SRD Research and Development Groups Inc.

SRD RESEARCH AND DEVELOPMENT GROUP

SRD RESEARCH GROUP INC. MARKET INTELLIGENCE AND TRAINING
SRD DEVELOPMENT GROUP INC. EXPORT HORTICULTURE TECHNOLOGY

COST OF PRODUCTION AND PRODUCTION TECHNOLOGY

Of

LOCALLY PRODUCED NON-TRADITIONAL HORTICULTURE PRODUCTS

Prepared by:

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Horticulture Export Development Project
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COST OF PRODUCTION

Of

ASPARAGUS

STRAWBERRY

MANGO

POTENTIAL FOR EXPORTING LOCALLY PRODUCED NON-TRADITIONAL AGRICULTURE PRODUCTS

ASPARAGUS

COST OF PRODUCTION PER ACRE	UNIT COST	YEAR -I	YEAR II	YEAR-III	YEAR -IV	YEAR -V
I. RENT OF LAND (Per Acre Per annum)	PER ACRE	2000	2000	2000	2000	2000
II. PREPARATION OF LAND						
PLOUGHING PLANKING	@ RS. 100/	500				
iii. SEED BED PREPARATION	10 MAN DAYS @RS50	500				
iv. COST OF NURSERY PLANTS	RS. 1.50/PLANT	13000				
v. TRANSPLANTING CHARGES	10 MAN DAYS	500				
vi. F. Y. MANURE	@ Rs. 2.50/1ROLLEY	1000	500	500	500	500
vii. FERTILIZER	5 @ Rs. 500/each	1000	1000	1000	1000	1000
viii. FUNGICIDE/PESTICIDES	4 SPRAYS/RS. 250	1000	1000	1000	1000	1000
ix. IRRIGATION COST	@ Rs. 500	500	500	500	500	500
x. HARVESTING/PICKING	RS. 50/MAN DAY @ Rs.50/day - 4 mandays/day in Year 4 and 5 for 30 days.			1500	6000	6000
	SUB-TOTAL	20000	5000	6500	11000	11000
	Interest @ 10% per annum	2000	2500	3150	4250	5350
	GRAND TOTAL	22000	7500	9650	15250	16350
	COST YEAR 1-5	70750				
	COST YEAR 6-10	81750				
	@ RS. 16350					
	TOTAL COST	152500 = RS. 16.57/Kg.				

B. PRODUCTION		
YEAR-III	.30 TONS	
YEAR IV-X	11.20 TONS	
TOTAL	11.5	
WASTAGE 20%	2.3 TONS	
NET PRODUCE	9.2 TONS	
FARM GATE PRICE	RS. 16576/TON	
C. EXPORT POTENTIAL		
i) Local Tranport Cost	@ Rs.1/Kg.	
ii) Packing charges	@ Rs.10/ Kg.	
iii)Air Freight Charges for European Market	@ Rs. 32/Kg.	
iv) Tariff handling & Marketing expenses. @ Rs. 26 or US$ 1/Kg.	@ Rs.7/Kg	
	Sub-Total @ RS. 50/Kg	RS. 460000
Profit per acre		
Income	@ US$ 4 = RS. 100/Kg.	RS. 920000
Cost @ Rs.65.50/Kg	Rs.612500	
Profit	Rs. 307500 = US$ 12300	RS. 307500

As the Price in Germany and Francc is about US$ 8.00/Kg. It can give good return. However, to be on safer side, we have assumed the price as US$ 4/Kg.

