



BARLEY: Short Fallow: No-till
Southern Zone - West

Dryland Winter 2012

1. GROSS MARGIN BUDGET:

INCOME:

2.20 tonnes/ha @ \$150 /t on farm

A. TOTAL INCOME \$/ha:

VARIABLE COSTS:

See following page for detail

Cultivation.....
Sowing.....
Fertiliser.....
Herbicide.....
Contract harvesting.....
Levies.....
Crop insurance.....
Cartage.....

B. TOTAL VARIABLE COSTS \$/ha:

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

Standard Budget \$/ha	Your Budget \$/ha
\$330	

\$330	
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\$0	
\$24	
\$53	
\$53	
\$37	
\$7	
\$7	
\$0	
\$181	

\$149	
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SENSITIVITY TABLES

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)				
	\$110 /t	\$130 /t	\$150 /t	\$170 /t	\$190 /t
0.70	-\$56	-\$43	-\$29	-\$16	-\$2
1.20	-\$4	\$19	\$42	\$66	\$89
1.70	\$48	\$81	\$114	\$147	\$180
2.20	\$101	\$144	\$149	\$229	\$271
2.70	\$151	\$203	\$255	\$307	\$360
3.20	\$197	\$259	\$321	\$383	\$445
3.70	\$244	\$315	\$387	\$458	\$530

Gross Margin (\$/ha)
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BARLEY: Short Fallow: No-till

Southern Zone - West

Dryland Winter 2012

CALENDAR OF OPERATIONS:		Machinery			Inputs			Total Cost
Operation	Month	hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	Total Cost \$/ha
Broadleaf and grass spray eg Glyphosate	Dec	0.05	\$53.37	\$2.87	0.80 L/ha	\$4.20	\$3.36	\$6.23
Melon control eg Garlon® + Wetting agent LI700		With above			0.06 L/ha	\$20.30	\$1.22	\$1.22
		With above			0.18 L/ha	\$7.00	\$0.61	\$0.61
Broadleaf and grass spray eg: Glyphosate	Jan/Feb	0.05	\$53.37	\$2.87	0.80 L/ha	\$4.20	\$3.36	\$6.23
Broadleaf control eg Surpass®		With above			1.00 L/ha	\$6.97	\$6.97	\$6.97
Wetting agent LI700		With above			0.18 L/ha	\$7.00	\$0.61	\$0.61
Broadleaf and grass spray eg: Glyphosate	April / May	0.05	\$53.37	\$2.87	1.20 L/ha	\$4.20	\$5.04	\$7.91
Pre sowing spray eg IBS Treflan®480		With above			1.50 L/ha	\$8.50	\$12.75	\$12.75
Wetting agent LI700		With above			0.18 L/ha	\$7.00	\$0.61	\$0.61
Sow (seed cost is based on farmer's own seed)	May	0.17	\$87.87	\$14.94	30 kg/ha	\$0.30/kg	\$9.00	\$23.94
Starter fertiliser eg: MAP		with above			70 kg/ha	\$760/t	\$53.20	\$53.20
Broadleaf weed control eg: metsulfuron (Ally®)	Jul	0.05	\$53.37	\$2.87	5 g/ha	\$400/kg	\$2.00	\$4.87
Broadleaf weed control eg: MCPA 500	Jul	with above			0.70 L/ha	\$6.76/L	\$4.73	\$4.73
Contract harvest	Nov	contract		\$37.07				\$37.07
Crop Levies						\$1.50/tonne + 1.015% of on-farm value		\$6.65
Crop Insurance						2.224% of on-farm value		\$7.34

AGRONOMIC 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.

Cropcheck:	- Monitor and record crop performance. Key checks include establishment, weeds, insects, tiller numbers, disease and grain fill.
Rotation:	- Sown as a second crop in a rotation of wheat long fallow. - Test soil for nitrogen status if trying to achieve malting grade. Making malting grade depends on seed size and 'grain protein'. Barley can host wheat diseases such as rhizoctonia, take all and crown rot. Care is therefore needed in high risk paddocks.
Varieties:	- See NSW DPI <i>Winter crop variety sowing guide 2012</i> . The two types of barley are Malt and Feed.
Seed:	- Using own seed treat with registered seed dressing. - Budgets are based on cost of using own seed. Consider retail seed price at \$850/tonne, if growing a new or hybrid variety.
Sowing Time:	- Increase seeding rate 10% if sowing time is delayed after May. See <i>Winter crop variety sowing guide 2012</i> for recommended sowing window for each variety.
Weed control:	- See <i>Weed control in winter crops 2012</i> . Weed control will vary depending on paddock history and season. - May need a grass weed spray eg Axial depending on weed presence. - Wetting agent LI700 is used at 350ml/100L of spray solution, but most farmers spray @50L/ha.
Machinery:	- A tractor with 149 kW (200 HP) pto power and 177kW (240 HP) engine power is assumed. - Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.
Labour:	- The labour required for machinery operations is 1.22 hr/ha. - Using a labour cost of \$22/hr, an additional \$26.84/ha can be deducted from the budget.
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.



