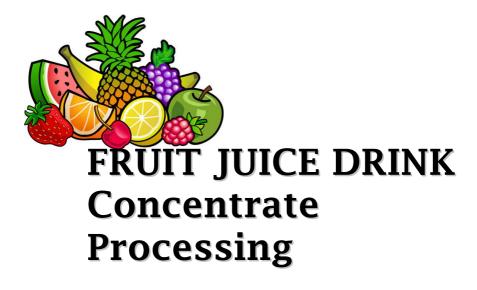
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Livelihood Technology Series 46





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'Our Business is Industry..."

1st edition 2015

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<u>Livelihood Technology Series 46</u> Fruit Juice Drink Concentrate Processing

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FRUIT JUICE DRINK CONCENTRATE PROCESSING

DEFINITION

 Fruit juice drink concentrate is a blend of fruit beverage base and syrup. The fruit beverage base is a mixture of fruit flavors, essences and coloring material. Citric acid and preservatives may be present in the base or may be added during the preparation of the concentrate. Each part of the concentrate shall be diluted with no less than one part of water to produce a ready-to-drink beverage.

ADVANTAGES

- Provides a truly refreshing non-carbonated drink, using an indigenous raw material
- Makes a more healthy and natural alternative beverage to softdrinks

PROCESSING METHODS

- Short-term processing methods which include refrigeration and sanitation
- Preservation methods by chemical action including high sugar concentrates and use of chemical additives such as sodium benzoate, potassium sorbate and other food acids
- Preservation methods by physical treatment using thermal processing (pasteurization, canning and aseptic processing) and use of low temperature (freezing)

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PRODUCTION OF FRUIT JUICE DRINK CONCENTRATE

FRUIT







SANITIZING







MIXING



PASTEURIZING





FILLING



ADVANTAGES OF THE TECHNOLOGY



- With the use of a hydraulic press, no need to go through the process of tedious cutting
- With controlled hydraulic pressing, seeds do not break thus; seeds bitterness is not manifested in the product

• The steam jacketed kettle can be operated without a boiler or steam generator



PRODUCTION EQUIPMENT

QTY	EQUIPMENT	SPECIFIFCATIONS	CAPACITY	COST
1	Vertical Hydraulic Press	2 Hp motor, manual pressure regulator with pressure gauge up to 1,500 psi operating pressure including 3 pcs of perforated sample holder	3 - 4 kg of calamansi per pressing	P 138,000.00
1	Double Jacketted Kettle	LPG heated, stainless steel inside vessel, MS jacket, bottom drain with paddle mixer	120 liter capacity per batch	140,000.00
1	Manual Filling Tank	Stainless steel with two nozzle	120 liter capacity	80,000.00
			TOTAL	P 358,000.00

FINANCIAL HIGHLIGHTS

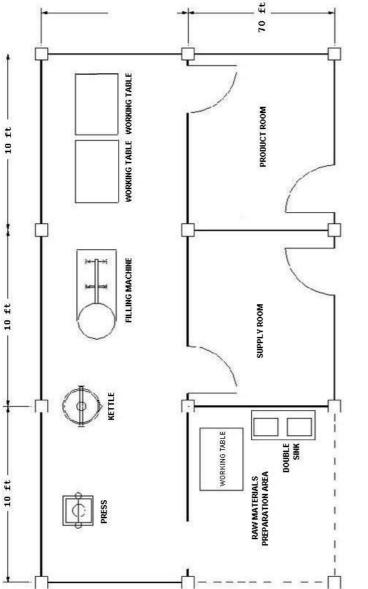
Calamansi-Sugar Concentrate Production

(cottage scale)

PRODUCT	CALAMANSI JUICE CONCENTRATE	
Capacity/Mo. (in Liters)	500	
Total Project Cost	P 34,584	
Unit Cost of Production/500 mL	P 30.61	
Proposed Selling Price/Liter	P 60.00	
Gross Sales	P 60,000	
Gross Profit	P 29,393	

Dalandan Juice Drink Concentrate Production (cottage scale)

PRODUCT	DALANDAN JUICE CONCENTRATE	
Capacity/Mo. (in Liters)	425	
Total Project Cost	P 35,264	
Unit Cost of Production/500 mL	P 34.27	
Proposed Selling Price/Liter	P 53.00	
Gross Sales	P 45,050	
Gross Profit	P 29,131	



Schematic Layout for Fruit Juice Drink Concentrate Processing Plant (4.25m x 9) = 38.25 sq.m

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For PET bottles		
1.	MC BRIDE PET MFG. CORP. 116 B. Serrano St. cor. 11 th Avenue Grace Park, Caloocan City Tel. nos.: 334-1103; 364-0277; 367-1480 to 81 Telefax: 367-1479	
For	glass jars and caps	
2.	SAINTS & BRANCH 545 Franciscan St., Sta. Ana Village, Sunvalley, Parañaque Tel. nos.: 821-5325; 821-5328	
3.	SAN MIGUEL GLASS PLANT 45 Muelle dela Industria, Del Pan, Binondo, Manila Tel. nos.: 242-8641 to 60 Fax: 632-3093	
4.	ASIA BREWERY, INC. 6 th Flr. Allied Bank Center, Ayala Ave., Makati City Tel. nos.: 816-3421 to 25 Fax: 810-2711	
For	equipment	
5.	TAIWAN MACHINERIES DISPLAY AND TRADE CENTER 27 Guava Road, Malabon Tel. nos.: 361-71-02, 363-01-66, 363-01-67, 363-01-88	
For dial thermometer		
6.	WILSHINE ENTERPRISE COMPANY 6 McDonough St., Parañaque City Tel. nos.: 852-1179; 852-1184	
7.	SEMIC RESOURCES TRADING INTERNATIONAL 15F/Unit 1543 City and Land Mega Plaza Bldg. ADB Avenue cor. Garnet Road Ortigas Center, Pasig City Tel. nos.: 852-1179; 852-1184	
For food additives		
8.	ALYSSON'S CHEMICAL INDUSTRIES 1425 Araneta Ave., Quezon City Tel. nos.: 712-2266	