



**BARLEY: Short Fallow**

Southern Zone - east

**Dryland Winter: 2012**

**1.GROSS MARGIN BUDGET:**

**INCOME:**

3.00 tonnes/ha@ \$150.00 /tonne on farm (feed)

**A. TOTAL INCOME \$/ha:**

**VARIABLE COSTS:**

See following page for detail

Cultivation

Sowing

Fertiliser & application

Herbicide & application

Insecticide & application

Contract harvesting

Levies

Crop Insurance

Cartage

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

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

Standard Budget \$/ha	Your Budget \$/ha
\$450.00	
<b>\$450.00</b>	
\$0.00	
\$33.41	
\$124.40	
\$82.17	
\$0.00	
\$37.07	
\$9.09	
\$10.01	
\$0.00	
<b>\$296.14</b>	
<b>\$153.86</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$90 /t	\$120 /t	<b>\$150 /t</b>	\$180 /t	\$210 /t	
1.50	-\$149	-\$105	-\$62	-\$18	\$25	
2.00	-\$106	-\$48	\$10	\$68	\$126	
2.50	-\$63	\$9	\$82	\$155	\$227	
<b>3.00</b>	-\$20	\$67	<b>\$154</b>	\$241	\$328	←
3.50	\$22	\$124	\$226	\$327	\$429	
4.00	\$62	\$178	\$294	\$410	\$526	
4.50	\$99	\$229	\$360	\$490	\$621	

**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.

# BARLEY: Short Fallow

Southern Zone - east

Dryland Winter: 2012

## CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Fallow broadleaf and grass weed control eg ground spray glyphosate 450	Jan/Feb	0.05	\$70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
Triclopyr 600 (Garlon ® 600)	With above				0.12 L/ha	\$20.30/L	\$2.44	<b>\$2.44</b>
Fallow broadleaf and grass weed control eg ground spray glyphosate 450	Feb/Mar	0.05	\$70.67	\$3.81	1.25 L/ha	\$4.20/L	\$5.25	<b>\$9.06</b>
Burn stubble	Mar							
Broadleaf and grass weed control eg ground spray glyphosate 450	May	0.05	\$70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
Sow (seed cost is based on farmer's own seed)	May	0.17	\$91.67	\$15.41	60kg/ha	\$0.30 /kg	\$18.00	<b>\$33.41</b>
Apply starter fertiliser eg. MAP	May	with above			100kg/ha	\$0.76 /kg	\$76.00	<b>\$76.00</b>
In crop grass weed control eg ground spray tralkoxydim (Achieve®)	Jul	0.05	\$70.67	\$3.81	0.400kg/ha	\$60.60 /kg	\$24.24	<b>\$28.05</b>
In crop broadleaf weed control eg ground spray terbuthryn (Igran®)	Jul	0.05	\$70.67	\$3.81	0.85 L/ha	\$18.75/L	\$15.94	<b>\$19.74</b>
& ground spray MCPA 500	Jul	with above			0.30 L/ha	\$8.90/L	\$2.67	<b>\$2.67</b>
Apply nitrogen eg. urea ground spread	Aug	contract		\$5.50	65kg/ha	\$0.66 /kg	\$42.90	<b>\$48.40</b>
Contract harvest	Nov	contract		\$37.07				<b>\$37.07</b>
Crop Levies					\$1.50 /t	1.020% of on-farm value		<b>\$9.09</b>
Crop Insurance						2.224% of on-farm value		<b>\$10.01</b>

## 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.*

### Varieties:

- See NSW DPI "Winter crop variety sowing guide 2012" .

### Herbicide Resistance Management:

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

### Seed:

- Budgets are based on cost of using own seed. Consider retail seed price at \$1070/tonne, if growing a new variety.

### Sowing time:

- Early May - June

### Soil:

- Choose an acid soil tolerant variety or lime paddocks where soil pH<sub>CaCl2</sub> is below 5.0.

### Fertiliser:

- Nitrogen and phosphorus important for good yields.  
- Topdress with nitrogen fertiliser to increase yields.  
- Careful nitrogen management is necessary for malt quality barley, to ensure the required protein level.

### Prices:

- Monitor market prices throughout the season as prices fluctuate widely. Set target prices.

### Labour:

- The labour required for machinery operations is 0.48 hrs/ha.  
- At \$22/hour this costs: \$10.55 /ha changing the gross margin to \$143.31 /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 & repairs.

### 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.



**WHEAT: Long Fallow (Following pasture)**  
Southern Zone - east

Dryland Winter: 2012

**1. GROSS MARGIN BUDGET:**

**INCOME:**

4.00 tonnes/ha@ \$200.00 /tonne on farm

**A. TOTAL INCOME \$/ha:**

**VARIABLE COSTS:**

See following page for detail

Cultivation

Sowing

Fertiliser & application

Herbicide & application

Insecticide, fungicide & application

Contract harvesting

Levies

Crop Insurance

Cartage

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

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

Standard Budget \$/ha	Your Budget \$/ha
\$800.00	
<b>\$800.00</b>	
\$25.05	
\$36.41	
\$76.00	
\$116.79	
\$28.56	
\$40.59	
\$8.16	
\$17.79	
\$0.00	
<b>\$349.35</b>	
<b>\$450.65</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)				
	\$140 /t	\$170 /t	\$200 /t	\$230 /t	\$260 /t
2.50	\$19	\$91	\$164	\$236	\$309
3.00	\$87	\$174	\$261	\$348	\$435
3.50	\$154	\$256	\$357	\$459	\$561
<b>4.00</b>	\$218	\$335	<b>\$451</b>	\$567	\$683
4.50	\$280	\$411	\$541	\$672	\$803
5.00	\$342	\$487	\$632	\$777	\$922
5.50	\$404	\$563	\$723	\$883	\$1,042

← Gross Margin (\$/ha)

# WHEAT: Long Fallow (Following pasture)

Southern Zone - east

Dryland Winter: 2012

CALENDAR OF OPERATIONS:								
Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Pasture broadleaf and grass weed control eg. ground spray Simazine	July yr1	0.05	70.67	3.81	1.25 L/ha	\$6.00/L	\$7.50	<b>\$11.31</b>
& Paraquat (Gramoxone®)	July yr1	with above			1.0 L/ha	\$5.30/L	\$5.30	<b>\$5.30</b>
Pasture removal/fallowing eg. ground spray glyphosate 450	Oct yr1	0.05	70.67	3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
& eg. 2,4-D amine	Oct yr1	with above			1.50 L/ha	\$5.97/L	\$8.96	<b>\$8.96</b>
Fallow broadleaf and grass weed control eg: ground spray glyphosate	Jan/Feb yr 2	0.05	70.67	3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
& eg. 2,4-D 600 LVE	With above				0.90 L/ha	\$11.61/L	\$10.45	<b>\$10.45</b>
Cultivation - Scarify	Feb yr2	0.35	72.14	25.05				<b>\$25.05</b>
Broadleaf and grass weed control eg ground spray glyphosate 450	May yr2	0.05	70.67	3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
Sow (seed cost is based on farmer's own seed)	May yr2	0.17	91.67	15.41	70kg/ha	\$0.30 /kg	\$21.00	<b>\$36.41</b>
Apply starter fertiliser - eg. MAP	May yr2	with above			100kg/ha	\$0.76 /kg	\$76.00	<b>\$76.00</b>
Apply cereal seed dressing eg Fluquinconazole (Jockey®)		with above			450ml/100kg	\$50.00/L	\$15.75	<b>\$15.75</b>
In crop grass weed control eg ground spray Tralkoxydim (Achieve®)	July yr2	0.05	70.67	3.81	0.40 L/ha	\$60.60/L	\$24.24	<b>\$28.05</b>
In crop broadleaf weed control eg ground spray terbuthryn (Igran®)	Aug yr2	0.05	70.67	3.81	0.85 L/ha	\$18.75/L	\$15.94	<b>\$19.74</b>
& MCPA 500	Aug yr2	with above			0.30 L/ha	\$8.90/L	\$2.67	<b>\$2.67</b>
Apply rust spray i.e. triadimefon 125g/L	Aug yr2	0.05	70.67	3.81	1.00 L/ha	\$9.00/L	\$9.00	<b>\$12.81</b>
Contract harvest	Dec yr2	contract		40.59				<b>\$40.59</b>
Board & Research Levies					1.02%	of on-farm value		<b>\$8.16</b>
Crop insurance					2.22%	of on-farm value		<b>\$17.79</b>

## NOTES:

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### Topcrop:

- Adjust sowing rate and plant density to match rainfall zone and target yield/protein.
- Monitor and record crop performance.

### Varieties:

- See "Winter crop variety sowing guide 2012". When choosing varieties consider the stripe rust resistance rating and risk of a stripe rust epidemic occurring in your area.
- **Caution:** Some seed dressing may reduce coleoptile length so growers should avoid deep sowing, especially on small or low vigour seed or on short coleoptile varieties. Check seed dressing crop withholding periods especially for grazing varieties. See seed dressing label for further information.

### Herbicide Resistance Management:

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

### Seed:

- Budgets are based on cost of using own seed. Consider retail seed price at \$920/tonne, if growing a new variety.

### Fertiliser:

- Fertiliser rates should be tailored to the paddocks individual history, with rates varied accordingly on soil phosphorus and nitrogen levels. Soil nutrient tests are recommended prior to any major changes in fertiliser rates, particularly phosphorus as this is very important for early crop growth and potential crop yields.

### Sowing time:

- March to late May/early June depending on the variety

### Soils:

- Select suitable varieties for soils which are acid in nature or apply lime to raise soil pH.
- Gypsum applications may be necessary on some surface setting or sodic soils to improve soil structure.

### Herbicide:

- Choose herbicides that are safe on undersown pasture species

### Rotation:

- Winter clean with simazine and paraquat (eg. Gramoxone) to remove grasses from pasture and minimise disease risk.

### Prices:

- Monitor market prices throughout the season as prices fluctuate widely. Set target prices.

### Labour:

- The labour required for machinery operations is 0.91 hrs/ha.
- At \$22/hour this costs: \$20.10 /ha changing the gross margin to \$430.56 /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 & repairs.

### 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.

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.



