

FIFTEEN -YEAR ESTIMATED COST AND RETURN OF A ONE-HECTARE LANZONES ORCHARD

Particulars	COST AND RETURN PER HECTARE PER YEAR														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Yield (kgs)								4,240	4,860	5,480	6,100	6,720	7,340	7,960	8,580
Gross Return (P)								84,800	97,200	109,600	122,000	134,400	146,800	159,200	171,600
Cumulative Gross Return								84,800	182,000	291,600	413,600	548,000	694,800	854,000	1,025,600
Production Cost (P)															
A. Crop Establishment	38,000														
B. Care & Maintenance	8,300	8,500	9,500	10,000	10,600	12,200	14,200	14,600	18,400	21,000	23,500	29,700	32,400	36,100	44,900
Total Production Cost (P)	46,300	8,500	9,500	10,000	10,600	12,200	14,200	14,600	18,400	21,000	23,500	29,700	32,400	36,100	44,900
Cumulative Production Cost	46,300	54,800	64,300	74,300	84,900	97,100	111,300	125,900	144,300	165,300	188,800	218,500	250,900	287,000	331,900
Net Return (P)	(46,300)	(8,500)	(9,500)	(10,000)	(10,600)	(12,200)	(14,200)	(14,200)	(18,400)	(21,000)	(23,500)	(29,700)	(32,400)	(36,100)	(44,900)
Cumulative Net Return	(46,300)	(54,800)	(64,300)	(74,300)	(84,900)	(97,100)	(111,300)	(141,100)	(169,500)	(190,500)	(214,000)	(243,700)	(278,100)	(317,200)	(362,100)

Assumptions:

Yield Estimate Y = 1.55x - 1.8

Farm Gate Price = P20.00/kg.

Population Density = 400 trees per hectare

Contract buyers shoulder the harvesting expenses.

Disclaimer

Trade names cited in this publication are used solely for the purpose of providing specific information and do not endorse product names nor imply criticism of similar ones not mentioned. The recommended practices or procedures are based on research and the best information available.

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**Lanzones
Production**



Lanzones grows well in clay loam soils and in places where the ground water is shallow. It thrives best in warm humid climate with an even distribution of rainfall throughout the year.



Department of Agriculture
Bureau of Plant Industry
Davao National Crop Research,
Development and Production
Support Center

VARIETIES

DUKU - The tree is usually shorter than the other varieties but has a wider crown; leaves are hairless. Fruits are round and are borne from 4 to 12 fruits per raceme. Pericarp is thick (up to 6 mm) with no latex. It is sweet



PAETE - Fruit is elongated and smallest among the varieties. Leaves are lanceolate; tree is erect and is grown mostly in Luzon, Misamis Oriental and Camiguin Island. Trees are relatively susceptible to bark borer



LONGKONG - is a Lanzones variety introduced from Thailand and Malaysia. The fruit is sweet, tasty, almost seedless and the skin or



PREPARATION OF PLANTING MATERIALS

1. Select only plump and well-developed seeds.
2. Carefully remove the flesh adhering the seed.
3. Germinate the seeds in light loamy soils or in germination beds with sawdust.
4. Germinated seedlings are ready for potting in 8" x 11" x .003 plastic bag when the first pair of leaves have developed
5. At 12-18 months from pricking, the rootstocks are ready for asexual propagation and at 6-12 months after grafting, the asexually propagated plants are ready for field planting.

LAND PREPARATION

1. Clear/Underbrush the whole area.
2. Plow and harrow to loosen the soil.
3. Plant temporary shade (ipil-ipil, madre de cacao or banana) before field planting.
4. Stake a distance of 5 meters between hills and 5 meters between rows. Prepare holes 25 cm in diameter at a depth of 25 cm.

PLANTING

1. Apply basally, 50-100 gm of complete fertilizer (14-14-14) or ammophos (16-20-0).
2. Remove the plastic bag and plant the seedling into the prepared hole.
3. Cover the hole with top soil and press gently.
4. Water immediately after planting.

MAINTENANCE

1. Ringweeding of the plants should be done when necessary.
2. Shallow cultivation of the plant to a radius of at least one meter should be done twice a year or as the need arises.
3. Mulch the tree with coconut husks or grasses to conserve soil moisture.
4. Judicious pruning is done during the dry season. Cut surfaces are applied with copper fungicides.

Plant Age/ Stage	Kind of Fertilizer	Rate/Plant
a) Vegetative stage	Ammonium Sulfate/ Urea	100-200 g/tree/year
b) Bearing Stage	Complete Fertilizer (14-14-14)	5-8 kgs/tree/year (after harvest)

Fertilization Schedule

Fertilizer is drilled or broadcast one meter away from

HARVESTING AND POST-HARVEST HANDLING

1. Lanzones fruits can be harvested in 5-6 months from flower emergence.
2. A sharp knife or shear is used in clipping-off the bunches.
3. Avoid bruising the fruits by handling them properly.
4. Pack harvested fruits in crates or kaing lined with banana leaves on the inside to serve as cushion.

MATURITY INDEX

PESTS, DISEASES AND THEIR CONTROL

Pests	Control Measures
1. Bark Borer (most common pest)	Scrape-off severely infested barks and spray with recommended contact and systemic insecticides such as Chlorpyrifos, Decis
2. Twig Borer	Prune/remove infested twigs and split them to expose larva and kill them mechanically.
3. MealyBugs	Apply protectant sprays (Malathion Endosulfan) or any contact insecticides on the developing fruits as the need arises.
4. Scale Insects	Control biologically using the 2 coccinellid beetle predators <i>Chilocorus nigrita</i> (black beetle) and <i>Chilocorus circumdata</i> (orange beetle)
Disease	
1. Root Rot	Dig up & burn the dead trees. Treat infected roots with lime sulfur.