- Discard immature seeds and tissues, and refill the pail with water. Repeat the process until no seeds float.
- Put clean seeds in net bags and air-dry for 2–3 days, then sundry for 4–5 days while turning the seeds from time to time. Increase sun drying period as the seeds dry.
- For oven drying, dry seeds initially to no more than 30^{0}C, and increase it to 40^{0}C as the seeds dry.
- For dry sealed packaging, dry the seeds thoroughly.

Packaging/Storage

- Dry seeds absorb moisture from the air. Use moisture resistant packaging materials such as thick polyethylene plastic, aluminum-lined packets, tin cans, or glass jars. Seal well.
- Seeds can be packed in paper packets but must be placed in large tin cans or wide-mouth glass jars with desiccants such as charcoal, silica gel, calcium chloride, quick lime, or wood ash at the bottom.
- Cover tightly.
- Keep seeds away from moisture and high temperatures. The cooler and drier the area is, 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
- Plowing		2,617	2,617
- Harrowing (2x)		2,164	4,328
- Rotavation		3,001	3,001
- Furrowing		1,640	1,640
2. Seedling preparation			
- Sowing	1	210	210
- Land prep/potting	2	210	420
- Pricking	10	210	2,100
- Maintenance	5	210	1,050
3. Transplanting/basal fertilization	20	210	4,200
4. Hilling-up		2,350	2,350
5. Field maintenance			
- Irrigation (Furrow-10x) MD/Irrigation - 2 workers/operation	20	210	4,200
- Sidedressing	2	210	420
- Weeding (3x)		3,000	9,000
- Spraying (10x)	18	210	3,780
6. Roguing	2	210	420
7. Harvesting/hauling	80	210	16,800
8. Seed extraction/cleaning/drying	100	210	21,000
9. Seed sorting	10	210	2,100
10. Seed treatment	1	210	210
		Subtotal	**83,650**
B. Supplies and Materials			
1. Seeds	250 gm	3,750	938
2. Fertilizers			
- Complete	4 bags	1,900	7,600
- Urea	8 bags	1,780	14,240
- Muriate of Potash	3 bags	2,200	6,600
3. Fungicide			1,500
4. Insecticide			5,000
5. Jute sacks	30 pcs	12	360
6. Net bags	30 pcs	10	300
7. Coir dust	1 sack	30/sack	30
8. Garden soil	1 sack	30/sack	30
		Subtotal	**36,598**
		Grand Total	**120,248**
III. Seed Store Economics			
1. Cost of production		120,248	
2. Seed yield (kg/ha)	Low	Medium	High
	50	80	120
3. Gross income (₱3000/kg	150,000	240,000	360,000
4. Net income	34,469	124,469	244,469
5. ROI (%)	30	108	212

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

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Seed Production of EGGPLANT

VARIETY DESCRIPTION (fresh)

Mistisa

- potential yield: 30 tons/hectare (t/ha)
- maturity: 55 days after transplanting (DAT)
- fruits: medium long, striped light violet, have 1 week storage life, very good for "Pinakbet"
- resistant to bacterial wilt, and moderately resistant to fruit borer, leafhopper, and phomopsis
- ideal for organic production
- IPB-released variety
-

Mara

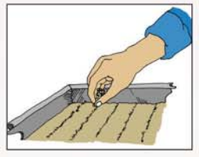
- potential yield: 15 t/ha
- maturity: 52 DAT
- fruits: medium purple, shiny, medium long, with good storage life
- resistant to green leafhopper, moderately resistant to bacterial wilt
- NSIC-released variety

ENVIRONMENTAL REQUIREMENTS

- Eggplant (*Solanum melongena* L.) belongs to the family of Solanaceae.
- It can be produced throughout the year, but it is best planted at the tail end of the rainy season. This will coincide with the long dry months of the year, promoting better fruit maturation and harvesting, and avoiding fruit rotting.
- Grows best with temperature range of 22^{0}C-32^{0}C. At extreme temperatures of 15^{0}C and below, and 33^{0}C and above, flower fertilization and yield are significantly reduced.
- Tolerates drought and excessive rainfall better than its relatives, tomato and pepper.

CULTURAL MANAGEMENT

Seedbed Preparation



- Prepare a seedbed, seedbox, or tray.
- Mix 1:1:1 garden soil, compost and sand, or 1:1 garden soil and coir dust.
- Sterilize by heat, or drench the soil mixture with fungicide solution.
- Saturate the soil with water.
- Make horizontal rows 5 cm apart.
- Sow the seeds in rows. Cover the seeds with soil, put mulch, and water gently (200–300 g of seeds is needed per hectare).

