DEPARTMENT OF ARICULTURE
Regional Field Office No. 02
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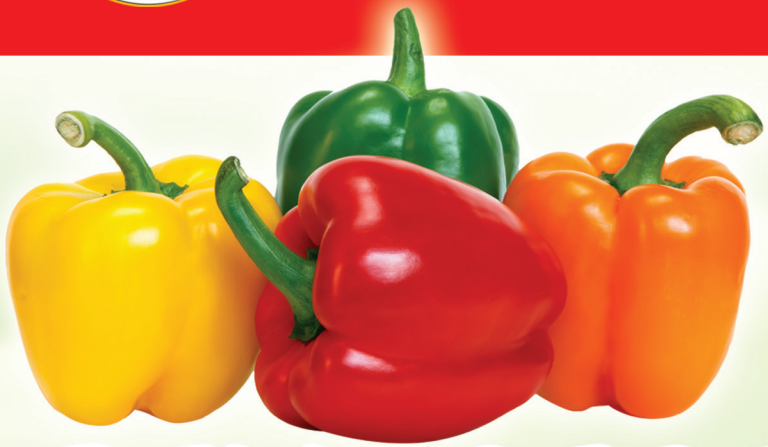
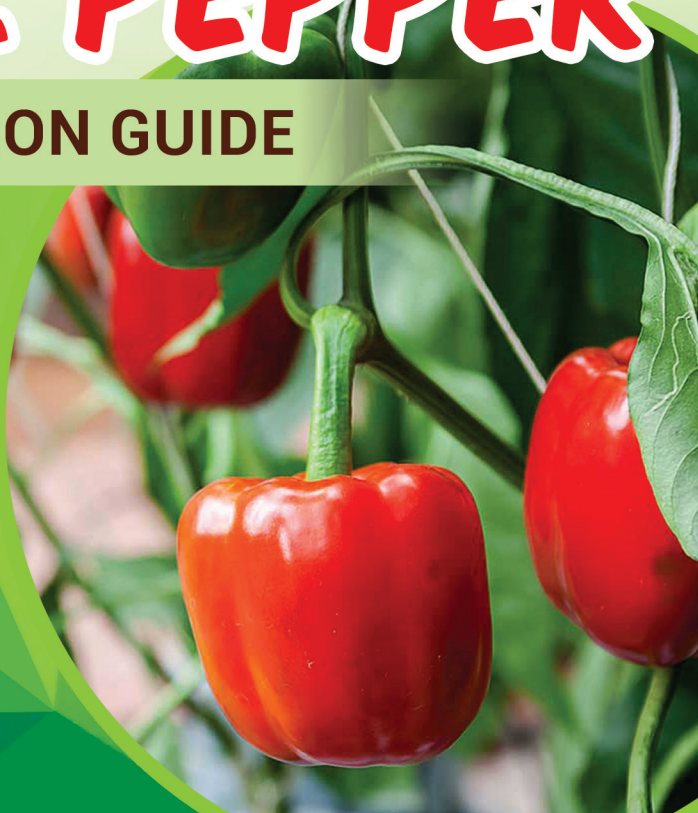


BELL PEPPER

PRODUCTION GUIDE



Bell Pepper

Production Guide

This Publication is a project of the **Department of Agriculture, Regional Field Office No. 02, High Value Crops Development Program**. It contains the most recently available and locally adaptable technical information on **Bell Pepper** in Region 02.

June 2017

Introduction

Pepper is an erect and bushy plant that grows several centimeters high. The sweet variety attains a height of 30 to 60 cm. There are varieties however, that grow more than a meter high and produce for more than one year. The leaves are somewhat elongated and heart-shaped. The flowers are white and borne on the axils of the leaves singly or sometime in pairs. The fruit of the sweet varieties are sometimes in an upright or pendant position. As a rule, the immature fruits of sweet pepper are green and they turn red at full maturity. There is one variety which is creamy when immature and somewhat yellow when fully ripe.

Sweet pepper requires cool weather for best fruit quality. In low elevations, October to December planting is best. In high elevations, it can be grown throughout the year. Sweet pepper grows well in any type of soil with a pH of 5.5-6.5. production is best, however, in sandy loam soil. Maximum fruit set occurs at night temperature of 16oC. Never plant pepper after tobacco, potato, tomato or eggplant.

Varieties

The following are varieties recommended in Region 02 type of weather:

California Wonder – short bell – green-OP
Yolo Wonder – short bell – green – OP
Green 500 – long bell – green – F1
Rain Hardy – short bell – green – F1

Annabel	– short bell	–green – F1
Blondy	– short bell	- yellow –F1
Islander	– long bell	- Violet – F1
King Arthur	– long bell	– green – F1
Excel	– short bell	– red F1
Emperor	– long bell	– red F1

Seedling Production

One hectare requires 100-200 g of seeds. It is best to produce in nurseries and transplant 3-4 weeks later. Prepare by incorporating 2-4 kg of manure and 1-2 kg rice hull charcoal/m2. Prepare 1m wide beds at

Any convenient length, wet the seedbed and make shallow lines across the bead at 7-10 cm apart. Sow thinly if no pricking will be done. Cover lightly with a mixture of manure and rice hull. In case of hybrid seeds, prick to nursery seedling trays soon after germination. Water the seedlings by means of sprinkler. Provide temporary shade. Harden seedlings a week before transplanting.

