



Lucerne and sub clover pasture - establishment under a cereal crop
Southern Zone - east Dryland Winter: 2012

ESTABLISHMENT

INCOME:

2.00 wheat tonnes/ha@ \$200.00 /tonne on farm

	Standard Budget \$/ha	Your Budget \$/ha
	\$400.00	
A. TOTAL INCOME \$/ha:	\$400.00	
Cultivation	\$31.83	
Sowing	\$51.79	
Fertiliser & application	\$76.00	
Herbicide & application	\$59.03	
Insecticide & application	\$19.46	
Contract harvesting	\$37.07	
Insurance	\$8.90	
Crop lavies	\$4.08	

VARIABLE COSTS:

A. TOTAL INCOME \$/ha:

Cultivation	\$31.83
Sowing	\$51.79
Fertiliser & application	\$76.00
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Insecticide & application	\$19.46
Contract harvesting	\$37.07
Insurance	\$8.90
Crop lavies	\$4.08

B. TOTAL VARIABLE COSTS \$/ha: **\$288.15**

C. GROSS MARGIN (A-B) \$/ha: **\$111.85**

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$160 /t	\$180 /t	\$200 /t	\$220 /t	\$240 /t	
1.10	-\$112	-\$90	-\$68	-\$46	-\$24	
1.40	-\$64	-\$36	-\$8	\$20	\$48	
1.70	-\$16	\$18	\$52	\$86	\$120	
2.00	\$32	\$72	\$112	\$152	\$192	←
2.30	\$80	\$126	\$172	\$218	\$264	
2.60	\$128	\$180	\$232	\$284	\$336	
2.90	\$176	\$234	\$292	\$350	\$408	

PRODUCT TRADE NAMES

The product trade names in this publication are supplied 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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CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Fallow broadleaf & grass weed control eg ground spray glyphosate 450 and 2,4-D 600LVE	Jan/Feb	0.05	70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	\$10.11
	With above				0.90 L/ha	\$11.61/L	\$10.45	\$10.45
Fallow broadleaf & grass weed control eg ground spray glyphosate 450	Mar/Apr	0.05	70.67	\$3.81	1.25 L/ha	\$4.20/L	\$5.25	\$9.06
Cultivation - Scarify	Apr	0.35	91.67	\$31.83				\$31.83
Apply pre emergent residual soil herbicide eg. ground spray trifluralin	May	0.05	70.67	\$3.81	0.80 L/ha	\$8.50/L	\$6.80	\$10.61
Sow wheat (seed cost is based on farmer's own seed)	May	0.17	<u>91.67</u>	\$15.41	10kg/ha	\$0.30 /kg	\$3.00	\$18.41
Apply cereal seed dressing eg Fluquinconazole (Jockey®)	with above				450ml/100kg	\$50.00/L	\$2.25	\$2.25
Sowing - Lucerne seed	May	with above			2kg/ha	\$8.44 /kg	\$16.88	\$16.88
Sowing - Sub. clover seed	May	with above			3kg/ha	\$5.40 /kg	\$16.20	\$16.20
Apply seed inoculant(all seed)	May	with above			5kg/ha	\$0.06 /kg	\$0.30	\$0.30
Apply starter fertiliser eg. MAP	May	with above			100kg/ha	\$0.76 /kg	\$76.00	\$76.00
Apply residual soil insecticide - RLEM control eg. ground spray bifenthrin (Talstar®)	May	0.05	70.67	\$3.81	0.10 L/ha	\$46.00/L	\$4.60	\$8.41
In crop broadleaf weed control eg ground spray (Bromoxynil 200®)	June	0.05	70.67	\$3.81	1.50 L/ha	\$10.00/L	\$15.00	\$18.81
Apply rust spray i.e. Bayleton®	September	0.05	70.67	\$3.81	1.00 L/ha	\$5.00/L	\$5.00	\$8.81
Contract harvest	Dec	contract		\$37.07				\$37.07
Board & Research Levies					1.02%	of on-farm value		\$4.08
Crop Insurance					2.22%	of on-farm value		\$8.90

NOTES:

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

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

Cover Crop:

- Cover crops (eg. wheat) for lucerne pasture should be sown at 10kg/ha, to reduce competition. Double row spacing increases light available to lucerne seedlings.

Varieties:

- See NSW DPI *Pasture varieties used in NSW*.

Inoculation:

- Use correct strain of Rhizobium for lucerne and subclover.

Seed dressing:

- Fungicide seed dressing may improve establishment of lucerne in some districts.

Herbicide Resistance Management:

- Record herbicide groups and rotate groups where possible to avoid developing herbicide resistance on your farm.

Sowing time:

- Lucerne and Subclover respond well to earlier sowing.

Soil:

- Acid soil should be limed if pH (CaCl₂) < 5.2. Apply and incorporate 3 months before sowing.

Fertiliser:

- Phosphorus fertiliser essential for legumes. Molybdenum also needed for good nodulation.
- Lime application is only every ten years.

Herbicides:

- MCPA cannot be used because lucerne is highly sensitive
- Check the NSW DPI publication "*Weed control in lucerne and pastures*" for alternative recommendations that are safe in an undersown situation

Insecticides:

- Bifenthrin is used for the control of red-legged earthmite.

Labour:

- The labour required for machinery operations is 0.85 hrs/ha.
- At \$22/hour this costs: \$18.61 /ha changing the variable costs to \$306.76 /ha

Machinery:

- A tractor with 141kW (190 HP) pto power and 148 kW (225 HP) engine power is assumed.
- Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries and repairs.

Note on sowing:

- Best pasture establishment is obtained by sowing it on its own, but if sowing pasture under a cereal cover crop, then costs for pasture are offset by returns from the cereal crop.

Economic note:

- These gross margins are only a guide. They do not include overhead costs or GST.

Note: Input and crop prices are correct at the time of writing (April 2012).

Market uncertainty makes estimation of future pricing impractical.

- Use your own figures and price assumptions to estimate your own gross margin.