**WHEAT: Grazing and Grain**

Southern Zone - east

**Dryland Winter: 2012**

**1. GROSS MARGIN BUDGET:**

<b>INCOME:</b>				
2.50	tonnes/ha@	\$200.00	/tonne on farm	
20.0	hd/ha @	0.15 kg/day	x 75 days	x \$2.50/kg

**A. TOTAL INCOME \$/ha:**

**VARIABLE COSTS:**  
See following page for detail

Cultivation	\$0.00
Sowing	\$36.41
Fertilizer & application	\$137.60
Herbicide & application	\$84.81
Insecticide, fungicide & application	\$28.56
Contract harvesting	\$37.07
Levies	\$5.10
Crop Insurance	\$11.12
Cartage	\$0.00

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

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

Standard Budget \$/ha	Your Budget \$/ha
\$500.00	
\$562.50	
<b>\$1,062.50</b>	
\$0.00	
\$36.41	
\$137.60	
\$84.81	
\$28.56	
\$37.07	
\$5.10	
\$11.12	
\$0.00	
<b>\$340.66</b>	
<b>\$721.84</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$140 /t	\$170 /t	<b>\$200 /t</b>	\$230 /t	\$260 /t	
1.00	\$374	\$403	\$432	\$461	\$490	
1.50	\$441	\$485	\$528	\$572	\$615	
2.00	\$509	\$567	\$625	\$683	\$741	
<b>2.50</b>	\$577	\$649	<b>\$722</b>	\$794	\$867	←
3.00	\$644	\$732	\$819	\$906	\$993	
3.50	\$712	\$814	\$915	\$1,017	\$1,119	
4.00	\$776	\$892	\$1,009	\$1,125	\$1,241	

**PRODUCT TRADE NAMES**

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# WHEAT: Grazing and Grain

Southern Zone - east

Dryland Winter: 2012

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	Jan/Feb	0.05	\$70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
Triclopyr 600 (Garlon @ 600)	With above				0.12 L/ha	\$20.30/L	\$2.44	<b>\$2.44</b>
Fallow broadleaf & grass weed control eg ground spray glyphosate 450	Feb/Mar	0.05	\$70.67	\$3.81	1.25 L/ha	\$4.20/L	\$5.25	<b>\$9.06</b>
Broadleaf and grass weed control eg ground spray glyphosate 450	Mar/Apr	0.05	\$70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
Pre-emergent residual soil herbicide eg spray chlorsulfuron (Glean®)	Mar/Apr	with above			0.020kg/ha	\$132.20 /kg	\$2.64	<b>\$2.64</b>
Sow (seed cost is based on farmer's own seed)	Mar/Apr	0.17	\$91.67	\$15.41	70kg/ha	\$0.30 /kg	\$21.00	<b>\$36.41</b>
Apply starter fertiliser eg. DAP	Mar/Apr	with above			100kg/ha	\$0.76 /kg	\$76.00	<b>\$76.00</b>
Apply cereal seed dressing eg Fluquinconazole (Jockey®)		with above			450ml/100kg	\$50.00/L	\$15.75	<b>\$15.75</b>
In crop grass weed control eg ground spray Tralkoxydim (Achieve®)	June	0.05	\$70.67	\$3.81	0.400 L/ha	\$60.60/L	\$24.24	<b>\$28.05</b>
In crop broadleaf weed control eg ground spray terbuthryn (Igran®)	July	0.05	\$70.67	\$3.81	0.850 L/ha	\$18.75/L	\$15.94	<b>\$19.74</b>
& MCPA 500	July				0.30 L/ha	\$8.90/L	\$2.67	<b>\$2.67</b>
Apply nitrogen eg. urea ground spread	July	contract		\$5.50	85kg/ha	\$0.660 /kg	\$56.10	<b>\$61.60</b>
Apply rust spray i.e. triadimefon 125g/L	July	0.05	70.67	\$3.81	1.00 L/ha	\$9.00/L	\$9.00	<b>\$12.81</b>
Contract harvest	Dec	contract		\$37.07				<b>\$37.07</b>
Board & Research Levies					1.02%	of on-farm value		<b>\$5.10</b>
Crop Insurance					2.22%	of on-farm value		<b>\$11.12</b>

NOTES:	
	<i>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.</i>
<b>Topcrop:</b>	- Adjust sowing rate and plant density to match rainfall zone and target yield/protein. - Monitor and record crop performance.
<b>Varieties:</b>	- See "Winter crop variety sowing guide 2012". When choosing varieties consider the stripe rust resistance rating and risk of a stripe rust epidemic occurring in your area. <b>Caution:</b> Some seed dressing may reduce coleoptile length so growers should avoid deep sowing, especially on small or low vigour seed or on short coleoptile varieties. Check seed dressing crop withholding periods especially for grazing varieties. See seed dressing label for further information.
<b>Herbicide Resistance Management:</b>	- Record herbicide groups and rotate groups where possible to avoid developing herbicide resistance on your farm.
<b>Seed:</b>	- Budgets are based on cost of using own seed. Consider retail seed price at \$920/tonne, if growing a new variety.
<b>Economic note:</b>	- To calculate a grazing value consider the stocking rate, length of grazing time and the value of grazing (eg. agistment rate).
<b>Fertiliser:</b>	- Fertiliser rates should be tailored to the paddocks individual history, with rates varied accordingly on soil phosphorus and nitrogen levels. Soil nutrient tests are recommended prior to any major changes in fertiliser rates, particularly phosphorus as this is very important for early crop growth and potential crop yields
<b>Sowing time:</b>	- March to April depending on soil moisture
<b>Rotation:</b>	- Winter clean with simazine and paraquat eg. Gramoxone® to remove grasses from pasture and minimise disease risk.
<b>Prices:</b>	- Monitor market prices throughout the season as prices fluctuate widely. Set target prices.
<b>Labour:</b>	- The labour required for the machinery operations 0.48 hrs/ha. - At \$22/hour this costs: \$11 /ha changing the gross margin to \$711.29 /ha
<b>Machinery:</b>	- 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 & repairs.
<b>Economic note:</b>	- These gross margins are only a guide. They do not include overhead costs or GST. <b>Note: Input and crop prices are correct at the time of writing (April 2012). Market uncertainty makes estimation of future pricing impractical.</b> - Use your own figures and price assumptions to estimate your own gross margin.



**TRITICALE: Short Fallow**

Southern Zone - east

Dryland Winter: 2012

**1.GROSS MARGIN BUDGET:**

**INCOME:**

3.00 tonnes/ha@ \$150.00 /tonne on farm

**A. TOTAL INCOME \$/ha:**

**VARIABLE COSTS:**

See following page for detail

Cultivation

Sowing

Fertiliser & application

Herbicide & application

Insecticide & application

Contract harvesting

Levies

Crop Insurance

Cartage

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

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

Standard Budget \$/ha	Your Budget \$/ha
\$450.00	
<b>\$450.00</b>	
\$0.00	
\$33.41	
\$137.60	
\$75.91	
\$0.00	
\$37.07	
\$4.59	
\$10.01	
\$0.00	
<b>\$298.58</b>	
<b>\$151.42</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$90 /t	\$120 /t	<b>\$150 /t</b>	\$180 /t	\$210 /t	
1.50	-\$153	-\$110	-\$66	-\$23	\$21	
2.00	-\$110	-\$52	\$6	\$64	\$122	
2.50	-\$66	\$6	\$79	\$151	\$224	
<b>3.00</b>	-\$23	\$64	<b>\$151</b>	\$238	\$326	←
3.50	\$21	\$122	\$224	\$326	\$427	
4.00	\$61	\$177	\$293	\$409	\$525	
4.50	\$98	\$229	\$360	\$490	\$621	

# TRITICALE: Short Fallow

Southern Zone - east

Dryland Winter: 2012

## CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Broad leaf and 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	<b>\$10.11</b>
Fallow broadleaf & grass weed control eg ground spray glyphosate 450	With above				0.90 L/ha	\$11.61/L	\$10.45	<b>\$10.45</b>
Burn	Feb/Mar	0.05	70.67	\$3.81	1.25 L/ha	\$4.20/L	\$5.25	<b>\$9.06</b>
Broadleaf and grass weed control eg. ground spray glyphosate 450	March							
Pre-emergent residual soil herbicide eg ground spray chlorasulfuron (Glean®)	May	0.05	70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$11.80</b>
Sow (seed cost is based on farmer's own seed)	May	with above			0.02kg/ha	\$132.20 /kg	\$2.64	<b>\$6.45</b>
Apply starter fertiliser eg. MAP	May	0.17	91.67	\$15.41	60kg/ha	\$0.30 /kg	\$18.00	<b>\$33.41</b>
In crop grass weed control eg ground spray Tralkoxydim (Achieve®)	May	with above			100kg/ha	\$0.76 /kg	\$76.00	<b>\$76.00</b>
Apply nitrogen eg. urea ground spread	June	0.05	70.67	\$3.81	0.40 L/ha	\$60.60/L	\$24.24	<b>\$28.05</b>
Contract harvest	July	contract		\$5.50	85kg/ha	\$0.66 /kg	\$56.10	<b>\$61.60</b>
Research Levy	Dec	contract		\$37.07	1.02%	of on-farm value		<b>\$4.59</b>
Crop Insurance					2.22%	of on-farm value		<b>\$10.01</b>

## NOTES:

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

### Varieties:

- See NSW DPI "Winter crop variety sowing guide 2012" .

### Herbicide Resistance Management:

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

### Seed:

- Budgets are based on cost of using own seed. Consider retail seed price at \$850/tonne, if growing a new variety.

### Sowing time:

- Early May-June depending upon the variety

### Soil:

- Out yields other cereals on acid and waterlogged soils. Requires good fertility.

### Fertiliser:

- Fertiliser rates should be tailored to the paddocks individual history, with rates varied accordingly on soil phosphorus and nitrogen levels. Soil nutrient tests are recommended prior to any major changes in fertiliser rates, particularly phosphorus as this is very important for early crop growth and potential crop yields.

### Prices:

- Monitor market prices throughout the season as prices fluctuate widely. Set target prices. (Some local contracts with dairy farmers/feedlots may be available)

### Labour:

- The labour required for machinery operations is 0.48 hrs/ha  
- At \$22/hour this costs: \$10.55 /ha changing the gross margin to \$141 /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 & repairs.

### 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.



Subclover ley pasture

Southern Zone - east

Dryland Winter: 2012

ESTABLISHMENT

INCOME:

20 sheep/ha@ 0.15 kg/day x 75 days x \$2.50/kg

Standard Budget \$/ha	Your Budget \$/ha
\$562.50	

A. TOTAL INCOME \$/ha:

\$562.50
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VARIABLE COSTS

Cultivation	\$15.41	
Sowing	\$54.60	
Fertiliser & application	\$76.00	
Herbicide & application	\$66.03	
Insecticide & application	\$9.01	

B. TOTAL VARIABLE COSTS \$/ha:

\$221.04
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C. GROSS MARGIN (A-B) \$/ha:

\$341.46
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2. EFFECT OF GRAZING DAYS AND LAMB PRICE ON GROSS MARGIN PER HECTARE:

Lamb price (\$/kg)	Sheep grazing (no. of days)					Gross Margin (\$/ha)
	55	65	75	85	95	
1.00	-\$56	-\$26	\$4	\$34	\$64	
1.50	\$26	\$71	\$116	\$161	\$206	
2.00	\$109	\$169	\$229	\$289	\$349	
<b>2.50</b>	\$191	\$266	<b>\$341</b>	\$416	\$491	←
3.00	\$274	\$364	\$454	\$544	\$634	
3.50	\$356	\$461	\$566	\$671	\$776	
4.00	\$439	\$559	\$679	\$799	\$919	

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.