STRAWBERRY

	UNIT COST		YEAR -I
			COST RS.
I. RENT OF LAND	Rs.1000		
(Per Acre Per annum)	PER ACRE		1000
II.PREPARATION OF LAND			
Ploughing, Plamking @ Rs. 100/Acre	5 X 100		500
iiiSEED BED PREPARATION	(20 mandays @ Rs. 50)		1000
iv.COST OF NURSERY PLANTS	(20,000 plants @ Rs. 2/plant)		40000
v. TRANSPLANTING CHARGES	32 man days @ Rs. 50		1600
vi.F. Y. MANURE	@ Rs. 200/trolley - 200x5		1000
viiFERTILIZER	@ Rs. 5/Kg.- 200 Kg.		1000
viiWEEDING, HOEING	5 @ Rs. 500/each		2500
ix.MULCHING POLYTHENE	@ 60/Kg. - 1500 Kg.		9000
LABOUR CHARGES	@ RS. 50/DAY - 20 mandays		1000
x. FUNGICIDE/PESTICIDES	@ Rs.250/spray - 4 sprays		1000
xi.IRRIGATION COST	@ Rs.200/Acre(canal water charges)		200
xiiHARVESTING/PICKING	@ Rs.50/day - 200 mandays		10000
xiiINTEREST ON OPERATING CAPITAL			7960
TOTAL			77760
TOTAL PRODUCTION	2000 KG		
WASTAGE	200 KG		
NET PRODUCE	1800 KG		
FARM GATE PRICE	Rs.43.20	US$ 1.66	
B. LOCAL MARKET POTENTIAL			
Packing Expenses @ Rs. 8/Kg.	Rs.	8.00	
Transportation @ Rs. 2/Kg	Rs.	2.00	
Production cost	Rs.	43.20	
BREAKEVEN PRICE FOR LOCAL MARKET	Sub-Total	53.20	
LOCAL MARKET PRICE	@ Rs. 60/	60.00	
PROFIT/KG.		6.80	
C. EXPORT POTENTIAL			
i) Local Tranport Cost	@ Rs./Kg.	1800	
ii) Packing charges	@ Rs.20/	36000	
iii)Air Freight Charges for European Market	@ Rs. 32/	57600	
iv) Traffic handling & Marketing expenses.	@ Rs. 5/K	9000	
	Sub-Total	104400	
Price Per Kilogram	Rs.	58.00	
Local Production cost	Rs.	53.20	
	Total Cos	111.20	US$ 4.28

LOCAL MARKET	RS.	1.66
INTERNATIONAL MARKET	US$	4.28

BEING HIGHLY PERISHABLE AND HAVING HIGH PRICE IN LOCAL MARKET, IT IS NOT RECOMMENDED FOR EXPORT .

MANGO
20 YEARS CROP

	UNIT COST			YEAR -I	YEAR II-IV	YEAR V-Above
				COST RS.		
I. RENT OF LAND	Rs.1000					
(Per Acre Per annum)	PER ACRE			1000	1000	1000
II. PREPARATION OF LAND						
iii.SEED BED PREPARATION	(6 mandays @ Rs. 50)			300		
iv. COST OF NURSERY PLANTS	(100PLANTS @ Rs.25)			2500		
v. TRANSPLANTING CHARGES	6 man days @ Rs. 50			300		
vi. F. Y. MANURE	@ Rs. 250/trolley			1000	2000	4000
vii.FERTILIZER	@ Rs. 5/Kg NPK			1750	3000	7500
viiiWEEDING, HOEING	@Rs.50/DAY			200	200	200
PRUNING	@Rs.50/DAY			200	200	200
x. FUNGICIDE/PESTICIDES	@ Rs.250/spray			1000	1000	1000
xi. IRRIGATION COST	@ Rs.200/Acre(canal water charges)			200	200	200
xii.HARVESTING/PICKING	@ Rs.50/day					3000
SUB TOTAL				8450	7600	17100
INTEREST	@10%			845	760	1710
TOTAL FARM GATE PRICE	RS.	335335		9295	8360	18810
PRODUCTION	YEAR 5-8 @50 Kg./PLANT		20TONS			
	YEAR 9-20 @80 Kg./PLANT		96TONS	27040		
TOTAL PRODUCE			116TONS			
			23.2TONS			
NET PRODUCE			92.8TONS	Rs.3613/TON		
B. LOCAL MARKET POTENTIAL						
FARM GATE PRICE	RS	3.61				
LOCAL MARKET PRICE	RS	6.6[illegible]				
C. EXPORT POTENTIAL						
i) Local Tranport Cost	@ Rs./Kg.	1800				
ii) Packing charges	@ Rs.20/	36000				
iii)Air Freight Charges for European Market	@ Rs. 32/	57600				
iv) Tarrif handling & Marketing expenses.	@ Rs. 5/K	9000				
Sub-Total		104400				
Price Per Kilogram	Rs.	58.00				
Local Production cost	Rs.	53.20				
Total Cos	Rs.	111.20	4.28 US$			
	US$	4.28				
LOCAL MARKET	Rs.	1.66				
INTERNATIONAL MARKET	US$	4.28				

PRODUCTION TECHNOLOGY

Of

Mango
Strawberry
Peaches
Plums
Pears
and
Grapes

MANGO

Soil Deep (more than 10 ft) well drained loamy

Climate Tropical without frost, a continuous high but never less than - I.IC° temperature.

