



# 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.

## 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 4-12 fruits per raceme. Pericarp is thick (up to 6 mm) with no latex. It is sweet with delicate flavor.



### Paete

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



### Jolo or Mindanao type

Fruit is round and larger than Paete. It is widely grown in southeastern and southwestern Mindanao regions. Purposely grown as rootstocks.



### Longkong

Originated in Southern Thailand, Longkong is the latest Lanzones (*L. domesticum* Correa) introduction into the Philippines. It is sweeter, tastier, more or less seedless than the Paete variety. Skin or peel has no latex.

## PREPARATION OF PLANTING MATERIALS

1. Select only plump and well-developed seeds.
2. Remove the flesh adhering the seed carefully.
3. Germinate the seeds in light loamy soils or in germination beds made up of sawdust.
4. Germinated seedlings should be ready for potting in 8 x 11 x .003 plastic bags when the first pair of leaves have developed.
5. This would be ready for planting at about 2-3 years, or if intended as rootstocks for asexual propagation, would be ready in 12-18 months from pricking and potting.

6. Rebagging should be done when polyethylene bag becomes brittle. Rear seedling under nursery shade allowing full recovery of the plants prior to 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 m between hills and 5 m between rows. Prepare holes 25 cm in diameter and a depth of 25 cm.

## PLANTING

1. Apply basally, 50-100 g of complete fertilizer (14-14-14).
2. Remove the plastic bag and plant the seedling into the prepared hole.
3. Cover the hole with topsoil 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 1 m 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.

## FERTILIZATION SCHEDULE

Plant Age/Stage	Fertilizer	Rate
Vegetative	Ammonium Sulfate/Urea	100-200 g/tree/yr. (at the start of rainy season)
Bearing Stage	Complete (14-14-14)	5-8 kg/tree/yr (after every harvest)

Fertilizer is drilled or broadcast 1 m away from the base of the plant depending upon the topography of the land.

## HARVESTING AND POSTHARVEST 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 by handling them properly.
4. Pack harvested fruits in crates or kaing lines with banana leaves on the side to serve as cushion.

## MATURITY INDEX

Change in color of the pericarp from green to yellow.

## PESTS, DISEASES AND THEIR CONTROL

	Control Measures
<b><u>Pests</u></b>	
1. Bark borer (most common pest)	- Scrape -off severely infested barks & spray with recommended contact and systemic insecticides
2. Twig borer	- Prune/remove infested twigs & split them to expose larva & kill them mechanically
3. Mealy bugs	- Apply protectant sprays (Malathion, Endosulfan) or any contact insecticides on developing fruits as the need arises
<b><u>A. Disease</u></b>	
1. Root rot	- Digging up the dead trees & burning all parts - Treat infected roots with lime sulfur

## Cost of Establishing a hectare of Lanzones Orchard

PARTICULARS	COST (=P=)
A. Materials	
1. 440 pcs. Asexually propagated lanzones at P30.00/pc	P 13,200.00
2. Fertilizer, 2 bags of Ammonium sulfate	700.00
3. 1,600 sticks for shading support at P0.50/pc	800.00
4. Coconut fronds for shading	300.00
5. Lining and tying materials	200.00
<b><i>Sub-total</i></b>	<b>P 15,200.00</b>
B. Labor	
1. Land Preparation	P 800.00
2. Hauling, staking, distribution of planting materials	660.00
3. Holing at P1.00/hole	440.00
4. Shade Construction	1,600.00
5. Planting/basal fertilization	1,080.00
<b>Sub-total</b>	<b>P 4,500.00</b>
<b>TOTAL</b>	<b>P 19,780.00</b>

EXPENSES			INCOME at P10.00/kg			
Year	Yearly	Cumulative	Gross Income			Net Income
			Yearly	Cumulative	Yearly	Cumulative
1	24,970	24,970	-	-	-	-
2	5,330	30,300	-	-	-	-
3	5,190	35,490	-	-	-	-
4	5,540	41,030	-	-	-	-
5	4,030	45,060	-	-	-	-
6	4,240	49,300	-	-	-	-
7	3,780	53,080	-	-	-	-
8	5,220	58,300	42,400	42,400	37,180	(15,900)
9	6,760	65,060	48,600	91,100	41,840	25,940
10	8,300	73,360	54,800	145,000	46,500	72,440
11	10,080	83,440	61,000	206,800	50,920	123,360
12	11,860	95,300	67,200	274,000	53,340	178,700
13	13,640	108,940	73,400	347,400	59,760	237,460
14	15,420	124,360	79,600	427,000	64,180	302,640
15	18,600	142,960	85,800	412,000	67,200	369,840

**Cash Flow (P) over 15 years for one-hectare lanzones production**

Assumptions:

1. Yield estimate = 1.55 x -1.8
2. No. of tree/ha = 400 trees/ha
3. Farm gate price/kg = P10.00

**Disclaimer:**

Trade names cited 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.

Reference: DIS Techno-guide Series No.02-03 Revised 2003.  
DNCRDC Information Service  
Bago Oshiro, Tugbok Dist. Davao City.

PRODUCED BY:



**SMIARC - Knowledge Management/FITS Center**

Bago Oshiro, Tugbok Dist., Davao City

Telefax No. : (082) 293-0109 or 293-0136

Email : [smiarc@yahoo.com](mailto:smiarc@yahoo.com) or [kmfits11@yahoo.com](mailto:kmfits11@yahoo.com)

MEMBER:



**Southern Mindanao Agriculture and Resources  
Research and Development Consortium**

USEP, Bo. Obrero, Davao City