**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	<b>\$10.11</b>
		With above			0.90 L/ha	\$11.61/L	\$10.45	<b>\$10.45</b>
Fallow broadleaf & grass weed control eg ground spray glyphosate 450	Mar/Apr	0.05	70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
Cultivation - Scarify	Apr	0.17	91.67	\$15.41				<b>\$15.41</b>
Apply pre emergent residual soil herbicide eg. ground spray trifluralin	May	0.05	70.67	\$3.81	1.50 L/ha	\$8.50/L	\$12.75	<b>\$16.56</b>
Sowing - Subclover seed	May	with above			10kg/ha	\$5.40 /kg	\$54.00	<b>\$54.00</b>
Apply seed inoculant(all seed)	May	with above			10kg/ha	\$0.06 /kg	\$0.60	<b>\$0.60</b>
Apply starter fertiliser eg. MAP	May	with above			100kg/ha	\$0.76 /kg	\$76.00	<b>\$76.00</b>
RLEM and Lucerne flea control eg. ground spray - omethoate (Lemat®)	May	0.05	70.67	\$3.81	0.10 L/ha	\$52.00/L	\$5.20	<b>\$9.01</b>
In crop broadleaf weed control eg ground spray (Bromoxynil 200®)	June	0.05	70.67	\$3.81	1.50 L/ha	10.00 L/ha	\$15.00	<b>\$18.81</b>

**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.*

**Ley**

- Short term pasture, grown to fatten lambs and provide a 'break' between cereal crops.
- The ley will also increase soil nitrogen levels for the following cereal crop.

**Varieties:**

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

**Herbicide Resistance Management:**

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

**Sowing time:**

- Clovers will all benefit from early sowing (April).

**Sowing rate:**

- Higher sowing rates (8 - 10 kg/ha) produce a better establishment.

**Soil:**

- Clovers are suited to a wide range of soils.

**Herbicides:**

- Choose herbicide carefully and apply at the best time

**Insecticides:**

- Omethoate used for control of red-legged earthmite

**Grazing:**

- Grazing may commence when the plants are well anchored in the seedbed.

**Labour:**

- The labour required for machinery operations is 0.412 hrs/ha.
- At \$22/hour this costs: \$9.07 /ha changing the variable costs to \$230.11 /ha

**Machinery:**

- A tractor with 57 kW (77 HP) pto power and 66 kW (90 HP) engine power is assumed.
- Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries and repairs.

**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.



**PHALARIS BASED PASTURE (DIRECT DRILL Establishment)**  
Southern Zone - east  
ESTABLISHMENT

Dryland Winter: 2012

Income  
20 sheep/ha@ 0.15 kg/day x 75 days x \$2.50/kg

Standard Budget \$/ha	Your Budget \$/ha
\$562.50	

**A. TOTAL INCOME \$/ha:**

\$562.50

**VARIABLE COSTS:**

Cultivation	\$0.00
Sowing	\$90.42
Fertiliser & application	\$95.00
Herbicide & application	\$54.72
Insecticide & application	\$14.81
Lime	\$18.25

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

\$273.20

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

\$289.30

**2. EFFECT OF GRAZING DAYS AND LAMB PRICE ON GROSS MARGIN PER HECTARE:**

Lamb price (\$/kg)	Sheep grazing (no. of days)					Gross Margin (\$/ha)
	55	65	75	85	95	
1.00	-108	-78	-48	-18	12	
1.50	-26	19	64	109	154	
2.00	57	117	177	237	297	
<b>2.50</b>	139	214	<b>289</b>	364	439	
3.00	222	312	402	492	582	
3.50	304	409	514	619	724	
4.00	387	507	627	747	867	

**PRODUCT TRADE NAMES**

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**PHALARIS BASED PASTURE (DIRECT DRILL Establishment)**

Southern Zone - east

Dryland Winter: 2012

CALENDAR OF OPERATIONS:								
Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost	Total	Rate/ha	Cost	Total	
			\$/hour	\$/ha		\$	\$/ha	
Spring control of RLEM eg. ground spray - omethoate (Lemat®)	Sept/Oct (Yr1)	0.05	70.67	<b>\$3.81</b>	0.05 L/ha	\$52.00/L	<b>\$2.60</b>	<b>\$6.41</b>
Broadleaf and grass weed control eg ground spray glyphosate 450		with above			1.50 L/ha	\$4.20/L	<b>\$6.30</b>	<b>\$6.30</b>
Fallow broadleaf & grass weed control eg ground spray glyphosate 450 and 2,4-D Ester 680	Jan/Feb (Yr2)	0.05	70.67	<b>\$3.81</b>	1.25 L/ha	\$4.20/L	<b>\$5.25</b>	<b>\$9.06</b>
		with above			0.90 L/ha	\$11.61/L	<b>\$10.45</b>	<b>\$10.45</b>
Fallow broadleaf & grass weed control eg ground sprav glvphosate 450	Mar/Apr (Yr2)	0.05	70.67	<b>\$3.81</b>	1.50 L/ha	\$4.20/L	<b>\$6.30</b>	<b>\$10.11</b>
Sowing	Apr/May*	0.17	91.67	<b>\$15.41</b>				<b>\$15.41</b>
Sowing - Australian Phalaris seed	Apr/May*	with above			1.5kg/ha	\$15.00 /kg	<b>\$22.50</b>	<b>\$22.50</b>
Sowing - Currie Cocksfoot	Apr/May*	with above			1.0kg/ha	\$11.72 /kg	<b>\$11.72</b>	<b>\$11.72</b>
Sowing - Riverina subclover	Apr/May*	with above			2.0kg/ha	\$5.20 /kg	<b>\$10.40</b>	<b>\$10.40</b>
Sowing - Goulburn subclover	Apr/May*	with above			2.0kg/ha	\$15.00 /kg	<b>\$30.00</b>	<b>\$30.00</b>
Apply seed inoculant(all legume seeds)	Apr/May*	with above			6.5kg/ha	\$0.06 /kg	<b>\$0.39</b>	<b>\$0.39</b>
Apply starter fertiliser eg. Single super	Apr/May*	with above			250kg/ha	\$0.38 /kg	<b>\$95.00</b>	<b>\$95.00</b>
Apply residual soil insecticide - RLEM control eg. ground spray bifenthrin (Talstar®)	May*	0.05	70.67	<b>\$3.81</b>	0.10 L/ha	\$46.00/L	<b>\$4.60</b>	<b>\$8.41</b>
In crop broadleaf weed control eg ground spray (Bromoxynil 200®)	June	0.05	70.67	<b>\$3.81</b>	1.50 L/ha	\$10.00/L	<b>\$15.00</b>	<b>\$18.81</b>
Lime (1 year in 10)				<b>\$25.00</b>	2.50 t/ha	\$63.00 /t	<b>\$157.50</b>	<b>\$18.25</b>
* Year 2								

<b>NOTES:</b>	<i>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.</i>
<b>Varieties:</b>	- See NSW DPI <i>Pasture varieties used in NSW</i> .
<b>Herbicide Resistance Management:</b>	- Record herbicide groups and rotate groups where possible to avoid developing herbicide resistance on your farm.
<b>Sowing time:</b>	- Clover and phalaris mixture needs to be sown in autumn.
<b>Soil:</b>	- Phalaris and subclover respond vigorously to lime, paddocks need to be fertile for rapid establishment.
<b>Herbicides:</b>	- Timing is critical to ensure effective weed control and to minimise pasture damage. - Control weeds prior to sowing down pasture.
<b>Fertiliser:</b>	- Lime needed to reduce soil acidity. Apply and incorporate lime 3 months before sowing. - Lime application is only every ten years. - Phosphorus needed for clovers. - Aim for soil Al% of less than 3%.
<b>Insecticides:</b>	- Bifenthrin is used for red-legged earthmite control.
<b>Labour:</b>	- The labour required for machinery operations is 0.41 hrs/ha. - At \$22/hour this costs: \$9.07 /ha changing the variable costs to \$282.27 /ha
<b>Machinery:</b>	- A tractor with 57 kW (77 HP) pto power and 66 kW (90 HP) engine power is assumed. - Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries and repairs.
<b>Economic note:</b>	- These gross margins are only a guide. They do not include overhead costs or GST. <b>Note: Input and crop prices are correct at the time of writing (April 2011). Market uncertainty makes estimation of future pricing impractical.</b> - Use your own figures and price assumptions to estimate your own gross margin.

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.



## OATS: Grazing & Grain (Short Fallow)

Southern Zone - east

Dryland Winter: 2012

### 1. GROSS MARGIN BUDGET:

**INCOME:**

2.50	tonnes/ha@	\$140.00	/tonne on farm (feed)
20	sheep/ha@	0.15 kg/day	x 75 days x \$2.50/kg

**A. TOTAL INCOME \$/ha:**

**VARIABLE COSTS:**

See following page for detail

Cultivation

Sowing

Fertiliser & application

Herbicide & application

Insecticide & application

Contract harvesting

Levies

Crop Insurance

Cartage & grading

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

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

Standard Budget \$/ha	Your Budget \$/ha
\$350.00	
\$562.50	
<b>\$912.50</b>	
\$31.83	
\$36.41	
\$122.40	
\$40.36	
\$0.00	
\$37.07	
\$3.57	
\$7.78	
\$0.00	
<b>\$279.41</b>	
<b>\$633.09</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$100 /t	\$120 /t	<b>\$140 /t</b>	\$160 /t	\$180 /t	
1.00	\$391	\$411	\$430	\$449	\$469	
1.50	\$440	\$469	\$498	\$527	\$556	
2.00	\$488	\$527	\$565	\$604	\$643	
<b>2.50</b>	\$536	\$585	<b>\$633</b>	\$681	\$730	
3.00	\$585	\$643	\$701	\$759	\$817	
3.50	\$633	\$701	\$769	\$836	\$904	
4.00	\$678	\$755	\$833	\$910	\$988	

### 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.

# OATS: Grazing & Grain (Short Fallow)

Southern Zone - east

Dryland Winter: 2012

## CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Broad leaf and grass weed control eg ground spray glyphosate 450 and	Jan/Feb	0.05	70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
2,4-D 600LVE	With above				0.90 L/ha	\$11.61/L	\$10.45	<b>\$10.45</b>
Burn	March							
Cultivation - Scarify / Harrow	March	0.35	91.67	\$31.83				<b>\$31.83</b>
Sow (seed cost is based on farmer's own seed)	March	0.17	91.67	\$15.41	70kg/ha	\$0.30 /kg	\$21.00	<b>\$36.41</b>
Apply starter fertiliser eg. MAP	March	with above			80kg/ha	\$0.76 /kg	\$60.80	<b>\$60.80</b>
In crop broadleaf and grass weed control eg. ground spray chlorsulfuron (Glean@)	May	0.05	70.67	\$3.81	20 g/ha	\$132.2 /kg	\$2.64	<b>\$6.45</b>
& eg. ground spray MCPA 500	May	with above			1.50 L/ha	\$8.90/L	\$13.35	<b>\$13.35</b>
Apply nitrogen eg. urea ground spread	July	contract		\$5.50	85kg/ha	\$0.660 /kg	\$56.10	<b>\$61.60</b>
Contract harvest	Dec	contract		\$37.07				<b>\$37.07</b>
Board & Research Levies					1.015% of on-farm value			<b>\$3.57</b>
Crop Insurance					2.224% of on-farm value			<b>\$7.78</b>

## 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.*

### Varieties:

- See NSW DPI "Winter crop variety sowing guide 2012".