WHEAT: Short Fallow (ASW/APW/AH) - Conventional cultivation

Southern Zone - West

Dryland Winter 2012

1. GROSS MARGIN BUDGET:

INCOME:

2.20 tonnes/ha @ \$200 /t on farm

Standard Budget \$/ha	Your Budget \$/ha
\$440	

A. TOTAL INCOME \$/ha:

\$440	
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VARIABLE COSTS:

See following page for detail

Cultivation.....	\$46
Sowing.....	\$24
Fertiliser.....	\$38
Herbicide.....	\$22
Contract harvesting.....	\$37
Levies.....	\$4
Crop insurance.....	\$10
Cartage.....	\$0

\$46	
\$24	
\$38	
\$22	
\$37	
\$4	
\$10	
\$0	
\$181	

B. TOTAL VARIABLE COSTS \$/ha:

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

\$259	
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SENSITIVITY TABLES

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)				
	\$160 /t	\$180 /t	\$200 /t	\$220 /t	\$240 /t
0.70	-\$21	-\$8	\$6	\$20	\$33
1.20	\$56	\$79	\$103	\$126	\$149
1.70	\$134	\$167	\$199	\$232	\$265
2.20	\$211	\$254	\$259	\$339	\$381
2.70	\$286	\$338	\$353	\$442	\$495
3.20	\$357	\$419	\$481	\$543	\$605
3.70	\$429	\$500	\$572	\$643	\$715

Gross Margin (\$/ha)



WHEAT: Short Fallow (ASW/APW/AH) - Conventional cultivation
Southern Zone - West **Dryland Winter 2012**

CALENDAR OF OPERATIONS:		Machinery			Inputs			Total Cost \$/ha
Operation	Month	hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Harrow stubble	Jan	0.17	\$47.90	\$8.14				\$8.14
Chisel plough	Jan/Feb	0.22	\$56.22	\$12.55				\$12.55
Scarify	Mar/Apr	0.35	\$72.14	\$25.25				\$25.25
Broadleaf and grass spray eg: Glyphosate + Pre sowing spray eg Logran® +	May	0.05	\$53.37	\$2.87	1.20 L/ha	\$4.20/L	\$5.04	\$7.91
Wetting agent LI700	May	with above			0.035 kg/ha	\$64/kg	\$2.22	\$2.22
Sow (seed cost is based on farmer's own seed)	May	with above			0.18 L/ha	\$7/kg	\$0.61	\$1.23
Starter fertiliser eg: MAP	May	0.17	\$87.87	\$14.94	30 kg/ha	\$0.30/kg	\$9.00	\$23.94
Sulphate of Ammonia	May	with above			50 kg/ha	\$760 /t	\$38.00	\$38.00
Grass weed control eg: Clodinafop-propargyl (Topik®)	May	with above			50 kg/ha	\$680 /t	\$34.00	\$34.00
Contract harvest	Jul	0.05	\$53.37	\$2.87	0.085 L/ha	\$87/L	\$7.40	\$10.27
Crop Levies	Nov	contract		\$37.07				\$37.07
Crop Insurance					1.02%	of on-farm value		\$4.47
					2.224%	of on-farm value		\$9.79

AGRONOMIC NOTES:

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- Cropcheck:** - Monitor and record crop performance. Key checks include establishment, weeds, insects, tiller numbers, disease and grain fill.
- Rotation:** - Sown as a crop following a grain legume, canola or oats.
 - Higher risk of cereal root disease when following a wheat or barley. Burning previous wheat stubbles minimises risks from yellow leaf spot and crown rot. Where suitable machinery is available, stubble retention is preferred over burning for sustainable farming.
- Varieties:** - See NSW DPI *Winter crop variety sowing guide 2012* for approved varieties in SNSW.
 - This budget is based on Ventura.
- Seed:** - When using own seed treat with registered seed dressing. If sowing stripe rust susceptible varieties consider fungicide seed dressings such as Triadimenol (eg Baytan®) or Fluquinconazole (eg Jockey®).
 - Budgets are based on cost of using own seed. Consider retail seed price at \$920/tonne, if growing a new or hybrid variety.
- Sowing Time:** - Increase seeding rate 10% if sowing time is delayed after May.
 - See *Winter crop variety sowing guide 2012* for recommended sowing windows for each variety.
- Weed control:** - See *Weed control in winter crops 2012*. A possible post emergence broadleaf weed control - eg MCPA 500 may be needed in some cases.
 - Wetting agent LI700 is used at 350ml/100L of spray solution, but most farmers spray @50L/ha.
- Machinery:** - A tractor with 149 kW (200 HP) pto power and 177kW (240 HP) engine power is assumed.
 - Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.
- Labour:** - The labour required for machinery operations is 1.17 hr/ha.
 - Using a labour cost of \$22/hr, an additional \$25.74/ha can be deducted from the budget.
- 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.