Altitude Upto 610 M

Planting Season Feb-March, August-September.

Planting Distance (in Square) 10.6-13.7 Meters

Irrigation First irigation after fruit set, then after monthly intervals till harvest 1.2 irrigation till flowering.

Nutrition/ Plant	**Age(year)**	**FYM (Kgs)**	**Urea (Kgs)**	**S.S.P (Kgs)**	**Pot. Sulphate (Kgs)**
	1 - 4	10 - 30	2 - 5	1	-
	5 - 8	40 - 60	3 - 5	1.5 - 2	0.5
	9 -11	65 - 75	6 - 7	2.5 - 3	1 - 1.5
	12- above	80 -120	8 -10	3 - 4	2 - 3

Pruning Cut dead and diseased branches. Inflorescence effected by mall formation should be cut back.

Main Problems Biennial bearing, mango mall formation, mango mealy bug, anthracnose, Root rot.

Harvesting Time May-August.

Yields Per Plant 75-110 Kgs

Varieties (Promising)

Malda: Ripens early June, Yield 80-100 Kgs per plant.
Langra: Ripens end June-Mid July, Yields 100-120 Kg.
Aman Dusehri: Ripens end June-Mid July, Yields 80-100 gs.
Anwar Retaul: Ripens in July. Yield 50-70 Kg.
Samar Bahist: Ripens end July-Mid August. Yield 100-150 Kgs.
Fajri: Ripens end August. Yield 80-100 Kgs.
Sindhri: Ripens in May-June.

STRAWBERRY

Climate Mild weather conditions characterised by moderation of temperature and atmospheric and soil moisture through out the year are ideal for strawberry growing.

Soil Well drained, deep rich moist loamy soils.

Planting Time January-February
September-October

Nutrition/ Hac

Nutrition timings	Fertilizer	Quantity
During land preparation	Farm yard Manure super phosphate	50 tons 750 Kgs
After second year planting apply mixed fertilizer at monthly inter-vals commencing when the first flower buds appear (if needed)	Sulphate of ammonia super phosphate row	1 Kg/22M

Irrigation

Heavy rain fall area (like Murree Hills)	No need
Rawalpindi/Islamabad and Peshawar areas	Irrigate during dry spells.
Arid Regions (like Quetta)	Irrigate after fort-night during summer once or twice during winter.

Harvesting Time Plains: February-March
Hilly Areas: May-June

Yield/Hac 5-8 Tons

Main Problems Leaf spot, leaf scorch, Mildew, White grubs, strawberry weevil, leaf roller, crown borer, short harvest spell, fruit rot, black spot.

PEACHES

Soil	Moderateiy fertile loam to sandy loam, warm and well drained but not all the same droughty.
Climate	Dry climate with winter rainfal, mild summer, moderately cold winters and spring, free from frost. Temperature range should be more than -17C° and less than 46C°.
Altitude	
Planting Season	Feb-March
Distancing (in Square)	2.5-3 Meters
Irrigation	In humid parts, they grow rainfed, In plains irrigate after 15 days in summer and a month in winter. In dry hills of Quetta and Kalat region, irrigate after 15-20 days in summer.
Nutrition	Mature plant needs 15-20 Kgs of FYM and 0.5 Kgs of nitrogen every year.
Pruning	Basically, a centre leader tree with four or five scaffold limbs evenly spread on each side of the tree. These limbs are trained at an angle of 35 to 40° from the vertical with the lowest originating at approximately 40 cm above ground level. This system is known as palmette. A continuous bearing surface is developed enabling even fruit distribution and maturity and the use of lharvesting aids.
Problems (Main)	Fruit fly, leaf curl, powdery mildew, scab.
Harvesting Time	May-August
Yield/Plant	75-95 Kgs
Varieties	Robin, Allberta, Golden, Early grand.

PLUMS

Soil Alkali free clay loam.

Climate Temperate, can withstand a minimum temperature as low as 16C° and as high as 44C°.

Altitude 455-1830 Ms.

Planting Season Feb-March

Distancing (in Square) 6.09 Ms

Irrigation 35 acre inches water is required for bearing tree. Ordinarily 12 irrigations of about 3" should be given after proper interval, depending upon the temperature and rains etc.

