



Area Unit = 1ha

WATERMELON - Seedless

2013

						standard budget	your budget
INCOME:	Item	Quantity	Rate	Price			
Anticipated Yield	1st Grade	30 tonne/ha	@	\$ 600.00 /tonne		\$ 18,000.00	
A. Gross Income/ha						\$ 18,000.00	
OPERATING COSTS:							
						\$ Cost	
Seed and Plants	Seedlings - Seeded Pollinator	2200 plants/ha		\$ 100.00 /1000		\$ 220.00	
	Seedlings - Seedless	4400 plants/ha		\$ 600.00 /1000		\$ 2,640.00	
Fertiliser	Single Super	350 kg/ha		\$ 0.48 /kg		\$ 168.00	
	Calcium Nitrate	450 kg/ha		\$ 0.76 /kg		\$ 342.00	
	Potassium Nitrate	350 kg/ha		\$ 1.32 /kg		\$ 462.00	
	Magnesium Nitrate	150 kg/ha		\$ 1.28 /kg		\$ 192.00	
	Micro Nutrients	5 L /ha		\$ 6.50 /L		\$ 32.50	
Fuel	Ground/Bed Preparation	15 L/hr	3.5 hr/ha	\$ 1.15 /L		\$ 60.38	
	Lay Mulch/Drip Tape	12 L/hr	1.0 hr/ha	\$ 1.15 /L		\$ 13.80	
	Sowing/Planting	15 L/hr	2.0 hr/ha	\$ 1.15 /L		\$ 34.50	
	Chemical Applications	12 L/hr	2.0 hr/ha	\$ 1.15 /L		\$ 27.60	
	Fertiliser Applications	12 L/hr	0.8 hr/ha	\$ 1.15 /L		\$ 11.04	
	Harvesting	12 L/hr	10 hr/ha	\$ 1.15 /L		\$ 138.00	
Chemicals	Insecticide	2 applications	1.6 L/ha	\$ 10.00 /L		\$ 32.00	
	Insecticide	1 application	0.12 kg/ha	\$ 1,620.00 /kg		\$ 194.40	
	Insecticide	1 application	20.0 L/ha	\$ 4.75 /L		\$ 95.00	
	Fungicide	3 applications	2.2 kg/ha	\$ 8.25 /kg		\$ 54.45	
	Fungicide	1 application	1.2 L/ha	\$ 154.00 /L		\$ 184.80	
	Fungicide	2 applications	0.5 L/ha	\$ 290.00 /L		\$ 290.00	
	Fungicide	1 application	1.5 L/ha	\$ 150.00 /L		\$ 225.00	
	Fungicide	2 applications	0.25 L/ha	\$ 100.00 /L		\$ 50.00	
Water	Drip Irrigation		4 ML/ha	\$ 60.00 /ML		\$ 240.00	
Labour	Tractor Driving	1 person	18.3 hr/ha	\$ 25.00 /hr		\$ 457.50	
	Lay Mulch/Drip Tape	2 people	1.0 hr/ha	\$ 25.00 /hr		\$ 50.00	
	Field (weeding)	3 people	1.0 hr/ha	\$ 18.00 /hr		\$ 54.00	
	Irrigation	1 person	2.0 hr/ha	\$ 25.00 /hr		\$ 50.00	
	Harvest/Grading	3 people	10 hr/ha	\$ 18.00 /hr		\$ 540.00	
	Packing (on farm)	1 people	10 hr/ha	\$ 18.00 /hr		\$ 180.00	
	Shed/Forklift	1 person	0.5 hr/ha	\$ 25.00 /hr		\$ 12.50	
Electricity/Gas	Irrigation Pumps		4 ML/ha	\$ 36.00 /ML		\$ 144.00	
Packaging	Package Materials	67 octabins/ha		\$ 18.50 /octabin		\$ 1,233.33	
Freight/Transport	Truck	2 <small>octabins/ pallet space</small>		\$ 115.00 <small>cost per pallet space</small>	\$ 57.50 /octabin	\$ 3,833.33	
Other Costs	Agents Commission		15%			\$ 2,700.00	
	Plastic Mulch		5000 m/ha	\$ 0.10 /m		\$ 500.00	
	Drip Tape		5000 m/ha	\$ 0.11 /m		\$ 550.00	
	Bin Hire	20 days	50 bins/ha	\$ 0.40 /bin/day		\$ 400.00	
	Bee Hives		3 Hives/ha	\$ 70.00 /hive		\$ 210.00	
B. Total Operating Costs						\$ 16,622.13	
Gross Margin per ha (A-B)						\$ 1,377.87	
Gross Margin /ML						\$ 344.47	