### Herbicide Resistance Management:

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

### Seed:

- Budgets are based on cost of using own seed. Consider retail seed price at \$850/tonne, if growing a new variety.

### Economic note:

- To calculate a grazing value consider the stocking rate, length of grazing time and the value of grazing (eg. agistment rate).

### Herbicides:

- Good weed control is required in previous years.

### Prices:

- Prices for this crop can fluctuate widely.

### Labour:

- The labour required for machinery operations is 0.71 hrs/ha.  
 - At \$22/hour this costs: \$15.65 /ha changing the gross margin to \$617.43 /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 & repairs.

### 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.



**OATS GRAIN: Short Fallow**  
Southern Zone - east

**Dryland Winter: 2012**

**1. GROSS MARGIN BUDGET:**

**INCOME:**

3.00 tonnes/ha@ \$140.00 /tonne on farm (feed)

**A. TOTAL INCOME \$/ha:**

**VARIABLE COSTS:**

See following page for detail

Cultivation

Sowing

Fertiliser & application

Herbicide & application

Insecticide & application

Contract harvesting

Levies

Crop Insurance

Cartage

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

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

Standard Budget \$/ha	Your Budget \$/ha
\$420.00	
<b>\$420.00</b>	
\$25.05	
\$36.41	
\$68.40	
\$50.46	
\$0.00	
\$37.07	
\$4.28	
\$9.34	
\$0.00	
<b>\$231.01</b>	
<b>\$188.99</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$100 /t	\$120 /t	<b>\$140 /t</b>	\$160 /t	\$180 /t	
1.50	-\$72	-\$43	-\$14	\$15	\$44	
2.00	-\$24	\$15	\$54	\$92	\$131	
2.50	\$25	\$73	\$121	\$170	\$218	
<b>3.00</b>	\$73	\$131	<b>\$189</b>	\$247	\$305	
3.50	\$121	\$189	\$257	\$324	\$392	
4.00	\$166	\$244	\$321	\$398	\$476	
4.50	\$208	\$296	\$383	\$470	\$557	

**PRODUCT TRADE NAMES**

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# OATS GRAIN: Short Fallow

Southern Zone - east

Dryland Winter: 2012

CALENDAR OF OPERATIONS:								
Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Broad leaf and grass weed control eg ground spray glyphosate 450	Jan/Feb	0.05	70.67	\$3.81	1.50 L/ha	\$4.20	\$6.30	<b>\$10.11</b>
2,4-D 600LVE	With above				0.90 L/ha	\$11.61	\$10.45	<b>\$10.45</b>
Burn	March							
Cultivation - Scarify	March	0.35	72.14	\$25.05				<b>\$25.05</b>
Broad leaf and grass weed control eg ground spray glyphosate 450	April / May	0.05	70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
Sow (seed cost is based on farmer's own seed)	May	0.17	91.67	\$15.41	70kg/ha	\$0.30 /kg	\$21.00	<b>\$36.41</b>
Apply starter fertiliser eg.MAP	May	with above			90kg/ha	\$0.76 /kg	\$68.40	<b>\$68.40</b>
In crop broadleaf and grass weed control eg. ground spray chlorsulfuron (Glean@)	July	0.05	70.67	\$3.81	20 g/ha	\$132.2 /kg	\$2.64	<b>\$6.45</b>
& ground spray MCPA 500	July	with above			1.50 L/ha	\$8.90/L	\$13.35	<b>\$13.35</b>
Contract harvest	Dec	contract		\$37.07				<b>\$37.07</b>
Board & Research Levies					1.02%	of on-farm value		<b>\$4.28</b>
Crop Insurance					2.22%	of on-farm value		<b>\$9.34</b>

## 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.*

### Varieties:

- See NSW DPI "Winter crop variety sowing guide 2012".

### Herbicide Resistance Management:

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

### Seed:

- Budgets are based on cost of using own seed. Consider retail seed price at \$850/tonne, if growing a new variety.

### Sowing time:

- March - June depending upon the variety

### Soil:

- Some varieties (eg. Coolabah) are more affected by acid soil than others.  
- Refer to the "Winter crop variety sowing guide 2012" for tolerance rating of varieties to acid soils.

### Herbicides:

- Some grass species (eg. Vulpia) cannot be controlled in this crop  
- Good weed control required. See *Weed control in winter crops 2012*.

### Prices:

- Prices for this crop can fluctuate widely (Contracts for certain milling varieties are available).

### Rotations:

- Essential to control diseases and weeds. Seed dressing is available for control of some diseases.

### Labour:

- The labour required for machinery operations is 0.71 hrs/ha.  
- At \$22/hour this costs: \$15.65 /ha changing the gross margin to \$173.34 /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 & repairs.

### 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.



**NARROW LEAF LUPINS: (Direct Drill)**  
Southern Zone - east

**Dryland Winter: 2012**

**1. GROSS MARGIN BUDGET:**

**INCOME:**  
1.60 tonnes/ha@ \$200.00 /tonne on farm

**A. TOTAL INCOME \$/ha:**

**VARIABLE COSTS:**  
See following page for detail

Cultivation  
Sowing  
Fertiliser & application  
Herbicide & application  
Insecticide  
Fungicide & application  
Contract harvesting  
Levies  
Crop Insurance  
Cartage  
**B. TOTAL VARIABLE COSTS \$/ha:**  
**C. GROSS MARGIN (A-B) \$/ha:**

Standard Budget \$/ha	Your Budget \$/ha
\$320.00	
<b>\$320.00</b>	
\$0.00	
\$52.21	
\$53.00	
\$76.66	
\$14.65	
\$2.94	
\$49.40	
\$3.26	
\$8.69	
\$0.00	
<b>\$260.82</b>	
<b>\$59.18</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$140 /t	\$170 /t	<b>\$200 /t</b>	\$230 /t	\$260 /t	
1.00	-\$114	-\$85	-\$56	-\$27	\$1	
1.20	-\$87	-\$52	-\$18	\$17	\$51	
1.40	-\$60	-\$20	\$21	\$61	\$102	
<b>1.60</b>	-\$33	\$13	<b>\$59</b>	\$105	\$152	←
1.80	-\$6	\$46	\$98	\$150	\$202	
2.00	\$21	\$78	\$136	\$194	\$252	
2.20	\$48	\$111	\$175	\$238	\$302	

**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.

# NARROW LEAF LUPINS: (Direct Drill)

Southern Zone - east

Dryland Winter: 2012

## 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 Triclopyr 600 (Garlon @ 600)	Jan	0.05	70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
	with above				0.12 L/ha	\$20.30/L	\$2.44	<b>\$2.44</b>
Fallow broadleaf & grass weed control eg ground spray glyphosate 450	Feb/Mar	0.05	70.67	\$3.81	1.25 L/ha	\$4.20/L	\$5.25	<b>\$9.06</b>
Fallow broadleaf & grass weed control eg ground spray glyphosate 450 and	April	0.05	70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
Apply pre emergent herbicide eg ground spray Trifluralin 480	With above				1.70 L/ha	\$8.50/L	\$14.45	<b>\$14.45</b>
Sow (seed cost is based on farmer's own seed)	April	0.17	91.67	\$15.41	80kg/ha	\$0.40 /kg	\$32.00	<b>\$47.41</b>
Apply seed dressing eg. Iprodione (Rovral®)	April	with above			0.14 L/ha	\$21.00/L	\$2.94	<b>\$2.94</b>
Apply seed inoculant	April	with above			80kg/ha	\$0.06 /kg	\$4.80	<b>\$4.80</b>
Apply starter fertiliser eg. Legume Starter	April	with above			100kg/ha	\$0.53 /kg	\$53.00	<b>\$53.00</b>
Pre-emergent residual soil herbicide eg ground spray simazine	April	0.05	70.67	\$3.81	3.00 L/ha	\$6.00/L	\$18.00	<b>\$21.81</b>
In crop grass weed control eg. ground spray haloxyfop-R (Verdict®)	July	0.05	70.67	\$3.81	0.10 L/ha	\$48.90/L	\$4.89	<b>\$8.70</b>
Heliethis control eg. aerial spray lambda-cyhalothrin (Karate Zeon ®)	Oct	contract	aerial	\$9.60	0.036 L/ha	\$140.39/L	\$5.05	<b>\$14.65</b>
Contract harvest	Dec	contract		\$49.40				<b>\$49.40</b>
Research Levy					1.02%	of on-farm value		<b>\$3.26</b>
Crop Insurance					2.72%	of on-farm value		<b>\$8.69</b>

### NOTES:

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

#### Topcrop:

- Aim to achieve 35 - 40 plants/m<sup>2</sup>. Dig up roots to check for nodulation.
- Monitor weekly for heliothis at budding.

#### Rotation:

- This crop follows cereals to maintain soil fertility and reduce risk of cereal root disease.
- Retention of cereal stubble will reduce brown leaf spot disease.
- Fracture subsoil hardpans prior to sowing lupins.

#### Varieties:

- See NSW DPI "Winter crop variety sowing guide 2012".

#### Herbicide Resistance Management:

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

#### Seed:

- Budgets are based on cost of using own seed. Consider retail seed price at \$850/tonne, if growing a new or hybrid variety.
- Seed test for Cucumber Mosaic Virus (CMV) and use only clean seed.

#### Sowing time:

- April-May, reduce seeding rates in April

#### Inoculation:

- Especially important in paddocks not previously sown with lupins. Apply Group G inoculant before sowing.

#### Seed dressing:

- May be required to prevent brown leaf spot.
- Application rate used in this budget is 0.2 L / 100 kg seed.

#### Soil:

- Very tolerant of acid soils
- Heavy soils will often give low yields

#### Prices:

- Prices for this crop can fluctuate widely.

#### Labour:

- The labour required for machinery operations is 0.41 hrs/ha.
- At \$22/hour this costs: \$9.07 /ha changing the gross margin to \$50.12 /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 & repairs.

#### 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.

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.



**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	
<b>A. TOTAL INCOME \$/ha:</b>	\$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
Herbicide & application	\$59.03
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	<b>\$200 /t</b>	\$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	
<b>2.00</b>	\$32	\$72	<b>\$112</b>	\$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.

# Lucerne and sub clover pasture - establishment under a cereal crop

Southern Zone - east

Dryland Winter: 2012

## CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost	Total	Rate/ha	Cost	Total	
			\$/hour	\$/ha		\$	\$/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:

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### 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 (CaCl<sub>2</sub>) < 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.