Land Preparation and Transplanting

Prepare the land thoroughly. For small areas, make plots 0.75 – 1 m wide for two row/plot planting. In bigger areas, make 0.5-0.75m apart for single row planting. Apply basal fertilizer at 2 bags/ha 14-14-14 (complete fertilizer) and organic fertilizer 20 bags/hectare. Transplanting spacing of 0.3-0.5 m between per hill, preferably 3-4 weeks after

emergence at one seedling per hill. Transplant late in the afternoon and water immediately to prevent wilting.

Fertilization

- Apply basal fertilizer at 1 tablespoon (tbsp) per hill during transplanting. This is equivalent to 5-7 bags of 14-14-14 per hectare.
- Place fertilizer on one side of the hole and cover with a thin layer of soil.
- Sidedress with 10 g Urea (46-0-0) per hill at 30 days, 45 days, and 60 days after transplanting.
- Apply decomposed chicken manure during land preparation at 3 t/ha and incorporate well with the soil.
- At the onset of fruiting, apply 1 tbsp of 2:1 mixture of 46-0-0 and 0-0-60.

Irrigation

- Water the plants 2-3 times per week in the first 3 weeks after transplanting during the dry season, or as needed during the wet season.
- Mulch with rice straw or black plastic sheet to reduce watering and weeding.
- Provide adequate drainage because excess water impairs root growth.

Weeding

- Use plastic mulch to suppress weed growth.
- Weed the furrows regularly but allow creeping weeds in between furrows.

Insect Pest Management

- Thrips, armyworms, and fruitfly are the most destructive insect pests.
- Plant insect-repellant crops such as marigold, kutsai and other aromatic plants, and flowering plants like sunflower, cosmos, and zinnia to attract insect predators around the field.
- Use chemical spray only when infestation becomes serious.

Disease Management

- Bacterial wilt, leaf spot, anthracnose, powdery mildew, and virus-causing diseases cause severe damage to the crop.
- Remove and bury or burn infected plant parts.
- Use chemical spray only when infection becomes serious.

Harvesting

Start harvesting at 80-100 days from transplanting or 3-6 weeks after flowering. Harvest mature green fruits, or

when the fruits are at breaker stage where streaks of red are beginning to appear.

Post Harvest

Sort fruits according to market standard and separate good from damaged fruits. Fresh fruits can be stored up to 5 weeks at 40oC humidity.

Cost and Return Analysis per one Hectare

Items	Amount (P)
Variable Costs	
Labor (250/MD)	
Plowing (mechanized)	P2,000
Harrowing (mechanized)	2,000
Rotavation (mechanized)	3,000
Furrowing (5 MD)	1,250
Manure application (5 MD)	1,250
Seedling production (15 MD)	3,750
Mulching w/ rice straw (15 MD)	3,750
Transplanting (10 MD)	2,500
Fertilization;basal (8 MD)	2,000
Side-dress (6 MD)	2,500
Hilling-up (10 MD)	2,500
Irrigation (10 MD)	2,500
Spraying (8 MD)	2,000
Weeding (30 MD)	7,500
Harvesting (20 MD)	5,000
Miscellaneous (pail, gloves, drum)	3,000
Sub-Total	**P46,500**

Materials

Items	Amount (P)
Seeds (200 g/ha)	12,000
Manure (20 bags)	5,000
Fertilizers:	
14-14-14 (2 bags)	2,000
46-0-0 (2 bags)	1,960
0-0-60 (2 bags)	4,000
Foliar (4 boxes)	800
Insecticide (2 liters)	1,700
Fungicides (2 boxes)	700
Packaging materials (100 plastic bags)	1,000
Sub-Total	**P29,160**
Grand Total	**P75,660**

Gross Income:

Regular Season . . . . . .7,000 kgs at P30/kg =P210,000

Offseason. . . . . .6,000 kgs at P50/kg =P300,000

Net Income:

Regular Season . . . . . .P210,000 - P75,660 = P134,340

Offseason. . . . . .P300,000 – P75,660 =P224,340

References:

PCARRD Bell Pepper Production Guide,
Information Bulletin No. 270/2008

Cultural Directions for Agricultural Crops, 1986
http://www.google.com.ph

http://www.dreamstime.com/stock-photo-bell-peppers-image26211210

http://www.saga.co.uk/contentlibrary/saga/publishing/verticals/home-and-garden/gardening/advice-and-tips/vegetables/are-sweet-peppers-easy-to-grow.jpg

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