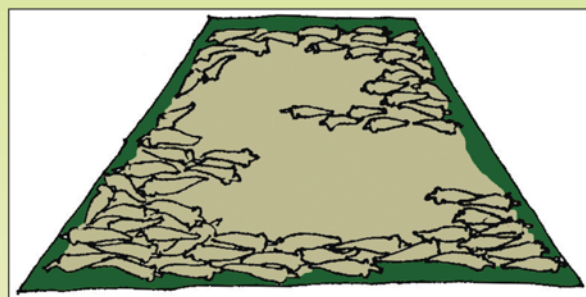


POSTHARVEST HANDLING

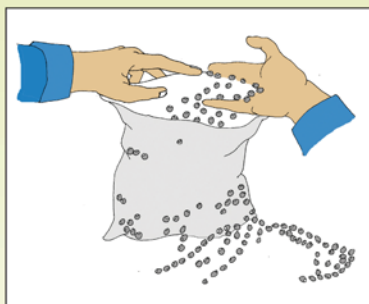
Seed Processing

- Put matured pods in canvas matting and sundry for 2–3 days or until pods become brittle.
- Thresh pods to extract the seeds and clean using air-screen cleaner or winnow.
- Get only the healthy seeds and remove seeds that are unfilled.
- Dry clean seeds gradually under the sun for 4–5 days to lower the moisture.



Packaging/Storage

- For home use, pack the seeds in a thick plastic or paper envelopes and place them in large aluminum cans or large-mouth jars lined at the bottom with charcoal, lime or silica gel.
- Seal the package well.
- Place the seeds in a cool, dry place.
- For large volume, pack the seeds in thick plastic bags or aluminum-lined packets and seal tightly.
- Keep the seeds in a cool and dry place or storage area. The drier the stored seeds and the cooler the storage area, the longer the life of the seeds.



COST AND RETURN ANALYSIS

	MD	Unit Cost ¹	Total Cost
A. Labor Cost			
1. Land preparation (mechanized)			
- Mowing		2,164	2,164
- Disking		1,640	1,640
- Harrowing (2x)		2,164	4,328
- Rotavation		3,001	3,001
- Furrowing		1,640	1,640
2. Planting/basal fertilization	5	210	1,050
3. Hilling-up		2,350	2,350
4. Field maintenance			
- Irrigation (Furrow - 8x)			
2 MD/Irrigation	16	210	3,360
- Sidedressing	2	210	420
- Weeding (3x)		3,000	9,000
- Spraying (6x)	12	210	2,520
5. Roguing	2	210	420
6. Harvesting/hauling	50	210	10,500
7. Seed extraction/cleaning/drying	20	210	4,200
8. Seed treatment	1	210	210
		Subtotal	46,803
B. Supplies and Materials			
1. Seeds	5 kg	400/kg	2,000
2. Fertilizers			
- Complete	4 bags	1900/bag	7,600
- Urea	4 bags	1780/bag	7,120
- Muriate of Potash	2 bags	2200/bag	4,400
3. Fungicide			1,000
4. Insecticide			2,000
5. Jute sacks	30 pcs	12	360
6. Net bags	30 pcs.	10	300
		Subtotal	24,780
		Grand Total	71,583
C. Seed Store Economics			
1. Cost of production		71,583	
2. Seed yield (kg/ha)	Low	Medium	High
	300	500	800
3. Gross income (P300/kg)	90,000	240,000	240,000
4. Net income (P)	18,417	78,417	168,417
5. ROI (%)	26	110	235

¹ Based on prevailing prices of labor and supplies as of July 2008.

Authors: Agripina O. Rasco, Laureano B. Lanosia Jr, Marilyn M. Beltran, Melquiades EC. Reyes

Illustration: Isidro R. Morales

Copyright 2008; UPLB, PCARRD.

Information Bulletin No. 286/2012

For more information, please contact:

Director

Crop Science Cluster-Institute of Plant Breeding
College of Agriculture, UP Los Baños
College, Laguna 4031
Tel. Nos.: (049) 536-5287; 576-0090
Fax Nos.: (049) 536-5287/3438

Dr. Patricio S. Faylon

Executive Director
PCAARRD, Los Baños, Laguna
Tel. Nos.: (049) 536-0014 to 20; 536-5907
Fax Nos.: (049) 536-0016/536-7922
E-mail: pcarrd@pcarrd.dost.gov.ph
Website: <http://www.pcarrd.dost.gov.ph>



DEPARTMENT OF TRADE & INDUSTRY
BUREAU OF MICRO, SMALL AND MEDIUM
ENTERPRISE DEVELOPMENT (BMSMED)
5/F, Trade and Industry Building
361 Sen. Gil J. Puyat Ave. Makati City
Trunkline No.: 751.0384
Tel. Nos.: (02) 897.1693 / 897.7596 / 890.4968
Fax No.: (02) 896.7916 • Email: bmsmed@dti.gov.ph
www.dti.gov.ph