## FIELD PEAS: (Direct drill)

Southern Zone - east

Dryland Winter: 2012

### 1. GROSS MARGIN BUDGET:

**INCOME:**

1.80 tonnes/ha@ \$220.00 /tonne on farm

**A. TOTAL INCOME \$/ha:**

**VARIABLE COSTS:**

See following page for detail

Cultivation

Sowing

Fertiliser & application

Herbicide & application

Insecticide & application

Contract harvesting

Levies

Crop Insurance

Cartage

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

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

Standard Budget \$/ha	Your Budget \$/ha
\$396.00	
<b>\$396.00</b>	
\$0.00	
\$56.81	
\$53.00	
\$93.10	
\$26.13	
\$49.40	
\$4.04	
\$15.06	
\$0.00	
<b>\$297.54</b>	
<b>\$98.46</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$160 /t	\$190 /t	<b>\$220 /t</b>	\$250 /t	\$250 /t	
1.05	-\$119	-\$89	-\$59	-\$29	-\$29	
1.30	-\$80	-\$43	-\$6	\$31	\$31	
1.55	-\$42	\$2	\$46	\$90	\$90	
<b>1.80</b>	-\$4	\$47	<b>\$98</b>	\$150	\$150	←
2.05	\$34	\$92	\$151	\$209	\$209	
2.30	\$72	\$137	\$203	\$269	\$269	
2.55	\$105	\$178	\$251	\$323	\$323	

### PRODUCT TRADE NAMES

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# FIELD PEAS: (Direct drill)

Southern Zone - east

Dryland Winter: 2012

## 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 Triclopyr 600 (Garlon @ 600)	Jan	0.05	70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
	With above				0.12 L/ha	\$20.30/L	\$2.44	<b>\$2.44</b>
Fallow broadleaf & grass weed control eg ground spray glyphosate 450	Feb	0.05	70.67	\$3.81	1.25 L/ha	\$4.20/L	\$5.25	<b>\$9.06</b>
Apply pre emergent residual soil herbicide eg. ground spray pendimethalin (Stomp®)	Jun	0.05	70.67	\$3.81	2.50 L/ha	\$10.10/L	\$25.25	<b>\$29.06</b>
Broadleaf and grass weed control eg. ground spray glyphosate 450	Jun	with above			1.50 L/ha	\$4.20/L	\$6.30	<b>\$6.30</b>
Sow (seed cost is based on farmer's own seed)	Jun	0.17	91.67	\$15.41	90kg/ha	\$0.40 /kg	\$36.00	<b>\$51.41</b>
Apply seed inoculant	Jun	with above			90kg/ha	\$0.06 /kg	\$5.40	<b>\$5.40</b>
Apply starter fertiliser eg. Legume starter	Jun	with above			100kg/ha	\$0.53 /kg	\$53.00	<b>\$53.00</b>
Pre-emergent residual soil herbicide eg ground spray metribuzin (Sencor®)	Jun	0.05	70.67	\$3.81	0.40 L/ha	\$59.10/L	\$23.64	<b>\$27.45</b>
In crop grass weed control eg. ground spray haloxyfop (Verdict®)	Jul	0.05	70.67	\$3.81	0.10 L/ha	\$48.90/L	\$4.89	<b>\$8.70</b>
Pea weevil control eg. ground spray alpha-cypermethrin (Fastac-Duo®)	Sep	0.05	70.67	\$3.81	0.16 L/ha	\$7.95/L	\$1.27	<b>\$5.08</b>
Heliothis control eg. aerial spray lambda-cyhalothrin (Karate Zeon ®)	Oct	contract	aerial	\$16.00	0.036 L/ha	\$140.39/L	\$5.05	<b>\$21.05</b>
Contract harvest	Dec	contract		\$49.40				<b>\$49.40</b>
Research Levy					1.02%	of on-farm value		<b>\$4.04</b>
Crop Insurance					3.80%	of on-farm value		<b>\$15.06</b>

## NOTES:

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

### Topcrop:

- Aim to achieve 30 plants/m<sup>2</sup> for conventional types, 40 plants/m<sup>2</sup> for semi-leafless types.
- Monitor for pea weevil and heliothis from flowering to pod fill.

### Rotation:

- Avoid rough paddock surfaces as this leads to harvesting difficulties and grain contamination.
- Where suitable machinery is available, stubble retention is preferred over burning for sustainable farming.
- Roll paddock after sowing to press clods, rocks, sticks, etc into soil surface (reduces header damage).

### Seed:

- Budgets are based on cost of using own seed. Consider retail seed price at \$850/tonne, if growing a new or hybrid variety.
- Ensure you include a cost for seed grading.

### Seed dressing:

- Application rate used in this budget is 0.18 L / 100 kg seed.

### Varieties:

- See NSW DPI "Winter crop variety sowing guide 2012".

### Herbicide Resistance Management:

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

### Sowing time:

- May / June

### Soil:

- Paddocks must be free of sticks and stones
- Acid soils must be limed
- Prefer lighter soils

### Harvest:

- Be prepared to harvest when crop reaches 12-15% moisture. Peas can be desiccated for improved harvest management.

### Prices:

- Premiums exist for food quality field peas over feed varieties.

### Labour:

- The labour required for machinery operations is 0.55 hrs/ha.
- At \$22/hour this costs: \$12.03 /ha changing the gross margin to \$86.43 /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 & repairs.

### 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.

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.



**FABA BEANS: After Cereal (Direct drill)**  
Southern Zone - east

**Dryland Winter: 2012**

**1. GROSS MARGIN BUDGET:**

**INCOME:**  
2.40 tonnes/ha@ \$280.00 /tonne on farm

**VARIABLE COSTS:**  
See following page for detail

**A. TOTAL INCOME \$/ha:**

Cultivation

Sowing

Fertiliser & application

Herbicide & application

Insecticide

Fungicide & application

Contract harvesting

Levies

Crop Insurance

Cartage

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

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

Standard Budget \$/ha	Your Budget \$/ha
\$672.00	
\$672.00	
\$0.00	
\$82.61	
\$74.20	
\$64.22	
\$14.55	
\$64.70	
\$49.40	
\$6.85	
\$21.42	
\$0.00	
<b>\$377.96</b>	
<b>\$294.04</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$240 /t	\$260 /t	<b>\$280 /t</b>	\$300 /t	\$320 /t	
1.50	-\$5	\$24	\$53	\$81	\$110	
1.80	\$64	\$99	\$133	\$168	\$202	
2.10	\$133	\$173	\$214	\$254	\$294	
<b>2.40</b>	\$202	\$248	<b>\$294</b>	\$340	\$386	←
2.70	\$271	\$323	\$375	\$426	\$478	
3.00	\$340	\$397	\$455	\$512	\$570	
3.30	\$409	\$472	\$535	\$599	\$662	

**PRODUCT TRADE NAMES**

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# FABA BEANS: After Cereal (Direct drill)

Southern Zone - east

Dryland Winter: 2012

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	0.05	70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
	With above				0.90 L/ha	\$11.61/L	\$10.45	<b>\$10.45</b>
Fallow broadleaf & grass weed control eg ground spray glyphosate 450	Feb/Mar	0.05	70.67	\$3.81	1.25 L/ha	\$4.20/L	\$5.25	<b>\$9.06</b>
Broadleaf and grass weed control eg ground spray glyphosate 450	Apr/May	0.05	70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
Sow (seed cost is based on farmer's own seed)	Apr/May	0.17	91.67	\$15.41	120kg/ha	\$0.50 /kg	\$60.00	<b>\$75.41</b>
Apply seed inoculant		with above			120kg/ha	\$0.060/kg	\$7.20	<b>\$7.20</b>
Apply starter fertiliser - Legume Starter	Apr/May	with above			140kg/ha	\$0.53 /kg	\$74.20	<b>\$74.20</b>
Pre-emergent residual soil herbicide eg ground spray (simazine 500)	Apr/May	0.05	70.67	\$3.81	2.00 L/ha	\$6.00/L	\$12.00	<b>\$15.81</b>
In crop grass weed control eg ground spray haloxyfop-R (Verdict®)	June	0.05	70.67	\$3.81	0.100 L/ha	\$48.90/L	\$4.89	<b>\$8.70</b>
Fungicide for choc. spot eg ground spray mancozeb	June	with above			2.2kg/ha	\$8.65 /kg	\$19.03	<b>\$19.03</b>
Fungicide for ascochyta & choc.spot eg ground spray mancozeb	Aug	0.05	70.67	\$3.81	2.2kg/ha	\$8.65 /kg	\$19.03	<b>\$22.84</b>
As above	Sep	0.05	70.67	\$3.81	2.2kg/ha	\$8.65 /kg	\$19.03	<b>\$22.84</b>
Heliothis control eg. aerial spray lambda-cyhalothrin (Karate®)	Sept/Oct	contract	Aerial	\$9.50	0.036 L/ha	\$140.39/L	\$5.05	<b>\$14.55</b>
Contract harvest	Nov/Dec	contract		\$49.40				<b>\$49.40</b>
Board & Research Levies					1.02%	of on farm value		<b>\$6.85</b>
Crop Insurance					3.19%	of on farm value		<b>\$21.42</b>

<b>NOTES:</b>	<i>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.</i>
<b>Paddock selection:</b>	- Select paddocks with low broadleaf weed burdens. Good weed control is required in previous years. - Grow faba beans on soils with a pH (CaCl <sub>2</sub> ) above 5.2.
<b>Varieties:</b>	- Farah and Nura, preferred due to yield, improved ascochyta blight, chocolate spot tolerance and seed quality.
<b>Rotation:</b>	- Suited to farming systems following a winter cereal.
<b>Herbicide Resistance Management:</b>	- Record herbicide groups and rotate groups where possible to avoid developing herbicide resistance on your farm.
<b>Seed:</b>	- Budgets are based on cost of using own seed. Consider retail seed price at \$1450/tonne, if growing a new or hybrid variety.
<b>Sowing:</b>	- Sowing rate should be adjusted according to seed size, germination percentage and seedling vigour. - If using your own seed, adjust seed price accordingly.
<b>Fertiliser:</b>	- A fertiliser such as Legume Starter is applied because of high phosphorus and sulphur requirements.
<b>Disease control:</b>	- Disease outbreaks in faba beans vary according to seasonal conditions. - Check with your local agronomic adviser for appropriate disease control strategies for your area.
<b>Weed Control:</b>	- Pre emergent herbicides such as simazine, imazethapyr or metribuzin can be used for broadleaf weed control. - Apply appropriate grass selective herbicide according to your herbicide resistance management program.
<b>Labour:</b>	- The labour required for machinery operations is 0.61 hrs/ha. - At \$22/hour this costs: \$13.51 /ha changing the gross margin to \$280.53 /ha
<b>Machinery:</b>	- Machinery costs include variable costs only for the tractor, implements and header. - A tractor with 141kW (190 HP) pto power and 148 kW (225 HP) engine power is assumed.
<b>Economic note:</b>	- These gross margins are only a guide. They do not include overhead costs or GST. <b>Note: Input and crop prices are correct at the time of writing (April 2012). Market uncertainty makes estimation of future pricing impractical.</b> - Use your own figures and price assumptions to estimate your own gross margin.

