

## COST AND RETURN ANALYSIS

ITEMS	QNTY.	UNIT	RATE	AMT.
<b>A. Labor</b>				
Land Preparation (Plowing, harrowing, rotavation and furrowing)	2	MD	2,500	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
Transplanting	5	MD	300	1,500
Spot weeding/ pathways (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				38,600

ITEMS	QTY	UNIT	RATE	AMT.
<b>B. Supplies and Materials</b>				
Seeds (OPV)	3	kg	1,200	3,600
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
Curry powder	300	g	1	300
Ordinary flour	3	kg	20	60
Sub Total				13,660
Contingencies (10%)				5,226
<b>Total Production Cost</b>				57,486
<b>Gross Income Seed Yield = 80 kg Php1,500 kg</b>				120,000
<b>Net Income (P)</b>				62,514
<b>ROI%</b>				109%

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Republic of the Philippines  
DEPARTMENT OF AGRICULTURE  
**BUREAU OF PLANT INDUSTRY**



# ORGANIC SQUASH SEED PRODUCTION





# INTRODUCTION

**Squash or “kalabasa” (*Cucurbita moschata* Duch),** belonging to family *Cucurbitaceae*, is viny, creeping and trailing crop producing fruits and considered to be one of the most delicious vegetables. It is the most commonly and regularly grown among the cucurbits due to its rich source of Vitamins A and C, phosphorus, calcium and iron. It is also rich in beta-carotene which is helpful in protection of the eyes, including protection against age-related muscular degeneration and cataracts

Squash plants produce separate male and female flowers. Pollen transfer from the male to the female flower is essential to the production of good yields of high quality fruit.



## RECOMMENDED VARIETIES

Rizalina variety (OPV) is well performed under organic condition

## SOIL & CLIMATIC REQUIREMENT

### Land Preparation

Recommended soil pH range between 5.6 – 6.8 and can be grown well in low to high elevation with any types of soil. For optimum yield and profit, plant in rice-based lowland areas from October to December, and May to July for hilly areas. Planting squash on these months will avoid the peak population of insect pests and the high incidence of plant diseases.

## CULTURAL MANAGEMENT

### A. Planting and Spacing

- To plant a hectare, it needs about 2 - 4 kilos of good seeds. Squash are directly planted at the rate of 2 - 5 seeds per hill, spaced of 2 - 3 m between rows and 1 m between hills.

One week after emergence, weak seedlings are thinned out and allow only 2 healthy seedlings to grow.



### Nutrient Management

- Basal application of 250gms of vermicast or well decomposed chicken manure per hill before planting. Foliar application of Fermented Plant Juice (FPJ) must be done once a week (150ml to 200 ml per 16 liters knapsack sprayer) from emergence until fruiting stage.



### B. Vine Thinning

- Removal of some lateral vines in the main stem and allow 1 to 2 fruits per plant to attain bigger fruits.

Deformed fruits must be removed while still small to avoid nutrient competition.

### Harvesting

- Harvesting of matured squash intended for seed production is when its fruit color turn into yellowish to orange color.



## COMMON PEST AND THEIR CONTROL

### 1. 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 (*Aphids craccivora*)

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

### 3. Yellow squash beetles

Control- Dusting of curry powder (100 gms / 1kilo ordinary flour) can repel the beetles.

## STEPS IN SEED PROCESSING

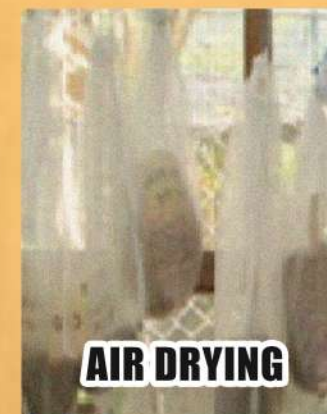
### 1. Seed Extraction & Fermentation

- To extract seeds, squash are sliced along its length and then seeds are scraped-off the fruit. Fruits and seeds are washed in water to separate seeds totally from fruits.



### 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 placed in polyethylene plastic bags and glass bottles/jars for storage. Storage area must have low temperature and low humidity to attain longer shelf life of seeds.