Nutrition/ Plant

Age (Years)	FYM (Kgs)	Urea (Kgs)	S.S.P. (Kgs)	Pot.Sulphate (Kgs)
Planting time	20	-	-	-
First	-	-	-	-
2nd	10	1/4	-	-
3rd	10	1/3	-	-
4th	15	1/2	-	-
5th	20	3/4	-	-
6-8	20	2	2	1
9-10	30	2	3	1 1/2
11-above	40	2 1/2	5	2

Pruning In second winter after plantation, select 3 evenly spaced laterals to form the main limbs these selected leaders should again be cut back. In the third winter select suitable laterals to become secondary limbs, thus filling in spaces as the tree grows upwards and spreads out. Care should be taken not to over crowd the tree with too many limbs. Then during the subsequent years, cut the diseased and narrow angled branches only.

Problems (Main) Fruit fly, Gumosis, Fruit rot.

Yield/Plant 37-60 Kgs.

Varieties

Mathley: Ripens in end May. Average yield/plant is 37 Kgs.
Fazal-e-Munani: Ripens in end June, Average/plant yield is 37-55 Kgs.
Formusa: Ripens in end June. Moderately productive
Transparent Gage: Ripens late. Good keeper.

PEARS

Soil Deep well drained heavy loam, can grow on shallow and water logged soils as well.

Climate Temperate-mild sub tropical Temperature range required is - 3.8C° to 44.4C°.

Altitude 305-2134 meters

Planting Season Feb-March

Planting Distance (in Square) 6 meter

Irrigation Localities which receive about 40" rain fall, well spread throughout the year, do not need suplimentary irrigation. Arid zone pears require regular irrigation after an interval of 20-30 days.

Nutrition/ Plant

Age (Years)	F.Y.M. (Kgs)	Urea (Kgs)	S.S.P. (Kgs)	Pot.Sulphate (Kgs)
Planting time	20	-	-	-
First	-	-	-	-
2nd	10	1/4	-	-
3rd	10	1/3	-	-
4th	15	1/2	-	-
5th	20	3/4	-	-
6-8	20	2	2	1
9-10	30	2	3	1 1/2
11-above	40	2 1/2	5	2

Pruning Pear trees should be pruned on the same lines as of apples on the central leader system.

Problems Pear scab, fruitfly, pear psylla, pear codling moth and codling.

Harvesting Time August-September

Yield/Plant 90-150 Kgs

Varieties

Leconte: Ripens early August. Average yield is 90 Kgs/plant.
Keiffer: Ripens early sep. high yielding.
Bartlett: Ripens early sep.

GRAPES

Soil Light well drained.

Climate Temperate, warm dry summers and cool winters. Requires temperature more than - 9C° and less than 37C°. During ripening it should be 18C°.

Altitude 915-1982 Ms

Planting Season Feb-March

Distancing Plant to plant 2 meters and in rows 3 meters.

Irrigation Needs to be irrigated every 10 days in first summer after planting. In subsequent years irrigation is extended to 20-25 days in summer and once a month in winter.

Nutrition/ Plant

Age (Years)	F.Y.M. (Kgs)	D.A.P. (Kgs)
Planting time	15	-
1	-	-
2	10	0.05 (50 grams)
3	10	0.07 (75 grams)
4	10	0.10 (100 grams)
5-above	15	0.12 (125 grams)

Pruning Plants are trained on trellis system for quality high yields.
The trellis system consists of 8 feet angle iron posts at 15 feet spacing. Three wires are strung along the rows at 2 feet, 4 feet and 6 feet above the ground.

Year 1: The vine is tied to the bottom wire and cut in March just above the bottom wire . 3 buds are allowed to develop. 2 will form lateral arms along the wire, the other will be trained kup to the next wire. Other lateral growths should be removed but leave the basal leaf of ther lateral.

Year 2: In March the main shoot is cut back just above the second wire and again 3 more buds are allowed to grow forming 2 more lateral arms and another upright shoot.

Year 3: The main shoot is cut again just above the top wire and only 2 buds are allowed to develop forming lateral arms onthe top wire.

All lateral arms are allowed to grow 3 feet long. Fruiting branches grow from the lateral arms and these are cut to two buds in March.

Problems Powdery mildew, leafspot, rot of grapes, grape vine bettle, wasp,grape vine leaf roller.