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.



## Elite Establishment of LUCERNE & SUB. CLOVER PASTURE

Southern Zone - east

Dryland Winter: 2012

### ESTABLISHMENT

					Standard Budget \$/ha	Your Budget \$/ha
<b>INCOME:</b>						
20	sheep/ha@	0.15 kg/day	x 75 days	x \$2.50/kg	\$562.50	
<b>A. TOTAL INCOME \$/ha:</b>					\$562.50	
<b>VARIABLE COSTS:</b>						
Cultivation					\$31.83	
Sowing					\$44.30	
Fertiliser & application					\$76.00	
Herbicide & application					\$46.17	
Insecticide & application					\$7.03	
<b>B. TOTAL VARIABLE COSTS \$/ha:</b>					<b>\$205.33</b>	
<b>C. GROSS MARGIN (A-B) \$/ha:</b>					<b>\$357.17</b>	

### 2. EFFECT OF GRAZING DAYS AND LAMB PRICE ON GROSS MARGIN PER HECTARE:

Lamb price (\$/kg)	Sheep grazing (no. of days)					Gross Margin (\$/ha)
	55	65	75	85	95	
1.00	-\$40	-\$10	\$20	\$50	\$80	
1.50	\$42	\$87	\$132	\$177	\$222	
2.00	\$125	\$185	\$245	\$305	\$365	
<b>2.50</b>	\$207	\$282	<b>\$357</b>	\$432	\$507	←
3.00	\$290	\$380	\$470	\$560	\$650	
3.50	\$372	\$477	\$582	\$687	\$792	
4.00	\$455	\$575	\$695	\$815	\$935	

### PRODUCT TRADE NAMES

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# Elite Establishment of LUCERNE & SUB. CLOVER PASTURE

Southern Zone - east

Dryland Winter: 2012

## 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	<b>\$10.11</b>
Fallow broadleaf & grass weed control eg ground spray glyphosate 450	With above				0.90 L/ha	\$11.61/L	\$10.45	<b>\$10.45</b>
Cultivation - Scarify	Mar/Apr	0.05	70.67	\$3.81	1.25 L/ha	\$4.20/L	\$5.25	<b>\$9.06</b>
Apply pre emergent residual soil herbicide eg. ground spray trifluralin	Apr	0.35	91.67	\$31.83				<b>\$31.83</b>
Sowing - Lucerne seed	May	with above			1.50 L/ha	\$8.50/L	\$12.75	<b>\$16.56</b>
Sowing - Sub. clover seed	May	with above			2kg/ha	\$8.44 /kg	\$16.88	<b>\$16.88</b>
Apply seed inoculant(all seed)	May	with above			5kg/ha	\$5.40 /kg	\$27.00	<b>\$27.00</b>
Apply starter fertiliser eg. MAP	May	with above			7kg/ha	\$0.06 /kg	\$0.42	<b>\$0.42</b>
Apply residual soil insecticide - RLEM control eg. ground spray bifenthrin (Talstar®)	May	with above			100kg/ha	\$0.76 /kg	\$76.00	<b>\$76.00</b>
In crop broadleaf weed control eg ground spray (Bromoxynil 200®)	May	0.05	70.67	\$3.81	0.07 L/ha	\$46.00/L	\$3.22	<b>\$7.03</b>
	June	0.05	70.67	\$3.81	1.50 L/ha	\$10.00/L	\$15.00	<b>\$18.81</b>

## 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.*

### Elite Establishment

- pasture sown without a cereal cover crop.

### 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 (CaCl<sub>2</sub>) < 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 to control red-legged earthmite.

### Grazing:

Lucerne plant must develop crown before grazing commences.

### Labour:

- The labour required for machinery operations is 0.64 hrs/ha.  
- At \$22/hour this costs: \$13.99 /ha changing the variable costs to \$219.32 /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.

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.



**CHICKPEAS (DESI): (Direct drill)**

Southern Zone - east

Dryland Winter: 2012

**1. GROSS MARGIN BUDGET:**

**INCOME:**

1.60 tonnes/ha@ \$440.00 /tonne on farm

**A. TOTAL INCOME \$/ha:**

**VARIABLE COSTS:**

See following page for detail

Cultivation

Sowing

Fertiliser & application

Herbicide & application

Insecticide & application

Fungicides & application

Contract harvesting

Levies

Crop Insurance

Cartage

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

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

Standard Budget \$/ha	Your Budget \$/ha
\$704.00	
<b>\$704.00</b>	
\$0.00	
\$69.81	
\$53.00	
\$87.77	
\$21.05	
\$24.91	
\$49.40	
\$7.18	
\$19.12	
\$0.00	
<b>\$332.25</b>	
<b>\$371.75</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$360 /t	\$400 /t	<b>\$440 /t</b>	\$480 /t	\$520 /t	
1.00	\$41	\$79	\$118	\$156	\$195	
1.20	\$110	\$156	\$202	\$249	\$295	
1.40	\$179	\$233	\$287	\$341	\$395	
<b>1.60</b>	\$249	\$310	<b>\$372</b>	\$433	\$495	
1.80	\$318	\$387	\$456	\$526	\$595	
2.00	\$387	\$464	\$541	\$618	\$695	
2.20	\$456	\$541	\$626	\$711	\$795	

**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.

# CHICKPEAS (DESI): (Direct drill)

Southern Zone - east

Dryland Winter: 2012

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	Jan	0.05	\$70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
2,4-D Ester 600 LVE	With above				0.90 L/ha	\$11.61/L	\$10.45	<b>\$10.45</b>
Fallow broadleaf & grass weed control eg ground spray glyphosate 450	Feb/Mar	0.05	\$70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
Broadleaf and grass weed control eg. ground spray glyphosate 450	with above				1.50 L/ha	\$4.20/L	\$6.30	<b>\$6.30</b>
Sow (seed cost is based on farmer's own seed)	May	0.17	\$91.67	\$15.41	80kg/ha	\$0.60 /kg	\$48.00	<b>\$63.41</b>
Apply seed inoculant	May	with above			80kg/ha	\$0.06 /kg	\$4.80	<b>\$4.80</b>
Apply seed dressing eg thiram+thiabendazole (P-Pickle-T®)	May	with above			0.20L/100kg	\$10.00/L	\$1.60	<b>\$1.60</b>
Apply starter fertiliser eg. Legume Starter	May	with above			100kg/ha	\$0.53 /kg	\$53.00	<b>\$53.00</b>
Apply post sowing pre emergent residual soil herbicide eg. Simazine® +	May	0.05	\$70.67	\$3.81	2.00 L/ha	\$6.00/L	\$12.00	<b>\$15.81</b>
Balance 750 WG®	with above				0.10 L/ha	\$350.00/L	\$35.00	<b>\$35.00</b>
Foliar fungicide for ascochyta blight and botrytis grey mould eg ground spray mancozeb 750	Sep	0.05	\$70.67	\$3.81	1.00kg/ha	\$8.65 /kg	\$8.65	<b>\$12.46</b>
Foliar fungicide for ascochyta blight eg ground spray mancozeb 750	Sep/Oct	0.05	\$70.67	\$3.81	1.00kg/ha	\$8.65 /kg	\$8.65	<b>\$12.46</b>
Heliethis control eg. aerial spray lambda-cyhalothrin (Karate Zeon ®)	Oct	contract		\$16.00	0.036 L/ha	\$140.39/L	\$5.05	<b>\$21.05</b>
Contract harvest	Dec	contract		\$49.40				<b>\$49.40</b>
Research Levy					1.02%	of on-farm value		<b>\$7.18</b>
Crop Insurance					2.72%	of on-farm value		<b>\$19.12</b>

NOTES:	<i>Use of a particular brand name does NOT imply a recommendation of that brand by NSW DPI.</i>
	<i>Always read chemical labels and follow directions carefully, as it is your legal responsibility to do so.</i>
<b>Topcrop:</b>	- Aim for 35 plants/m <sup>2</sup> . Target > 10 pink nodules on 70% of plants.. - Monitor for diseases such as ascochyta blight and sclerotinia.
<b>Rotation:</b>	- Plant in wider rows, 36cms in southern NSW. Sow into cereal stubble.
<b>Varieties:</b>	- See NSW DPI "Winter crop variety sowing guide 2012". Growers should select varieties rated as resistant to Ascochyta Blight. Should varieties with a lower resistance rating be grown additional fungicide applications will be needed to manage Ascochyta Blight in-crop.
<b>Herbicide Resistance Management:</b>	- Record herbicide groups and rotate groups where possible to avoid developing herbicide resistance on your farm.
<b>Seed:</b>	- Budgets are based on cost of using own seed. Consider retail seed price at \$850/tonne, if growing a new or hybrid variety. - Ensure you include a cost for seed grading.
<b>Sowing time:</b>	- Late April to mid May
<b>Soil:</b>	- Grows best in the well drained loams and self-mulching clays of the NSW wheatbelt. Acid soils must be limed.
<b>Seed:</b>	- Use only ascochyta-free seed. Treat seed with thiram+thiabendazole.
<b>Seed dressing:</b>	- Application rate used in this budget is 0.2 L / 100 kg seed.
<b>Pests:</b>	- Heliethis must be controlled. Monitor regularly from budding to pod-fill. "Heliethis may need to be sprayed twice if a second flight occurs late in the season".
<b>Prices:</b>	- Price penalties may be incurred for insect and seed damage.
<b>Labour:</b>	- The labour required for machinery operations is 0.34 hrs/ha. - At \$22/hour this costs: \$7.58 /ha changing the gross margin to \$364.17 /ha
<b>Machinery:</b>	- 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 & repairs.
<b>Economic note:</b>	- These gross margins are only a guide. They do not include overhead costs or GST. <b>Note: Input and crop prices are correct at the time of writing (April 2012). Market uncertainty makes estimation of future pricing impractical.</b> - Use your own figures and price assumptions to estimate your own gross margin.

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.