Pricking

- Prick the seedlings .5 days from seedling emergence, or when the cotyledons have fully opened and true leaves have appeared.
- For pricking in seedbeds, make raised beds 1 m wide.
- Sterilize the soil by drenching with insecticide-fungicide solution to protect the seeds from ants and damping-off.
- Prick the seedlings 5 cm x 5 cm apart.
- Construct polyvinyl plastic or protective structure to protect the seedlings from rain.
- During hot days, provide a shade above the seedbed to protect newly pricked seedlings, and remove the structure as the soon as the seedlings are established to avoid pale and lanky seedlings.
- Pricking could also be done in seedling/plug trays with individual 'cells'. Prick one seedling per 'cell'.
- Reduce watering 1 week before transplanting to harden the seedlings

Land Preparation

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

Transplanting

- Transplant one seedling per hill 3–4 weeks from pricking or 1 week after hardening. Seedlings for transplanting should be 3–4 inches high with 4–6 leaves.
- Transplant seedlings 50–75 cm between hills and 75–100 cm between rows.
- Irrigate the field immediately.
- Transplant during cool or cloudy days, or late in the afternoon to avoid excessive heat during planting.

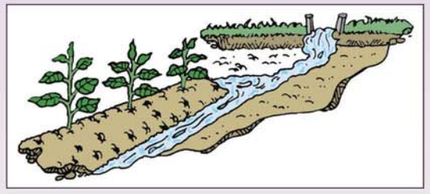
Fertilization

- Apply organic fertilizer or compost or dried animal manure at the rate of 3–10 t/ha during land preparation and incorporate it well with the soil.

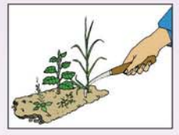
- Fertilizer rate depends on the results of soil analysis.
- Without soil analysis, apply 1 tbsp (15 g) 14-14-14 per hill before or after transplanting, which is equivalent to 8 bags/ha.
- When basally applied, apply fertilizer in holes and cover with a thin layer of soil
- 21–25 days from transplanting, sidedress 2 tbsp (10 g) of a mixture of 2 bags of Urea (46-0-0) and 1 bag Muriate of Potash (0-0-60).
- Repeat sidedressing every month or after every 2–3 harvestings.

Irrigation

- Follow furrow irrigation.
- Irrigate every 10 days during dry season and when needed during rainy season.
- If drainage is poor, construct a canal.

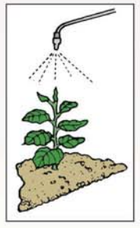


Weed Control and Management



- Mulch with rice straw or black plastic sheets to reduce weed population.
- Do not allow the weeds to flower and bear seeds.
- Cut tall weeds if the plants are in the vegetative stage.

Insect Pest Management



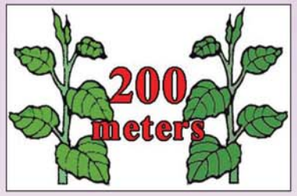
- Plant insect repellant plants like Amarillo, ginger, 'kutsai', and other aromatic plants.
- Use organic pesticides like the juice of native hot pepper and soap.
- Control fruit and stemborer by releasing earwigs, known predator of insect pests.
- Spray recommended insecticides only if needed.

Disease Management

- Prevent bacterial wilt by planting after rice or by crop rotation.
- Prevent phomopsis by mulching with rice straw or black plastic sheet which prevents the soil to come in contact with the leaves and fruits.
- Avoid producing the seeds during wet season.

Isolation

- To avoid cross pollination with other eggplant varieties, maintain an isolation distance of at least 200 m.



Roguing

- Remove not true-to-type plants or plants of other eggplant varieties.
- Rogue out plants that are infected with virus and remove fruits infected with phomopsis and anthracnose.
-

Harvesting

- Harvest when fruits have turned yellow-brown and have lost the pale violet color.

POSTHARVEST HANDLING

Seed Processing

- Soften the fruit by rolling them gently by foot on a flat floor or by beating the fruit gently with wood bat. Apply just enough pressure so as not to crack the fruit.
- Cut a small portion at the fruit peduncle end and open the whole fruit by hand to expose the seeds.
- Submerge the fruits in a pail of water and press out the seeds from the fibrous tissues. Good seeds settle at the bottom while the immature seeds float.