

SPRAY IRRIGATED LUCERNE - Established stand

Farm Enterprise Budget Series - Northern Zone

Summer 2009-2010

1. GROSS MARGIN BUDGET:

INCOME:			Sample Budget \$/ha	Your Budget \$/ha
7 cuts per season @ 2.20 t/ha per cut				
Total Yield = 15.40 tonnes per hectare				
@ 40 bales per tonne (25 kg bales)				
60% AFIA Grade A1	370 bales/ha@	\$7.50 / bale	\$2,772	
20% AFIA Grade B2	123 bales/ha@	\$6.00 / bale	\$739	
20% AFIA Grade C3	123 bales/ha@	\$4.00 / bale	\$493	
See http://www.afia.org.au/quality/national_grades/ for more details on hay grades used.				
A. TOTAL INCOME \$/ha:			\$4,004	

VARIABLE COSTS:

see following page(s) for details

Depreciation of establishment cost.....	\$90.50	
Fertilizer.....	\$356.79	
Herbicide.....	\$71.97	
Insecticide.....	\$0.00	
Irrigation.....	\$626.24	
Mow, rake & bale (contract).....	\$1,471.40	
Twine @ \$0.113/bale.....	\$69.81	
Cart and stack 100% of hay (\$60/t).....	\$924.00	
B. TOTAL VARIABLE COSTS \$/ha:	\$3,610.71	
C. GROSS MARGIN (A-B) \$/ha:	\$393.29	
D. GROSS MARGIN \$/MI:	\$49.16	

SENSITIVITY TABLES

2. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER HECTARE:

Yield	Price per bale		Grade A1 \$5.50	Grade A1 \$6.50	Grade A1 \$7.50	Grade A1 \$9.50	Grade A1 \$11.50
	Cuts	tonnes/ha	Grade B2 \$4.00	Grade B2 \$5.00	Grade B2 \$6.00	Grade B2 \$8.00	Grade B2 \$10.00
			Grade C3 \$2.00	Grade C3 \$3.00	Grade C3 \$4.00	Grade C3 \$5.00	Grade C3 \$6.00
			\$180 /tonne	\$220 /tonne	\$260 /tonne	\$332 /tonne	\$404 /tonne
4 cuts	8.8		-\$970	-\$618	-\$266	\$367	\$1,001
5 cuts	11.0		-\$926	-\$486	-\$46	\$746	\$1,538
6 cuts	13.2		-\$883	-\$355	\$173	\$1,124	\$2,074
7 cuts	15.4		-\$839	-\$223	\$393	\$1,502	\$2,611
8 cuts	17.6		-\$795	-\$91	\$613	\$1,880	\$3,148
9 cuts	19.8		-\$751	\$41	\$833	\$2,259	\$3,684
10 cuts	22.0		-\$707	\$173	\$1,053	\$2,637	\$4,221

3. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER MEGALITRE:

Yield	Price per bale		Grade A1 \$5.50	Grade A1 \$6.50	Grade A1 \$7.50	Grade A1 \$9.50	Grade A1 \$11.50
	Cuts	tonnes/ha	Grade B2 \$4.00	Grade B2 \$5.00	Grade B2 \$6.00	Grade B2 \$8.00	Grade B2 \$10.00
			Grade C3 \$2.00	Grade C3 \$3.00	Grade C3 \$4.00	Grade C3 \$5.00	Grade C3 \$6.00
			\$180 /tonne	\$220 /tonne	\$260 /tonne	\$332 /tonne	\$404 /tonne
4 cuts	8.8		-\$121	-\$77	-\$33	\$46	\$125
5 cuts	11.0		-\$116	-\$61	-\$6	\$93	\$192
6 cuts	13.2		-\$110	-\$44	\$22	\$140	\$259
7 cuts	15.4		-\$105	-\$28	\$49	\$188	\$326
8 cuts	17.6		-\$99	-\$11	\$77	\$235	\$393
9 cuts	19.8		-\$94	\$5	\$104	\$282	\$461
10 cuts	22.0		-\$88	\$22	\$132	\$330	\$528

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(diesel pump from river-regulated*)