## CANOLA: After Pasture

Southern Zone - east

Dryland Winter: 2012

### 1. GROSS MARGIN BUDGET:

**INCOME:**

2.00 tonnes/ha@ \$520.00 /tonne on farm

**A. TOTAL INCOME \$/ha:**

**VARIABLE COSTS:**

See following page for detail

Cultivation

Sowing

Fertiliser & application

Herbicide & application

Insecticide & application

Contract windrowing

Contract harvesting

Levies

Crop Insurance

Cartage

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

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

Standard Budget \$/ha	Your Budget \$/ha
\$1,040.00	
<b>\$1,040.00</b>	
\$39.16	
\$53.96	
\$138.25	
\$71.51	
\$13.61	
\$25.00	
\$50.00	
\$13.61	
\$39.55	
\$0.00	
<b>\$444.65</b>	
<b>\$595.35</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$440 /t	\$480 /t	<b>\$520 /t</b>	\$560 /t	\$600 /t	
1.40	\$193	\$246	\$299	\$353	\$406	
1.60	\$276	\$337	\$398	\$459	\$520	
1.80	\$360	\$428	\$497	\$565	\$634	
<b>2.00</b>	\$443	\$519	<b>\$595</b>	\$671	\$748	
2.20	\$527	\$610	\$694	\$778	\$862	
2.40	\$610	\$701	\$793	\$884	\$975	
2.60	\$693	\$792	\$891	\$990	\$1,089	

#### 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.

# CANOLA: After Pasture

Southern Zone - east

Dryland Winter: 2012

## CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Lime (1 in 10 years)	Sept yr1	contract		\$25.00	2.50 t/ha	\$63 /t	\$15.75	<b>\$40.75</b>
Pasture removal/fallowing eg. ground spray glyphosate 450	Sept yr1	0.05	\$70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
Spring control of RLEM eg. ground spray omethoate (Lemat®)	Sept yr1	with above			0.100 L/ha	\$52.00/L	\$5.20	<b>\$5.20</b>
Pasture removal/fallowing eg. ground spray glyphosate 450	Jan yr2	0.05	\$70.67	\$3.81	1.25 L/ha	\$4.20/L	\$5.25	<b>\$9.06</b>
Triclopyr 600 (Garlon @ 600)	With above	0.05	70.67		0.12 L/ha	\$20.30/L	\$2.44	<b>\$6.24</b>
Cultivation - Scarify	Feb yr2	0.35	\$91.67	\$31.83				<b>\$31.83</b>
Broadleaf & grass weed control eg ground spray glyphosate 450	March yr2	0.05	\$70.67	\$3.81	1.50 L/ha	4.20 L/ha	\$6.30	<b>\$10.11</b>
Pre-emergent residual soil herbicide eg ground spray trifluralin (Treflan 480 ®)	April yr2	0.05	\$70.67	\$3.81	1.80 L/ha	\$8.50/L	\$15.30	<b>\$19.11</b>
Cultivation - harrow	April yr2	0.08	\$91.67	\$7.33				<b>\$7.33</b>
Apply sulfur fertiliser eg. gypsum	April yr2	contract		\$7.50	250kg/ha	\$0.056 /kg	\$14.00	<b>\$21.50</b>
Sowing	Ap/My yr2	0.17	\$91.67	\$15.41	3kg/ha	\$12.85 /kg	\$38.55	<b>\$53.96</b>
Apply starter fertiliser eg. MAP	Ap/My yr2	with above			100kg/ha	\$0.76 /kg	\$76.00	<b>\$76.00</b>
Apply residual soil insecticide - RLEM control eg. ground spray bifenthrin (Talstar®)	May yr2	0.05	\$70.67	\$3.81	0.10 L/ha	\$46.00/L	4.60	<b>\$8.41</b>
Incrop grass weed control eg. Ground spray haloxyfop-R (Verdict®)	May yr2	0.05	\$70.67	\$3.81	0.10 L/ha	\$48.90/L	4.89	<b>\$8.70</b>
Incrop broadleaf weed control eg. ground spray clopyralid (Lontrel®)	May yr2	with above			0.30 L/ha	\$27.32/L	8.20	<b>\$8.20</b>
Contract Windrow	Nov yr2	contract		\$25.00				<b>\$25.00</b>
Contract harvest	Nov yr2	contract		\$50.00				<b>\$50.00</b>
Board & Research Levies					\$1.50/tonne + 1.015% of on-farm value			<b>\$13.61</b>
Crop Insurance					3.80% of on-farm value			<b>\$39.55</b>

### 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.*

### Topcrop:

- Aim to achieve 40-50 plants/m<sup>2</sup>. Monitor for RLEM, BOM, aphids and Lucerne flea after emergence.  
- Monitor nitrogen and sulphur status of crop. Record crop monitoring activities.

### Varieties:

- New varieties are available for 2012. See NSW DPI "Winter crop variety sowing guide 2012".

### Herbicide Resistance Management:

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

### Seed:

- Seed price is based on sourcing new seed, if using retained seed from last years harvest adjust accordingly.  
- Ensure you include a cost for seed grading. Seed cost given (\$12.85) is for open pollinated varieties, Hybrids (which make up 60%) of the varieties cost around \$20+/kg.

### Sowing time:

- Late April/mid May, reduce seeding rates if sowing early.

### Soil:

- Lime required on acid soils. Gypsum may be applied at higher rates for soil amelioration purposes on heavy or hard setting soils.

### Fertilisers:

- Fertiliser rates should be tailored to the paddocks individual history, with rates varied accordingly on soil phosphorus, sulfur and nitrogen levels. Soil nutrient tests are recommended prior to any major changes in fertiliser rates, particularly phosphorus and sulphur as these are very important for early crop growth and potential crop yields

### Oil Content:

- An oil bonus/discount of 1.5% of price is applied for every 1% above/below 42% oil content.

### Insecticide:

- Omethoate used for red-legged earthmite.

### Prices:

- Check market information regularly. Consider forward selling some of the crop if prices are good.

### Labour:

- The labour required for machinery operations is 0.95 hrs/ha.  
- At \$22/hour this costs: \$20.81 /ha changing the gross margin to \$574.54 /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 & repairs.

### 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.



Department of  
Primary Industries

**CANOLA: After Cereal**  
Southern Zone - east

**Dryland Winter: 2012**

**1.GROSS MARGIN BUDGET:**

**INCOME:**

2.00 tonnes/ha@ \$520.00 /tonne on farm

**A. TOTAL INCOME \$/ha:**

**VARIABLE COSTS:**

See following page for detail

Cultivation

Sowing

Fertiliser & application

Herbicide & application

Insecticide & application

Contract windrowing

Contract harvesting

Levies

Crop Insurance

Cartage

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

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

Standard Budget \$/ha	Your Budget \$/ha
\$1,040.00	
<b>\$1,040.00</b>	
\$0.00	
\$50.43	
\$188.50	
\$63.90	
\$8.41	
\$25.00	
\$50.00	
\$13.61	
\$39.55	
\$0.00	
<b>\$439.39</b>	
<b>\$600.61</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)				
	\$440 /t	\$480 /t	<b>\$520 /t</b>	\$560 /t	\$600 /t
1.40	\$198	\$251	\$305	\$358	\$411
1.60	\$281	\$342	\$403	\$464	\$525
1.80	\$365	\$433	\$502	\$570	\$639
<b>2.00</b>	\$448	\$524	<b>\$601</b>	\$677	\$753
2.20	\$532	\$616	\$699	\$783	\$867
2.40	\$615	\$707	\$798	\$889	\$981
2.60	\$699	\$798	\$897	\$996	\$1,095

Gross Margin (\$/ha)

**PRODUCT TRADE NAMES**

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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.

# CANOLA: After Cereal

Southern Zone - east

Dryland Winter: 2012

## 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	Jan	0.05	\$70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
Triclopyr 600 (Garlon @ 600)		with above			0.12 L/ha	\$20.30/L	\$2.44	<b>\$2.44</b>
Fallow broadleaf & grass weed control eg ground spray glyphosate 450	Feb/Mar	0.05	\$70.67	\$3.81	1.25 L/ha	\$4.20/L	\$5.25	<b>\$9.06</b>
Burn	Mar							
Broadleaf and grass weed control eg ground spray glyphosate 450	Apr / May	0.05	\$70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
Pre emergent residual soil herbicide eg ground spray Trifluralin (Treflan 480®)	Apr/May	with above			1.80 L/ha	\$8.50/L	\$15.30	<b>\$15.30</b>
Sowing	Apr/May	0.17	\$70.67	\$11.88	3kg/ha	\$12.85 /kg	\$38.55	<b>\$50.43</b>
Apply starter fertiliser eg. Starter 15	Apr/May	with above			150kg/ha	\$0.78 /kg	\$117.00	<b>\$117.00</b>
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	<b>\$8.41</b>
Incrop grass weed control eg. ground spray haloxyfop-R (Verdict®)	Jul	0.05	\$70.67	\$3.81	0.10 L/ha	\$48.90/L	\$4.89	<b>\$8.70</b>
Incrop broadleaf weed control eg. ground spray clopyralid (Lontrel®)	Jul	with above			0.30 L/ha	\$27.32/L	\$8.20	<b>\$8.20</b>
Apply nitrogen eg. urea ground spread	Jul	contract		\$5.50	100kg/ha	\$0.66 /kg	\$66.00	<b>\$71.50</b>
Contract Windrow	Nov	contract		\$25.00				<b>\$25.00</b>
Contract Harvest	Nov/Dec	contract		\$50.00				<b>\$50.00</b>
Board & Research Levies					\$1.50/tonne + 1.015% of on-farm value			<b>\$13.61</b>
Crop Insurance					3.80% of on-farm value			<b>\$39.55</b>

## 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.

### Topcrop:

- Aim to achieve 40-50 plants/m<sup>2</sup>. Monitor for RLEM, BOM, aphids and Lucerne flea after emergence.
- Monitor nitrogen and sulphur status of crop. Record crop monitoring activities.

### Varieties:

- New varieties are available for 2012. See NSW DPI "Winter crop variety sowing guide 2012".

### Herbicide Resistance Management:

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

### Seed:

- Seed price is based on sourcing new seed, if using retained seed from last years harvest adjust accordingly.
- Ensure you include a cost for seed grading. Seed cost given (\$12.85) is for open pollinated varieties, Hybrids (which make up 60%) of the varieties cost around \$20+/kg.

### Sowing time:

- Late April/mid May, reduce seeding rates if sowing early.

### Soil:

- Canola is sensitive to acidic soils. Preferred soils are those with a pH(CaCl<sub>2</sub>) above 5.0.

### Fertilisers:

- Fertiliser rates should be tailored to the paddocks individual history, with rates varied accordingly on soil phosphorus, sulfur and nitrogen levels. Soil nutrient tests are recommended prior to any major changes in fertiliser rates, particularly phosphorus and sulphur as these are very important for early crop growth and potential crop yields

### Rotation:

- Maintain a three-year break between canola crops; remove canola stubble to control disease.
- Blackleg risk is greater when canola is grown every second year.
- Fracture subsoil hardpans prior to sowing canola.

### Prices:

- Prices for this crop can fluctuate widely. Check market information regularly.
- Consider forward selling some of the crop if prices are good.

### Labour:

- The labour required for machinery operations is 0.41 hrs/ha.
- At \$22/hour this costs: \$9.07 /ha changing the gross margin to \$591.54 /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 & repairs.

### Economic note:

- These gross margins are only a guide. They do not include overhead costs or GST.
- **Use your own figures and price assumptions to estimate your own gross margin.**
- 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.

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.