Harvesting Time June-October

Yield/Plant 9 Kgs

Varieties (Main)

Haita: Aug.-Oct. Very good dessert grape. Rasins are prepared.
Shandao-Khani: Aug.-Sept. Good quality dessert and rasin grape
Spin Kishmish: July-Oct. Good quality dessert (Thomson grapes Seedless).

PRODUCTION TECHNOLOGY

Of

Musk Melon,

Okra,

Tomato

and Asparagus

MUSK MELON

A plant which flourished best in hot and dry areas. Elevations up to 500 meters are normally suitable. Excessive himidity adversely affects flowering. Root system sensitive to sun and requires soil with moisture holding capacity.

Soil

Fertile, well drained, relatively high organic content.

Method of Propagation

Seed sown directly on both sides of beds, two to three seeds sown together, seeding later reduced to one.

Seed Rate: 1-1/2 Kg/acre

Plant and Spacing

Rows three meters apart, 50 cms in between plants.

Fertilizer

At final ploughing add one bag of Ammonium Sulphate and three bags of Super Phosphate per acre.

Maintenance

Hoeing, weeding and regular irrigation in hot dry weather. Seeding may be hilled up when 30-50 cms high. The growing points of leading shoots may be removed to encourage the production of lateral growth.

Varieties

T-96, Chichawatni, Hales Best, Tim Dew.

Pests

Fruit-fly - white elongated conical larvae tunnel into fruits.
Controlled by Malathion or Diptrex spray.

Red beetle - Mostly attack appears on early crop. It can be controlled by Sevin dust mixed with ash.

Powdery mildew - White spots on leaves, spary Benlate as preventive and if attack appears Dithane M-45.

Down mildew - Bright yellow spots on leaves, later on they turn brown. Spray Dithane M-45.

Time to Maturity

10-14 weeks after planting.

Harvesting and Yields

Fruit turn yellow and soften when ripe. May be harvested before fully matured and ripened at room temperature. 8 tons/acre yield can be obtained.

OKRA

	Tolerant to a wide range of soils and rainfall. Grows will during both dry and wet season, sensitive to excessive soil moisture. Economic yields obtianed at altitudes up to 900 meters.
Soil Preparation	Lateral application of organic matter, well drained and cultivated to a depth of 25 cms.
Method of Propagation	Seed sown direct on one side of ridges. Seed rate: 6 Kg/acre.
Planting and spacing	Rows 60 cms apart, 30 cms between plants.
Fertilizer	Urea two bags and Ammonium Phosphate one bag per acre.
Maintenance	Hoeing, weeding and regular irrigation.
Varieties	T-13,Pusa Green.
Pests	Pink bloworm - tunnels into base of fruit, Sevin dust is an effective control or spray ambush. Aphid - Sap-scucking insect, spray with pirimor or Thiodan Jassid - Sucks cell sap usually in May-July, spray with Dimecron or Malathion. Powdery mildew - Whitish powdery spots, to control spray Afugam pr or Karathane. Dry rot - Root and stem, damping off seeding etc, to prevent follow strictly crop rotation.
Time to Maturity	9-10 weeks after sowing.
Harvesting and yields	Pods picked in young stage, frequent harvesting recommended. Yield of 4-5 tons per acre are easily obtainable.

TOMATO

Adapted to a wide range of variation in soil and climate, although excessive humidity, high temperature and frost reduce the yields.

Soil and Preparation

Well drained, with high organic content. Deep cultivation is recommended.

Method of Propagation

Seed sown slightly covered with soil and seed beds or in containers and transplanted to raised beds or ridges when 8-12 cms high.

Can be readily propagated by cuttings, but parent plants must be free from diseases. Seedlings respond favourably to shade after sowing and transplanting, but all the time protected from wind and excessive rainfall. Plastic or glass covered shelters are becoming increasingly popular for protecting plants before they are planted out. Seed rate 120 grams per acre.

Planting and spacing

Transplanted seedlings should be inserted in planting hole so that lowest leaves are level with the soil surface.

Raised beds:(for tall varieties) 1.25 meters apart, 50 cms between plants.

Ridges: (for bush varieties) 75 cms apart, 40 cms between plants.

Fertilizer

At final ploughing add one bag of Ammonium Sulphate and three bags of Single super Phosphate per acre. Potash in important throughout the life of plants and top-dressings of Sulphate of Potash at inervals of 21 days are commended for soils with a low potash reserve.