Summer 2009-2010

CALENDAR OF OPERATIONS:		Machinery*			Inputs			Total
Operation	Month	hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	Cost \$/ha
Apply Single Super	Jul	0.42	17.01	7.14	125kg	0.42/kg	52.50	59.64
Spray - paraquat + diquat	Jul	0.10	17.05	1.71	2.5 L	12.32/L	30.80	32.51
Spray - diuron	Jul	with above			2.5 L	9.20/L	23.00	23.00
Fertiliser- #Muriate of Potash	Aug	0.42	17.01	7.14	250kg	1.16/kg	290.00	297.14
Irrigate	Sep				1.00 MI	78.28	78.28	78.28
Irrigate	Oct				1.00 MI	78.28	78.28	78.28
Mow, rake 3 times and bale	Nov	contract		210.20				210.20
Cart and stack hay in shed	Nov	\$1.50	per bale @ 88 bales/ha per cut					132.00
Irrigate	Nov				1.00 MI	78.28	78.28	78.28
Mow, rake 3 times and bale	Dec	contract		210.20				210.20
Cart and stack hay in shed	Dec	\$1.50	per bale @ 88 bales/ha per cut					132.00
Irrigate	Dec				1.00 MI	78.28	78.28	78.28
Herbicide (haloxyfop-R)	Dec	0.10	17.05	1.71	0.1 L	147.59/L	14.76	16.46
Mow, rake 3 times and bale	Jan	contract		210.20				210.20
Cart and stack hay in shed	Jan	\$1.50	per bale @ 88 bales/ha per cut					132.00
Irrigate	Jan				1.00 MI	78.28	78.28	78.28
Mow, rake 3 times and bale	Feb	contract		210.20				210.20
Cart and stack hay in shed	Feb	\$1.50	per bale @ 88 bales/ha per cut					132.00
Irrigate	Feb				1.00 MI	78.28	78.28	78.28
Mow, rake 3 times and bale	Mar	contract		210.20				210.20
Cart and stack hay in shed	Mar	\$1.50	per bale @ 88 bales/ha per cut					132.00
Irrigate	Mar				1.00 MI	78.28	78.28	78.28
Mow, rake 3 times and bale	Apr	contract		210.20				210.20
Cart and stack hay in shed	Apr	\$1.50	per bale @ 88 bales/ha per cut					132.00
Irrigate	Apr				1.00 MI	78.28	78.28	78.28
Mow, rake 3 times and bale	May	contract		210.20				210.20
Cart and stack hay in shed	May	\$1.50	per bale @ 88 bales/ha per cut					132.00

AGRONOMIC NOTES:

Herbicides: Paraquat+diquat and diuron applied in July to established stands to clean up weeds.

To reduce the likelihood of herbicide resistance, rotate herbicide groups and weed management techniques.

Fertilisers: # In areas of long term irrigated hay production, there is a possibility that higher rates of potash may be required to correct chronic potassium deficiency.

Hay storage: The assumption is made that all of the hay is stored on farm prior to selling.

Hay Grades: The Australian Fodder Industry Association (AFIA) has developed a national grading system for legume and cereal hays. It is based on digestible dry matter, crude protein content and metabolisable energy.

AFIA (Incorporated in 1996) is the peak body for the hay and silage industries. Further information and a fodder vendor declaration form is available from AFIA. Phone: 03 9890 6855 Website: www.afia.org.au

Use of a particular brand name does NOT imply recommendation of that brand by I&I NSW.

Always read chemical labels and follow directions, as it is your legal responsibility to do so.

LABOUR REQUIREMENTS: Labour for carting hay from the paddock to the shed is accounted for in this budget.

Labour to apply fertiliser or spray is not costed. If we assume a labour cost of \$20/hr the total labour cost would be \$26.00/ha, reducing the gross margin to \$367/ha.

This does not include labour required to irrigate since this is more likely to be an overhead cost.

MACHINERY ASSUMPTIONS:

Tractor: pto power: 57 KW (76 HP)

Machinery costs refer to variable costs of: fuel, oil, filters, tyres, batteries and repairs.

Mow, Rake, Bale costs: If you use your own machinery for mowing, raking and baling then substitute this cost in your bud

Irrigation Costs: Estimated water usage charge of \$22.66 per ML assumed, your charges may be different.

Estimated water pumping cost of \$55.62 per ML assumed, your costs may be different.

Water use assumed: 8.00 ML/ha

calculated using a spray system with diesel powered pumping from surface supply

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