

# 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.

In the recent past, investment in the support services to Nigerian agriculture has been neglected with the result that this sector has not realized its full potential to contribute to the prosperity and economic development of the country. Meanwhile, increasing population pressure and the accompanying need to intensify agricultural production is leading to erosion of the natural resource base on which agriculture depends.

The sustainability of production is threatened by a vicious cycle of declining soil fertility and increasing problems of pests, diseases, and weeds. Moreover, the lack of knowledge on how to add value through proper storage, processing, and marketing impedes agricultural growth.

Promising technologies exist to address these problems, but their adoption is constrained by a lack of information packaged in appropriate formats, and poor communication channels for this information, between farmers and the research, extension, and education organizations that are supposed to address these issues.

**ICS-Nigeria** aims to assist in meeting these challenges by developing appropriate format materials for disseminating information and agricultural technologies to target user groups, while increasing capacity of farmer assistance organizations to produce information materials. At the same time, communication channels will be reinforced so that information flow is enhanced.

Agricultural technologies have been selected on the basis that they will lead to agricultural commercialization thereby enhancing rapid income generation for farmers and private sector practitioners. The project is taking advantage of existing agricultural development programs in Nigeria, national research institutes, and international research institutes in and out of Nigeria to identify these technologies. The project is also taking advantage of existing successful partnerships arising from recent and ongoing programs to enhance information flow.

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