Maintenance

Pruning : Side shoots may be removed as soon as formed, if the plants are required to yield a limited number of fruits of good quality. Pruning appears to lhave little effect on earlyness or fruit size. Bushy (Determinate) varieties do not require pruning.

Staking: Providing supports for the plants can improve the quality of fruits. Plants may be staked singly with sticks inserted a few inches from the base of the plant.

ASPARAGUS

Soil

Grown on sandy to heavy clay soil. Spear initially occurs at soil temperature about 10° C. Growth of spears is controlled primarily by air temperature and requires deep water for good yield. Areas known to be frosted should be avoided. The field should be level, fertile, well drained, and weed free.

Fertilization

Tolerate salinity and wide PH range. Pre-plantation requirement for phosphorus and K should be determined by soil test, if test capability not available , 100-200 Kg NPK per acre.

Water Requirement

Irrigate every 7-14 days as needed. Furrow irrigation is most common but micro irrigation is more effective.

Seed and Germination

- Number of seed/gram 25-43.
- Seed should be surfaced sterilized in solution of 5.25 gm Sodium by PO Chlorite to 4 parts water.
- Then rinse with cold water.
- Spread out to surface dry.
- Then plant immediately.
- Germination depends on soil moisture and on 20°C occurs in fifteen days. At 15°, 24 days are required for germination.

Crop Establishments

There are three methods of crop establishment.

a) **Crown (Roots)**

i) Advantage

Less cost practices become under control. Healthy roots can be selected, Injury to crown can be avoided.

ii) Disadvantage

For small seed, precision planter is required.
Weed control problem.
Mechanical digging necessary.
Time, Labour necessary.

b) **Transplanting**

Time, Labour Equipment Saving.
Less root injury.
Drought problem and irrigation to be carefully managed.
Irrigation needed.
First year growth less from crowns.
Day Temperature 21-24.
Night 15°-18°, 15 cm deep furrows.
Irrigate every 2-3 weeks with complete nutrient solution.
As plants grow gradually, close furrows with hoes or cultivators until surface is levelled.

c) Direct Seeding. Dig furrows of 12-15 cm and put in the seed at 6-7 cm apart & 2-4 cm deep in the bottom of furrows. Gradually close to level soil surface.

Planting Depth Bottom should not be less than 12 cm or more than 20 cm.

Plant Space 1.4 to 1.8 meters within the row, 25-45 cm between plants.

Maintenance

i) First Year

Weed control is necessary in the first year of cultivation. Irrigate the land after every ten days during hot weather. Plants should be disked or rotovated to incorporate old ferns into soil in December-January.

ii) Second year

- Refrain from harvest.
- 6 Kg/denim actual N+ other fertilizer.
- Ample irrigation.

iii) Third year

- Reshape beds fern disked or rototilled.
- Row ridge to be placed over the crowns for weed control.
- Spears can be cut for 6-8 weeks when reach at 20 cm in height.
- Harvesting in early morning and every day during warm whether.
- Cut below the soil surface so that 5 cm of white remains on each shear.
- Fertilise as per requirement at end of cutting season.
- During dry season irrigate every 10 days

iv) Fourth & subsequent season.

- Same as third year. Cutting season to be extended to 10-12 weeks each year.

Pest Management

- Control Fusarium moniliforms, Rust, bettle, aphid.
  F Oxysporum
  Cut worms

- Avoid excessive use & according to label direction. It must be registered in the country in which crop is to be marketed.

HARVESTING AND HANDLING

- Deteriorates quickly once harvested.
- Continues to grow at storage at temperature above freezing.
- Normal harvested length 22-25 cm long.
- Main losses due to dehydration and decay.
- Harvester must know what buyer wants. Japanese market demand medium to thin, Europeans Jumbos.
- Very high rate of respiration, must be kept cool and heat constantly removed.
- Loss of water, primary reason for rejection.
- Control temperature 2° to 6° C.
- Should not be packed wet.
- Cool promptly for better quality.
- Harvest for which you have market.
- Don't cut excessive amount of white, choose shears 23 to 25 cm long and minimum 20 cm long after final trimming.
- Packing container should support the weight not the asparagus.
- Avoid sun injury and heating up.
- Keep at highest humidity and close to 2.5° C until consumption.
- Grade and storage according to customer requirement.