INTRODUCTION

Eggplant (Solanum melongena) is a delicate tropical perennial plant which bears large flesh ovoid berry with glossy smooth skin and numerous small seeds. It can reach a height of 1.5 m and although they are perennial plants, they are most commonly grown as annuals.

It contains important phytonutrients such as phenolic compounds, a good food for the brain, and helps in achieving cardiovascular health and gives protection against free radicals. It is also an excellent source of digestion-supportive dietary fiber and bone building manganese, a good source of bone-building vitamin K, magnesium, copper, vitamin C, vitamin B6, folate and niacin.

RECOMMENDED VARIETIES

Batangas long purple and Dumaguete long purple are well performed varieties under organic condition.

SOIL & CLIMATIC REQUIREMENT

Eggplant thrives in sandy loam soil with pH 5.5-6.5 with low to high elevation areas.

CULTURAL MANAGEMENT

A. Land Preparation. Prepare a planting bed (at least .75m -1m wide). Plastic mulch/rice straw mulch may be place in planting beds to minimize weed growth and preserve moisture in the soil. Dig holes in the plastic much where seedlings are to be placed with a distance of at least 40 to 50cm from each other.

B. Seedling Preparation. Prepare soil media in seedling trays composed of vermicompost, coir dust and soil (1V:1C:1S). Sow the seeds and after emergence, transfer seedlings in other seedling trays with 1 seedling/hole. Spray Oriental Herbal Nutrient (OHN) and Fermented Plant Juice (FPJ) to seedlings once or twice a week.

C. Transplanting.

Transplanting may be done three weeks after seedling emergence. It must be done early in the morning or late in the afternoon to prevent stress.

NUTRIENT MANAGEMENT

- Apply vermicompost or well decomposed chicken manure at a rate of 0.5kg/m2 - 1kg/m2 at planting or at 3-7 days before transplanting. Side dress vermicompost or well decomposed chicken manure at the start of flowering stage with a rate of 0.5kg/m2.

- Spray Fermented Plant Juice (FPJ) and Oriental Herbal Nutrient (OHN) diluted in water (150-200 ml/16 ltr.) to tomato planta once or twice a week until fruiting stage.
- Seaweeds extract may also be applied once a week.
- Goat manure extract and vermicompost extract may also be sprayed to plants once a week from transplanting to flowering stage.

HARVESTING

For consumption, eggplant fruits may be harvested when its fruits reached the shiny purple color/ table ripe stage. For seed processing, tomato fruits must have yellow to brown color.

For consumption

For seed processing

COMMON PEST AND THEIR CONTROL

Fruit Flies.

Control - Spray citronella extract or curry leaves mixed with either crushed gumamela leaves, perla soap or okra to serve as sticker.

2. Aphids.

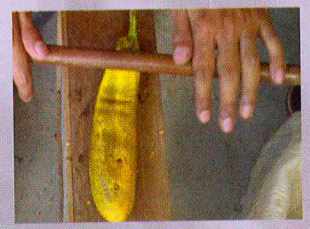
Control- Spray citronella extract or ginger-chives extract to plants regularly until population is controlled or minimized. Alagao leaves + citronella leaves extract.

3. Leafhopper.

Control- Regularly spray guyabano seed extract or fish mint/ curry leaves to infected crops. The extract may be mixed with either, perla soap, crushed gumamela flowers or okra to serve as sticker.

STEPS INSEED PROCESSING

1. **Seed Extraction & Fermentation –** To extract seeds, eggplant fruits are pressed and sliced along its length and then seeds are scraped-off the fruit.



2. **Drying –** After extraction, place the seeds in screens or net bags then air dry it for at least 3 days before sun drying for up to 5 days.

3. **Seed Storage** – Dried seeds may be place in polyethylene plastic bags, glass bottles/jars for storage. Storage area must have low temperature and low humidity to attain longer shelf life of seeds.

COST AND RETURN ANALYSIS (for one hectare)

ITEMS	Qnt.	Unit	Rate	Amt. Php
A. Labor				
Land Preparation (Plowing, harrowing, rotavation and furrowing)	2	MD	2500	5,000
Seedling Preparation –Sowing includes media mixing	1	MD	300	300
Pricking	2	MD	300	600
Maintenance (watering and foliar spray)	4	MD	300	1,200
Mulching/Basal compost	10	MD	300	3,000
Transplanting	10	MD	300	3,000
Spot weeding/path-ways (grass cutter)	10	MD	300	3,000
Fertilizer Preparation (Manure & FPJ)	3	MD	300	900
Botanical Concoction Preparation	2	MD	300	600
Ameliorant Application	10	MD	300	3,000
Concoction Foliar Spray	10	MD	300	3,000
Irrigation	30	MD	300	9,000
Harvesting	20	MD	300	3,000
Seed Extraction (cleaning and drying)	20	MD	300	6,000
Seed sorting and packaging	5	MD	300	1,500
Sub Total				**43,100**

Legend:

MD = mandays, mg= miligram, pcs=pieces, ltr= liter

ITEMS	Qnt.	Unit	Rate	Amt. Php
B. Supplies and Materials				
Seeds (OPV)	250	mg	3	750
Molasses	50	ltr.	11	550
Coir dust	3	sacks	50	150
Garden soil	3	sacks	50	150
Vermicast/Organic compost	3	sacks	450	1,350
Seedling Tray	50	pcs	50	2,500
Netbags, crates & knives				5,000
G.I Wire	50	kg	60	3,000
Sub Total				**13, 450**
C. Contingencies (10%)				**5,355**
TOTAL COST				**61,905**
Gross Income Seed Yield=80 kg Php2000kg				**160,000**
Net Income (P)				**98,095**
ROI %				**159%**

Credits

Technique developed by :Bureau of Plant Industry Los Baños, National Crop Research and Development Center (BPI-LBNCRDPSC)

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Published by
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Republic of the Philippines
Department of Agriculture

BUREAU OF PLANT INDUSTRY

LOS BAÑOS NATIONAL CROP RESEARCH, DEVELOPMENT AND PRODUCTION SUPPORT CENTER

ORGANIC EGGPLANT SEED PRODUCTION