



Area Unit = 1 ha

ASPARAGUS - Fresh Green

2013

SECOND YEAR & BEYOND

INCOME:		Item	Quantity	Rate	Price	standard budget	your budget
Anticipated Yield	1st Grade		800 boxes	@	\$ 33.00 / box	\$ 26,400.00	
A. Gross Income/ha						\$ 26,400.00	
OPERATING COSTS:					\$ Cost		
Seed and Plants	Nil for established crop (see NOTES)			kg/ha	\$ - /kg	\$ -	
Fertiliser	Urea		330 kg/ha		\$ 0.86 /kg	\$ 283.80	
	Sulphate of Potash		60 kg/ha		\$ 1.12 /kg	\$ 67.20	
	Super Phosphate		500 kg/ha		\$ 0.48 /kg	\$ 240.00	
	Organic Manure		1.8 tonne/ha		\$ 55.00 /tonne	\$ 99.00	
	Micro Nutrients		5 L/ha		\$ 6.50 /L	\$ 32.50	
Fuel	Ground/Bed Preparation	15 L/hr	7.5 hr/ha		\$ 1.15 /L	\$ 129.38	
	Chemical Applications	12 L/hr	1.0 hr/ha		\$ 1.15 /L	\$ 13.80	
	Fertiliser Applications	12 L/hr	0.3 hr/ha		\$ 1.15 /L	\$ 3.45	
	Harvest/Crate Pick Up	4 L/hr	15.0 hr/ha		\$ 1.15 /L	\$ 69.00	
	Slash/Windrow & Bale	15 L/hr	7.5 hr/ha		\$ 1.15 /L	\$ 129.38	
Chemicals	Pre-emergent Herbicide	2 applications	2.5 L/ha		\$ 8.00 /kg	\$ 40.00	
	Post-emergent Herbicide	1 application	1.5 kg/ha		\$ 36.09 /kg	\$ 54.14	
	Post-emergent Herbicide	1 applications	0.8 L/ha		\$ 63.00 /kg	\$ 51.66	
	Insecticide	3 application	0.8 L/ha		\$ 8.15 /L	\$ 18.34	
	Fungicide	0 applications					
Water	Sprinkler Irrigation		11.0 ML/ha		\$ 60.00 /ML	\$ 660.00	
Labour	Tractor Driving	1 person	31.3 hr/ha		\$ 25.00 /hr	\$ 782.50	
	Irrigation/Fertigation	1 person	2.0 hr/ha		\$ 25.00 /hr	\$ 50.00	
	Hand Harvest	2 people	400 boxes		\$ 7.80 /box	\$ 6,240.00	
	Pick Up	1 person	800 boxes		\$ 0.30 /box	\$ 240.00	
	Packing (on farm)	2 people	400 boxes		\$ 8.40 /box	\$ 6,720.00	
	Shed/Forklift	1 person	800 boxes		\$ 0.10 /box	\$ 80.00	
Electricity/Gas	Irrigation Pumps		11.0 ML/ha		\$ 80.00 /ML	\$ 880.00	
	Packing Shed		336 hr/ha		\$ 1.42 /hr	\$ 477.12	
	Cool Room		126 hr/ha		\$ 1.05 /hr	\$ 132.30	
Packaging	Package Materials		800 boxes		\$ 1.40 /box	\$ 1,120.00	
	Accessories (rubber bands)		800 boxes		\$ 0.30 /box	\$ 240.00	
Freight/Transport	Truck	144 boxes/ pallet space	\$ 115.00	cost per pallet space	\$0.80 /box	\$ 638.88	
Other Costs	No Levy Payable						
	Commissions		15%			\$ 3,960.00	
B. Total Operating Costs						\$ 23,452.43	
Gross Margin per ha (A-B)						\$ 2,947.57	
Gross Margin /ML						\$ 267.96	

Break-even Price	\$28.67 / box for	800	boxes/ ha
Break-even Yield	471 boxes / ha @	\$33.00	/ box

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.



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SENSITIVITY ANALYSIS

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

YIELD (boxes)	DELIVERED PRICE (\$/boxes)					
	27.00	30.00	33.00	36.00	39.00	42.00
500	-\$2,288	-\$1,013	\$262	\$1,537	\$2,812	\$4,087
650	-\$1,710	-\$53	\$1,605	\$3,262	\$4,920	\$6,577
800	-\$1,132	\$908	\$2,948	\$4,988	\$7,028	\$9,068
950	-\$555	\$1,868	\$4,290	\$6,713	\$9,135	\$11,558
1100	\$23	\$2,828	\$5,633	\$8,438	\$11,243	\$14,048

NOTES:

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

Area - Growing occurs at Cowra, Sunraysia, Bathurst and Deniliquin.

Production - Fresh green asparagus is main type grown. Processed asparagus (canned) has declined.

- 'Ida Lee' and 'UC157' are common varieties.
- Sprinkler irrigation is common. Furrow and drip irrigation are used in some growing locations.
- Plant spacings are 25 to 35 cm apart. Single rows 1.5 to 2 m apart are common. Double rows on wider beds, 2.5 m apart are sometimes used.
- Plant populations vary on field layout (18,000 to 54,000 plants/ha).
- New asparagus plantings can be harvested after two years and reach full production after 3 to 5 years.
- New fields can be established from seedlings or crowns. Establishment costs (not included in this budget) are Seed \$1,000/kg, seedlings \$5,850/ha (\$130/1,000 plants) or crowns \$11,250/ha (\$250/1,000 crowns).
- Asparagus can grow on a range of soil types that allow a healthy vigorous root system to grow.
- Asparagus responds well to generous irrigations, 7 to 12 ML/ha.
- Weed control is essential for a vigorous high yielding crop.
- Cool chain management is critical for freshness and quarantine (thrips), and chemical residue levels important.

Pest, Diseases & Disorders - Thrips are the main insect pest. Asparagus rust can occur in humid conditions in some locations.

- Stemphylium stem and leaf spot can occur in humid conditions. Phytophthora rot can occur in cool conditions.
- Boron deficiency can cause scarring on the sides of spears.
- Strong winds cause bent spears and scarring due to sand blasting.

Harvesting - Field sections can be managed to allow harvests from July to March. Natural dormancy occurs in winter.

- Harvest intervals depend on temperature. Hot weather requires daily harvests & cooler weather less frequent.
- Harvesting is by hand. Mechanical aids are used to transport workers along rows.
- An average harvest season involves 35 separate cuts.

Packaging - Domestic markets - fibreboard **6 kg box** . Spear length 25 cm. Medium and small diameter sizes preferred.

- Export markets - wooden box 5 kg or 10 kg or 6 kg waxed cartons. Larger diameter sizes preferred.

Yields - Yields vary with plant population and crop vigour and range from 4 to 8 tonne per hectare.

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: INT13/37812