## BROAD LEAF LUPINS: (Direct Drill)

Southern Zone - east

Dryland Winter: 2012

### 1. GROSS MARGIN BUDGET:

**INCOME:**

1.80 tonnes/ha@ \$250.00 /tonne on farm

**A. TOTAL INCOME \$/ha:**

**VARIABLE COSTS:**

See following page for detail

Cultivation

Sowing

Fertiliser & application

Herbicide & application

Insecticide

Fungicide & application

Contract harvesting

Levies

Crop Insurance

Cartage

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

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

Standard Budget \$/ha	Your Budget \$/ha
\$450.00	
<b>\$450.00</b>	
\$0.00	
\$72.91	
\$53.00	
\$78.96	
\$14.65	
\$5.25	
\$49.40	
\$4.59	
\$12.22	
\$0.00	
<b>\$290.98</b>	
<b>\$159.02</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$190 /t	\$220 /t	<b>\$250 /t</b>	\$280 /t	\$310 /t	
1.20	-\$55	-\$20	\$15	\$49	\$84	
1.40	-\$18	\$22	\$63	\$103	\$144	
1.60	\$18	\$65	\$111	\$157	\$203	
<b>1.80</b>	\$55	\$107	<b>\$159</b>	\$211	\$263	←
2.00	\$92	\$149	\$207	\$265	\$323	
2.20	\$128	\$192	\$255	\$319	\$382	
2.40	\$165	\$234	\$303	\$373	\$442	

#### 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.

# BROAD LEAF LUPINS: (Direct Drill)

Southern Zone - east

Dryland Winter: 2012

CALENDAR OF OPERATIONS:								
Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost	Total	Rate/ha	Cost	Total	
			\$/hour	\$/ha		\$	\$/ha	
Triclopyr 600 (Garlon ® 600)	Jan	0.10	70.67	\$7.07	1.50 L/ha	\$4.20/L	\$6.30	<b>\$13.37</b>
	With above				0.12 L/ha	\$20.30/L	\$2.44	<b>\$2.44</b>
Fallow broadleaf & grass weed control eg ground spray glyphosate 450	Feb/Mar	0.05	70.67	3.81	1.25 L/ha	\$4.20/L	\$5.25	<b>\$9.06</b>
Fallow broadleaf & grass weed control eg ground spray glyphosate 450 and	April	0.05	70.67	3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
Apply pre emergent herbicide eg ground spray Trifluralin 480	With above				1.70 L/ha	\$8.50/L	\$14.45	<b>\$14.45</b>
Sow (seed cost is based on farmer's own seed)	Apr	0.17	91.67	15.41	125kg/ha	\$0.40 /kg	\$50.00	<b>\$65.41</b>
Apply seed dressing eg. Iprodione (Rovral®)	Apr	with above			0.25 L/ha	\$21.00/L	\$5.25	<b>\$5.25</b>
Apply seed inoculant	Apr	with above			125kg/ha	\$0.06 /kg	\$7.50	<b>\$7.50</b>
Apply starter fertiliser eg. Legume Starter	Apr	with above			100kg/ha	\$0.53 /kg	\$53.00	<b>\$53.00</b>
Pre-emergent residual soil herbicide eg ground spray simazine	Apr	0.05	70.67	3.81	3.00 L/ha	\$5.68/L	\$17.04	<b>\$20.85</b>
In crop grass weed control eg. ground spray haloxyfop-R (Verdict®)	Jul	0.05	70.67	3.81	0.10 L/ha	\$48.90/L	\$4.89	<b>\$8.70</b>
Heliothis control eg. aerial spray lambda-cyhalothrin (Karate Zeon ®)	Oct	contract	aerial	9.60	0.036 L/ha	\$140.39/L	\$5.05	<b>\$14.65</b>
Contract harvest	Dec	contract		49.40				<b>\$49.40</b>
Research Levy					1.02%	of on-farm value		<b>\$4.59</b>
Crop Insurance					2.72%	of on-farm value		<b>\$12.22</b>

## 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.*

### Topcrop:

- Aim to achieve 35 plants/m<sup>2</sup>. Target > 10 pink nodules on 70% of plants.
- Monitor weekly for heliothis from flowering onwards.

### Rotation:

- Maintain a four year break between lupin crops.
- This crop follows cereals to maintain soil fertility and reduce risk of cereal root disease.
- Fracture subsoil hardpans prior to sowing lupins.

### Varieties:

- See NSW DPI "Winter crop variety sowing guide 2012".

### Sowing time:

- Mid April - mid May

### Herbicide Resistance Management:

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

### Seed:

- Budgets are based on cost of using own seed. Consider retail seed price at \$850/tonne, if growing a new or hybrid variety.
- Use only clean seed. All sowing seed should be tested for alkaloid levels (bitter contamination). Contact your local NSW DPI office to arrange testing prior to sowing.

### Seed dressing:

- Application rate used in this budget is 0.18 L / 100 kg seed.

### Inoculation:

- Especially important in paddocks not previously sown with lupins. Apply Group G inoculant before sowing.

### Soil:

- Broad leaf lupins are sensitive to acid soils where pHca is less than 5.0.
- Avoid poorly drained soils.

### Prices:

- Broadleaf lupins are for human consumption and should command higher prices.
- Price penalties may be incurred for insect and seed coat damage.

### Labour:

- The labour required for machinery operations is 0.41 hrs/ha.
- At \$22/hour this costs: \$9.07 /ha changing the gross margin to \$149.95 /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 & repairs.

### 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.

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.



WHEAT: Short Fallow  
Southern Zone - east

Dryland Winter: 2012

1. GROSS MARGIN BUDGET:

INCOME:  
3.00 tonnes/ha@ \$200.00 /tonne on farm

A. TOTAL INCOME \$/ha:

VARIABLE COSTS:  
See following page for detail

Cultivation  
Sowing  
Fertiliser & application  
Herbicide & application  
Insecticide, fungicide & application  
Contract harvesting  
Levies  
Crop Insurance  
Cartage

B. TOTAL VARIABLE COSTS \$/ha:

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

Standard Budget \$/ha	Your Budget \$/ha
\$600.00	
<b>\$600.00</b>	
\$0.00	
\$36.41	
\$137.60	
\$83.76	
\$28.56	
\$37.07	
\$6.12	
\$13.35	
\$0.00	
<b>\$342.85</b>	
<b>\$257.15</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)				
	\$140 /t	\$170 /t	\$200 /t	\$230 /t	\$260 /t
1.50	-\$120	-\$77	-\$33	\$10	\$54
2.00	-\$52	\$6	\$64	\$122	\$180
2.50	\$15	\$88	\$160	\$233	\$306
<b>3.00</b>	\$83	\$170	<b>\$257</b>	\$344	\$431
3.50	\$151	\$252	\$354	\$455	\$557
4.00	\$215	\$331	\$447	\$563	\$679
4.50	\$277	\$407	\$538	\$669	\$799

← Gross Margin (\$/ha)

PRODUCT TRADE NAMES

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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 and grass weed control eg ground spray glyphosate 450 and Triclopyr 600 (Garlon® 600)	Jan/Feb	\$0.05	\$70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
Fallow broadleaf and grass weed control eg ground spray glyphosate 450	Feb/Mar	0.05	70.67	\$3.81	0.12 L/ha	\$20.30/L	\$2.44	<b>\$2.44</b>
Burn stubble (optional-see Rotation note below)	Mar				1.25 L/ha	\$4.20/L	\$5.25	<b>\$9.06</b>
Broadleaf and grass weed control eg ground spray ground spray glyphosate 450	May	0.05	70.67	\$3.81	1.50 L/ha	\$4.20/L	\$6.30	<b>\$10.11</b>
Pre-emergent residual soil herbicide eg ground spray chlorsulfuron (Glean®)					0.025kg/ha	\$63.50 /kg	\$1.59	<b>\$1.59</b>
Sow (seed cost is based on farmer's own seed)		0.17	91.67	\$15.41	70kg/ha	\$0.30 /kg	\$21.00	<b>\$36.41</b>
Apply starter fertiliser eg. DAP	May				100kg/ha	\$0.76 /kg	\$76.00	<b>\$76.00</b>
Apply cereal seed dressing eg Fluquinconazole (Jockey®)					450ml/100kg	\$50.00/L	\$15.75	<b>\$15.75</b>
In crop grass weed control eg ground spray Tralkoxydim (Achieve®)	July	0.05	70.67	\$3.81	0.400 L/ha	\$60.60/L	\$24.24	<b>\$28.05</b>
In crop broadleaf weed control eg ground spray terbutryn (Igran®) & MCPA 500	July	0.05	70.67	\$3.81	0.850 L/ha	\$18.75/L	\$15.94	<b>\$19.74</b>
Apply nitrogen eg. urea ground spread	July				0.30 L/ha	\$8.90/L	\$2.67	<b>\$2.67</b>
Apply rust spray i.e. triadimefon 125g/L	July				85kg/ha	\$0.660 /kg	\$56.10	<b>\$61.60</b>
Contract harvest	July				1.000 L/ha	\$9.00/L	\$9.00	<b>\$12.81</b>
Board & Research Levies	Dec							<b>\$37.07</b>
Crop Insurance					1.02%	of on-farm value		<b>\$6.12</b>
					2.22%	of on-farm value		<b>\$13.35</b>

NOTES:

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**Topcrop:**

- Adjust sowing rate and plant density to match rainfall zone and target yield/protein.
- Monitor and record crop performance.

**Varieties:**

- See "Winter crop variety sowing guide 2012" When choosing varieites consider the stripe rust resistance rating and risk of a stripe rust epidemic occurring in your area.
- Caution: Some seed dressings may reduce coleoptile length so growers should avoid deep sowing, especially on small or low vigour seed or on short coleoptile varieties. Check seed dressing crop withholding periods especially for grazing varieties. See seed dressings label for further information.

**Herbicide Resistance Management:**

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

**Seed:**

- Budgets are based on cost of using own seed. Consider retail seed price at \$920/tonne, if growing a new variety.

**Fertiliser:**

- Fertiliser rates should be tailored to the paddocks individual history, with rates varied accordingly on soil phosphorus and nitrogen levels. Soil nutrient tests are recommended prior to any major changes in fertiliser rates, particularly phosphorus as this is very important for early crop growth and potential crop yields.

**Sowing time:**

- March to late-May/early June depending on the variety

**Soils:**

- Select suitable varieties for soils which are acid in nature or apply lime to raise soil pH.
- Gypsum applications may be necessary on some surface setting or sodic soils to improve soil structure.

**Rotation:**

- Consider burning or incorporating previous cereal stubbles to reduce foliar disease carry over or to reduce sowing blockages and poor emergence from heavy stubbles.

**Prices:**

- Monitor market prices throughout the season as prices fluctuate widely. Set target prices.

**Labour:**

- The labour required for machinery operations is 0.41 hrs/ha.
- At \$22/hour this costs: \$9 /ha changing the gross margin to \$248.08 /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 & repairs.

**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.