Cost Benefit Analysis

		OPV		Hybrid Karina	
	Qty	Unit Cost/acre (KES) *	Total Cost/ Acre (KES) *	Unit Cost/ Acre (KES)*	Total Cost/ Acre (KES) *
Land lease (per growing season)	1	4,000.00	4,000.00	4,000.00	4,000.00
Cost of seed (1,000 gms)	2	3,655.94	7,311.88	13,964.00	27,928.00
Primary tillage	1	3,500.00	3,500.00	3,500.00	3,500.00
Secondary tillage (Harrow)	1	2,800.00	2,800.00	2,800.00	2,800.00
Planting Cost 5 workers @ 200 per day	5	200	1,000.00	200	1,000.00
FERTILIZER COST					
DAP (50 KG Bag)	2	2,700.00	5,400.00	2,700.00	5,400.00
Manure (Tones)	4	2,000.00	8,000.00	2,000.00	8,000.00
Pest Control	8		2,500.00		2,500.00
Disease Control (8 Sprays per growing season	8		13,000.00	None	-
Harvesting Cost (Price may vary)					
Harvest : 10 workers @ Ksh.140 per day	10	140	1,400.00	140	1,400.00
TOTAL COST OF PRODUCTION			48,911.88		56,528.00
Yield Potential per acre(marketable carrot)	15t/acre (Nantes) & 25t/acre Karina	15.00 *	225,000.00	15	375,000.00
PROFIT (KES)			176,088.12		318,472.00

**prices may vary; above prices are only indicative*

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GROWING HYBRID KARINA

High yielding excellent colour and uniform carrots

Seminis®
grow forward

GROWING HYBRID KARINA

HYBRID KARINA

"Uniform shape, great color and sweet tasting carrot for the fresh market"

Features:

- Heavy yielder Nantes type with higher percentage of marketable carrots
- Suitable for fresh market and processing
- Resistance to Alternaria and high tolerance to powdery mildew
- Large and vigorous foliage with strong root attachment
- Excellent core and external colour with minimal green shoulder.
- Early maturing, harvestable in 85-125 days from sowing.
- Very uniform root shape that's near cylindrical with an average length of 18-22 cm
- Has exceptional orange color and flavor.
- Excellent tolerance to breakage and cracking.

Benefits:

- Higher returns as variety higher yielder 22-25t/acre
- Wider market as variety is suitable for both processing and fresh markets
- Reduced cost of production with less fungicide as variety has higher disease tolerance
- Ready market as high variety quality has higher demand in the market
- Less farm wastage as roots are market quality, have reduced breakages and cracking

CLIMATIC AND SOIL REQUIREMENTS

- Carrot is all year round crop that can grow in a wide range of soils. They perform best on deep, well drained sandy loam to sandy soils. Soils should be slightly acidic, pH 6.0 - 6.5.
- Carrot production should be avoided in areas where the temperature is consistently below 15°C and above 35°C.
- Land prepared to achieve a fine tilth, any compaction or poor drainage will adversely affect germination and the quality of the carrots.
- Crop should not be planted where the previous crop was carrots to avoid diseases

SOWING METHOD AND SPACING

- Sowing of carrots is done on a firm, even seedbed. Raised beds are best for good water management of carrots.
- Beds that are 1,2m wide containing 5 - 7 rows, 17 - 25cm apart can be used.
- Seeding is the most critical operation in carrot production. Seeds should preferably be sowed with a vacuum planter; care should be taken not to plant seed deeper than 10mm or shallower than 3mm.

FERTILIZATION

- If pH is acidic, i.e. less than 5, then lime should be applied at least 30 days before sowing. Fertilization should be based on a soil analysis.
- Basic fertilizer program 200kg of DAP during planting and Some growers find that banding MAP 12 - 15cm below seed placement, at sowing is beneficial to early growth.
- Total nitrogen applied by means of a side dressing should not exceed 35kg/ha.
- Carrots are sensitive to Boron deficiency, if B shortages are expected, 10-20kg/ha commercial Borax powder should be incorporated into the soil a minimum of seven days before sowing or apply Solubor.

IRRIGATION

- The second most important aspect of carrot production is probably irrigation management particularly during seed germination up until the fourth leaf stage.
- The soil surface should not be allowed to dry out at any stage during seed emergence as these results in a reduction in population and thus yield.
- Excessive irrigation can also adversely effect carrot populations, by stimulating Pythium dieback.
- Poor irrigation management may result in cracked carrots.

WEED CONTROL

- A wide range of herbicides is available to control weeds chemically pre and post emergency, consult your local chemical representative and use only registered products.
- Manual weeding can also be used .

PESTS AND DISEASE CONTROL

Pests such as carrot fly and nematodes are of importance in carrots. Use registered products for control of the above.

Common diseases include Alternaria leaf blight and powdery mildew. Use registered products for control of these diseases or plant resistant varieties such as Hybrid Karina.

MATURITY/HARVESTING

Maturity Indications:

Hybrid Karina is mature and ready for harvesting between 85 -120 days after sowing.

Some of the indications of a mature carrot crop include:

- Firm (ot flaccid or limp) with straight with a uniform tip fill
- Bright orange
- There should be little residual "hairiness" from lateral roots
- No "green shoulders" or "green core" from exposure to sunlight during the growth phase
- High moisture content and high reducing sugars are most desirable for fresh consumption

Quality Defects:

Quality defects include lack of firmness, non-uniform shape, roughness, poor colour, splitting or cracking, green core, sunburn and poor quality of top or trimming.