Philippine Council for Agriculture,
Aquatic and Natural Resources Research
and Development (PCAARRD)
Department of Science and Technology (DOST)



Institute of Plant Breeding (IPB)

Crop Science Cluster
College of Agriculture
University of the Philippines Los Baños (UPLB)



Seed Production of OKRA

VARIETY DESCRIPTION (Fresh)

Smooth Green

- yield: 21 tons/ha.
- harvest maturity: 45–50 days from planting
- fruits are smooth, 7–10 cm long, green, and slender
- IPB selection

ENVIRONMENTAL REQUIREMENTS

- 'Okra' grows best under tropical conditions with temperature range of 20°C-35°C.
- Tolerant to wide range of soils, but prefers well drained soils high in organic matter and pH of 6–7.6.

CULTURAL MANAGEMENT

Land Preparation

- Prepare land thoroughly by mechanical means or with the use of animal-drawn implements.
- Make sure to break big clods.
- Space the furrows 75 cm apart.

Planting

- Okra is direct seeded, requiring 10 kg seed/ha.
- Soak seeds in water overnight before planting for faster and uniform germination. Air dry the seeds before sowing.
- Sow 2–3 seeds/hill along the furrows 30 cm apart.
- Irrigate immediately after planting to ensure uniform seed germination.



- Two weeks after planting, thin out weak and diseased seedlings, maintain one healthy plant per hill.

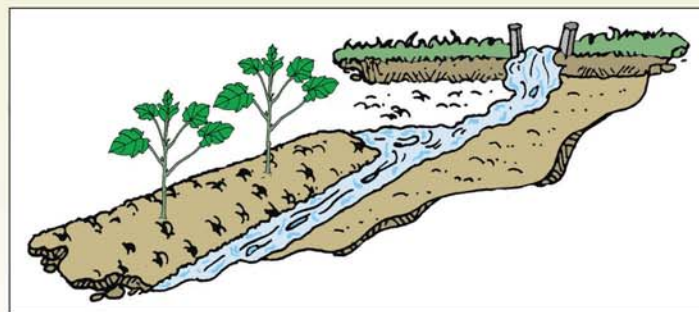
Fertilization

- Rate of fertilization depends on soil analysis, but in its absence, apply 10 gm or 1 tbsp complete fertilizer (14-14-14). Add about a handful of chicken manure per hill and cover with a thin layer of soil.
- At 30 and 45 days thereafter, sidedress 15 g of a mixture of 2 parts Urea (46-0-0) and 1 part Muriate of Potash (0-0-60) per hill.



Irrigation

- During dry months, furrow irrigate every 7 days. Irrigate only as needed during the wet season.
- Water is critical at planting, after emergence, during the vegetative stage and at flowering and fruiting development.



Weeding

- Keep the plants weed free within the first month. Hand-weed especially around the base of the plants.
- At 30 days after planting, hill-up immediately after sidedressing to cover the fertilizer and control weeds.

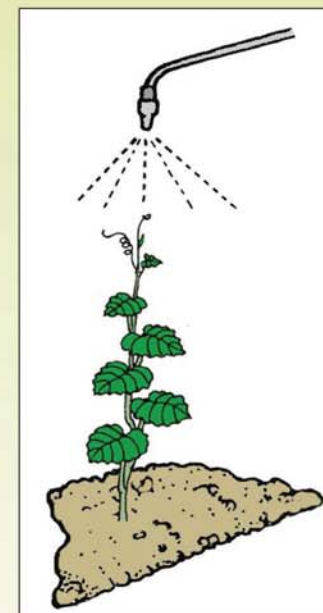


Insect Pest Management

- The most common pest of okra is cotton stainer and leafhopper. For leafhopper, spray appropriate chemical on the underside of the leaves where the insect settle.

Disease Management

- Cercospora leaf mold and powdery mildew are the major diseases of okra. Prune and burn infected leaves to minimize or prevent their spread. Spray appropriate fungicide.



Pollination/Isolation

- Okra is predominantly self-pollinated crop but 4–45% cross-pollination can occur depending on variety.
- Bees and flies pollinate okra.



- Maintain an isolation distance of 200 m for certified seed and 400 m for breeder seed.

Crop Inspection and Roguing

- Inspect the crop three times during the growing period.
- For certified seeds, inspect 1) A month after emergence, check for leaf size, shape and color, growing habit and vigor. 2) At flowering and podding stages, check for shape and color of flowers, fruit size, shape and color and number of ridges in pods. 3) At first maturity, check for fruit size, shape and color, late maturity and unproductive plants.
- To keep the genetic purity of the seed lot, avoid planting different varieties of okra in succession on the same lot. This will avoid volunteer plants from dormant seeds of the previous variety to be mixed with the newly-planted variety.

Harvesting

- Seeds mature about 110–120 days from emergence.
- The basal and apical pods do not mature all at the same time so that about 3–4 primings may be needed.
- Pods turn leathery brown in color at seed maturity.

