

Enterprise
Unit

CARROTS - PROCESSING
2001

ha

Furrow Irrigation

GROSS MARGIN BUDGET:
1 ha

Standard Budget	Your Budget
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INCOME:

40 t/ha @ \$135.00 /t

\$5,400.00

A. Total Income/ha
\$5,400.00
VARIABLE COSTS:
Seed

Western Red 3 kg/ha \$300.00 /kg \$900.00

Tractor costs
Large equipment including labour, fuel, oil, etc

2 Cultivation	0.7 hr/ha	\$30.50 /hr	\$42.70
1 Lister	0.5 hr/ha	\$30.50 /hr	\$15.25
1 Drill Fertiliser	0.5 hr/ha	\$30.50 /hr	\$15.25
2 Bedform	0.5 hr/ha	\$30.50 /hr	\$30.50
1 Sidedress	0.5 hr/ha	\$30.50 /hr	\$15.25
1 Inter Row Cult'n	0.5 hr/ha	\$30.50 /hr	\$15.25
7 Boomspray	0.2 hr/ha	\$30.50 /hr	\$42.70
1 Sowing	2.5 hr/ha	\$24.50 /hr	\$61.25

Irrigation

Water 5.5 ML/ha \$17.36 /ML \$95.48

Fertiliser

Single Super	500 kg/ha	\$0.24 /kg	\$120.00
Ammonium nitrate	400 kg/ha	\$0.41 /kg	\$162.80
Micro nutrients Foliar	2 kg/ha	\$1.20 /kg	\$2.40

Pest control

1 Insecticide	0.8 L/ha	\$8.75 /L	\$7.00
1 Insecticide	0.8 L/ha	\$14.90 /L	\$11.92
4 Fungicide	2.2 kg/ha	\$7.45 /kg	\$65.56

Weed Control

1 Herbicide	2.8 L/ha	\$6.50 /L	\$18.20
1 Pre-emergent	2.0 kg/ha	\$3.60 /kg	\$7.20
1 Post emergent	1.0 L/ha	\$63.70 /L	\$63.70

Harvesting

Harvester	10 hr/ha	\$30.50 /hr	\$305.00
2 Bin Pick up	10 hr/ha	\$14.50 /hr	\$290.00
2 Casual labour	10 hr/ha	\$14.50 /hr	\$290.00
14 Bin Hire (14 days)	87 bins/ha	\$0.16 /bin-day	\$194.88
Wash	40 t/ha	\$15.00 /t	\$600.00
Processor	40 t/ha	\$40.00 /t	\$1,600.00

Freight
Levy

0.50% \$27.00

B. Total Variable Costs
\$4,999.29

Break-even price	\$124.98 /t
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Gross Margin /ha (A-B)
\$400.71

Break-even yield	37.03 t/ha
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Gross Margin /ML
\$72.86
PRODUCT TRADE NAMES

The product trade names in this publication are omitted on the understanding that no preference between equivalent products is intended and that the inclusion of a product does not imply endorsement by NSW Agriculture over any other equivalent product from another manufacturer.

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SENSITIVITY ANALYSIS
TABLE 1- Effect of Yield and Price on Gross Margin /ha

YIELD (t)	DELIVERED PRICE (\$/t)					
	115.00	125.00	135.00	145.00	155.00	165.00
30	-\$990	-\$691	-\$393	-\$94	\$204	\$503
35	-\$692	-\$344	\$4	\$352	\$701	\$1,049
40	-\$395	\$3	\$401	\$799	\$1,197	\$1,595
45	-\$98	\$350	\$797	\$1,245	\$1,693	\$2,141
50	\$199	\$696	\$1,194	\$1,691	\$2,189	\$2,686

TABLE 2- Effect of Yield and Price on Gross Margin /ML

YIELD (t)	DELIVERED PRICE (\$/t)					
	115.00	125.00	135.00	145.00	155.00	165.00
30	-\$180	-\$126	-\$71	-\$17	\$37	\$91
35	-\$126	-\$63	\$1	\$64	\$127	\$191
40	-\$72	\$0	\$73	\$145	\$218	\$290
45	-\$18	\$64	\$145	\$226	\$308	\$389
50	\$36	\$127	\$217	\$308	\$398	\$488

The weighted average price shown in bold is based on the Flemington Market prices over a recent 12 month period.

NOTES:

- Area** - MIA is the main district where carrots are grown specifically for juicing.
- Production** - Carrots are susceptible to magnesium deficiency on acid soils and boron deficiency on sandy soils. Crop establishment can be difficult on the heavier soils if effected by salinity.
- Harvesting is fully mechanised using top lifting root harvesters. Cracked, split and deformed carrots can be accepted for processing, not affecting juice quality.
- Pests** - Aphids and leaf hoppers are the main insect pests with cavity spot and leaf blight the most common diseases.
- Harvesting** - Harvesting is almost all year round, with less during spring.
- The growing period is dependent on temperature and ranges from 14 to 24 weeks.
- Carrot harvesters are normally grower-owned.
- Yields** - Carrots can be very high yielding with over 50 tonnes per hectare achieved by some growers.
- Packaging** - No packaging is required as crop is delivered in bulk trailers.
- Economic note** - **This budget is ONLY A GUIDE** and should be altered for movements in crop and input prices, changes in seasonal conditions and the farm characteristics.
- This budget does not include overhead costs or GST.