

Hot Pepper Production

Hot pepper (*Capsicum frutescens* L.) or siling labuyo, is a perennial plant with small, tapering fruits, often 2-3, at a node. The fruits of most varieties are red, some are yellow purple or black. The fruits are very pungent. The flowers are greenish white or yellowish white.

Uses and Nutritional Value

Hot pepper is used generally as a condiment. Its extracts are also used to control borers and other larval insects.

Each 100 g edible portion contains:

<u>Nutrient</u>	<u>Amount</u>
Water	86.0 g
Protein	1.9 g
Fat	1.9 g
Carbohydrates	9.2 g
Iron	1.2 mg
Calcium	14.4 mg
Vitamin A	700-21600 IU
Vitamin C	242.0 mg
<u>Energy value</u>	<u>257.0 kJ</u>

Production Management

Varieties

Varieties	Description
Matikas	long, tapering, smooth, dark green fruits, With mild pungency; cooking type
C-1550	smooth, light green fruits, with mild pungency; Cooking type
Inokra	long, tapering, slightly wrinkled, light green Fruits, not pungent; cooking type
Pasas	2-3 cm long, dark green to deep red, shiny fruits, Extremely pungent

Climatic and Soil Requirements

Hot pepper can be grown from low to mid elevation throughout the year. Production is best, however, during the cool, dry months of October to March in sandy loam soil.

Seedling Production

Line sow 200-250 g of seeds, in a seedbed prepared from a mixture of equal parts of animal manure, rice hull charcoal and soil. Make shallow lines spaced 10-15 cm apart. Water before and after sowing. Mulch with rice hull and straw. Provide partial shade. Water regularly. Harden the seedling one week before transplanting.

Land Preparation

Prepare the area thoroughly. For small areas, make plots 0.75-1 m wide for two-row/plot planting. In bigger areas, make furrows 0.5-0.75 m apart for single-row planting. Apply basal fertilizer at 5-7 bags/ha 14-14-14 and 5-10 t/ha manure. Transplant at a spacing of 0.3-0.5 m between hills.

Transplanting

Hot pepper grows best under full sunlight although it can also tolerate partial shade. Transplant 4-5 week old, sturdy seedlings. Prepare raised beds 1 m wide and about 20-30 cm high. The spacing between hills and rows is 30-50 cm with two rows in each bed. Make holes in the beds and place a handful of compost or animal manure. Place 1-2 seedlings in the hole and cover with soil, pressing lightly near the stem for maximum contact between roots and soil. Water immediately after transplanting.

Hot pepper can also be grown in clay pots, cans and plastic bags. It can be treated as an ornamental if maintained properly.

Fertilization

Hot pepper responds well to inorganic fertilizer. However, animal manure and compost are better sources of nutrients. Another alternative is to grow hot pepper around basket compost.

Irrigation

Apply water once a week or as needed. Watering is needed in container-grown plants. Mulching in both plots and containers can cut watering by at least 50%. Grasses, paper, sawdust, manure and plastic sheets can be used for mulching.

Pest and Disease Management

The main diseases of hot pepper are bacterial wilt and viruses. Bacterial wilt is soilborne and difficult to control. Wilting in fully-grown plants is usually due to bacterial wilt. Grow in containers with sterilized soil instead. Viruses are systematic, so pull out and bury infected plants (mosaic, leaf curling, fern-like leaves) to prevent spread of diseases through insect vectors.

The major insect pests of pepper are thrips, mites, army worm, fruit fly and shoot borers. Thrips is a problem during the dry season and can be managed by overhead irrigation. Shoot and fruit borer can be managed by removing damaged fruits and shoots.

Harvesting

Harvest mature green or fully ripened red fruits. Pack in plastic crates, cartons, or bamboo crates lined with banana leaves.

Seeds can also be extracted from the red fruits. Air-dry and sun-dry seeds for 3-5 days. Place in plastic bags or clear bottles, seal and store in a cool, dry place or inside the refrigerator. Label properly to indicate variety and date of harvest.

Cost and Return Analysis Per Hectare

	ITEMS	AMOUNT (P)
I.	VARIABLE COSTS	72,375
	A. Labor (P150/MD)	
	Plowing	1,500
	Harrowing	1,000
	Bedding	1,500
	Manure application	2,000
	Seedling production (15 MD)	2,250
	Mulching with rice straw (15 MD)	2,250
	Transplanting (10 MD)	1,500
	Fertilization; basal (2 MD) and Side-dress (6 MD)	1,200
	Irrigation (64 MD)	9,600
	Spraying (32 MD)	4,800
	Weeding (30 MD)	4,500
	Harvesting (20 MD)	3,000

	Miscellaneous (20 MD)	3,000	
	Sub-total	38,100	
B.	Materials		
	Seeds (200 g/ha)	2,000	
	Animal manure (10 t)	10,000	
	Fertilizers		
	14-14-14 (5 bags)	1,750	
	46-0-0 (5 bags)	2,325	
	0-0-60 (2 bags)	1,200	
	Chemical spray	7,000	
	Fuel and oil	5,000	
	Miscellaneous	5,000	
	Sub-total	34,275	
II.	FIXED COSTS		23,463
	Land Rental	10,000	
	Depreciation		
	5 pcs. scythe (2 yrs)	63	
	5 pcs. hoe (2 yrs)	125	
	3 pcs. shovel (3 yrs)	75	
	2 knapsack sprayers (5 yrs)	800	
	Interest on loans at 24% int. p.a.	12,400	
	TOTAL COSTS		95,838
	GOSS INCOME*		200,000-250,000
	NET INCOME		104,162-154,162

*with marketable yield of 8-10 t/ha at P25/kg

Reference:

Siemonsma, J. S. and Piluek, K. (Editors). 1994. PROSEA Handbook No. 8. Vegetables. Pudoc, Wageningen. 1993/PROSEA, Bogor.

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