Break-even Price \$546 / tonne for 30 tonne/ha

Break-even Yield 26 tonne / ha @ \$600 / tonne

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 DPI over any other equivalent product from another manufacturer.



WATERMELON - Seedless

2013

SENSITIVITY ANALYSIS

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

YIELD (tonne)	DELIVERED PRICE (\$/tonne)					
	500	550	600	650	700	750
20	-\$3,733	-\$2,883	-\$2,033	-\$1,183	-\$333	\$517
25	-\$2,453	-\$1,390	-\$328	\$735	\$1,797	\$2,860
30	-\$1,172	\$103	\$1,378	\$2,653	\$3,928	\$5,203
35	\$108	\$1,596	\$3,083	\$4,571	\$6,058	\$7,546
40	\$1,389	\$3,089	\$4,789	\$6,489	\$8,189	\$9,889

NOTES:

Authors - This budget was prepared by G.Kelly, T.Napier and S.Watts and outlines production for inland NSW.

Area - Riverina, Sunraysia, Cowra, Hillston and Bourke are growing locations. Freedom from frosts is essential.

Production - Watermelons are planted from August to late December (varies with location).

- Seedless varieties are popular. Seeded melons are grown as pollinators and for market sale.
- Planting dates vary with location. Sequential plantings occur from August (northern areas) to January.
- Plants are spaced 0.8 to 1.0 m apart (seedless) and 1.8 m apart (grafted seedless). Single rows on beds 1.8 to 2.0 m wide. Plant population 4,000 to 7,000 per ha.
- New ground or crop rotations minimise root diseases. Lighter soils offer better drainage and root health.
- Grafted plants (higher costs) are used where fusarium or verticillium diseases existed.
- Plastic mulch and drip irrigation are common and help reduce weeds and diseases.
- Water usage is 3 to 4 ML/ha and varies with soil, location and season.
- Fertiliser applications provide half of total nutrient requirement and most P requirement pre-planting.
- Remaining fertiliser as regular applications up to and during harvest maintains active growth and fruit set. Micronutrient applications improve crop and fruit quality.
- Blossom-end rot can be a problem if irrigation stress occurs and causes calcium deficiency.
- Hollow heart may occur due to fluctuating growth rates (fertiliser, soil moisture, temperature conditions).
- Pollination rates 2 to 4 hives/ha.

Pests, Diseases - Thrips, cutworm and pumpkin beetle are insect pests.

& Disorders - Powdery mildew, anthracnose, gummy stem blight are disease problems.

Harvesting - Harvest commences in November (northern areas) and last harvests are completed in April (southern areas).

- Watermelons are ripe when the tendril nearest the fruit has dried and a dull thud or empty sound is heard when the fruit is tapped.

Packaging - Watermelons can be marketed in ½ tonne (450 kg) or ¼ tonne (200 kg) cardboard octabins.

Yields - Yields range from 20 to 40 tonne/ha.

Economic - This budget is **ONLY A GUIDE** and is specific to the regions specified. Costs and income can be altered for changes in crop management or input prices. Farmers should use their own figures.

- The budget uses a format similar to the Method 2 calculator in the VegTool Gross Margin program.
- Average prices for 2012 were used for this budget. Overhead costs or GST are not included.

Trim Reference: INT13/37829