WHEAT: Long Fallow (ASW/APW/AH): No till
Southern Zone - West

Dryland Winter 2012

1. GROSS MARGIN BUDGET:

INCOME:

3.40 tonnes/ha @ \$200 /t on farm

Standard Budget \$/ha	Your Budget \$/ha
\$680	

A. TOTAL INCOME \$/ha:

\$680

VARIABLE COSTS:

See following page for detail

Cultivation.....	
Sowing.....	
Fertiliser.....	
Herbicide.....	
Contract harvesting.....	
Levies.....	
Crop insurance.....	
Cartage.....	

\$0
\$24
\$61
\$68
\$48
\$7
\$15
\$0
\$223

B. TOTAL VARIABLE COSTS \$/ha:

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

\$457

SENSITIVITY TABLES

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)				
	\$160 /t	\$180 /t	\$200 /t	\$220 /t	\$240 /t
1.90	\$105	\$141	\$178	\$215	\$252
2.40	\$182	\$229	\$275	\$321	\$368
2.90	\$254	\$310	\$367	\$423	\$479
3.40	\$326	\$392	\$457	\$523	\$589
3.90	\$397	\$473	\$548	\$624	\$699
4.40	\$469	\$554	\$639	\$724	\$809
4.90	\$540	\$635	\$730	\$824	\$919

Gross Margin (\$/ha)



WHEAT: Long Fallow (ASW/APW/AH): No till**Southern Zone - West****Dryland Winter 2012****CALENDAR OF OPERATIONS:**

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Broadleaf & grass weed control eg: glyphosate 450	July	0.05	\$53.37	\$2.87	1.00 L/ha	\$4.20/L	\$4.20	\$7.07
Wetting agent LI700		with above			0.18 L/ha	\$7.00/L	\$0.61	\$1.23
Broadleaf & grass weed control eg: glyphosate 450	Oct	0.05	\$53.37	\$2.87	1.00 L/ha	\$4.20/L	\$4.20	\$7.07
Wetting agent LI700		with above			0.18 L/ha	\$7.00/L	\$0.61	\$1.23
Broadleaf and grass spray eg: Glyphosate +		0.05	\$53.37	\$2.87	1.00 L/ha	\$4.20	\$4.20	\$7.07
Melon control eg Garlon® +		With above			0.08 L/ha	\$20.30	\$1.62	\$1.62
Wetting agent LI700		With above			0.18 L/ha	\$7.00	\$0.61	\$1.23
Broadleaf and grass spray eg: Glyphosate 450 +	Mar	0.05	\$53.37	\$2.87	1.50 L/ha	\$4.20/L	\$6.30	\$9.17
Broadleaf control eg Surpass®		With above			1.00 L/ha	\$6.97/L	\$6.97	\$6.97
Wetting agent LI700		With above			0.18 L/ha	\$7.00/L	\$0.61	\$1.23
Pre sowing spray eg Logran® 750 +	May	0.05	\$53.37	\$2.87	0.035kg/ha	\$63.50	\$2.22	\$5.10
glyphosate 450		with above			0.80 L/ha	\$4.20/L	\$3.36	\$3.36
Pre sowing spray eg IBS Treflan®480		with above			1.80 L/ha	\$8.50/L	\$15.30	\$15.30
Sow (seed cost is based on farmer's own seed)	May	0.17	\$87.87	\$14.94	30 kg/ha	\$0.30/kg	\$9.00	\$23.94
Starter fertiliser eg: MAP		with above			80 kg/ha	\$760/t	\$60.80	\$60.80
Contract harvest	Nov	contract		\$48.23				\$48.23
Crop Levies					1.02%	f on-farm value		\$6.90
Crop Insurance					2.224%	f on-farm value		\$15.12

AGRONOMIC NOTES:

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Cropcheck:

- Monitor and record crop performance. Key checks include establishment, weeds, insects, tiller numbers, disease and grain fill.

Rotation:

- Can be the first crop following a pasture phase, or a long fallow after an earlier crop of wheat.
 - Fallow commencement in June/July minimises risk from "Take-All" and Rhizoctonia.
 - This rotation aims at storing subsoil moisture from the fallow.
 - Weed control is essential for maximising moisture retention.

Varieties:

- See NSW DPI *Winter crop variety sowing guide 2012* for approved varieties in SNSW.
 - This budget is based on Ventura.

Seed:

- Using own seed treat with registered seed dressing. If sowing stripe rust susceptible varieties consider fungicide seed dressings such as Triadimenol (eg Baytan®) or Fluquinconazole (eg Jockey®).
 - Budgets are based on cost of using own seed. Consider retail seed price at \$920/tonne, if growing a new or hybrid variety.

Weed control:

Number and timing of herbicides will vary according to season. Aim to spray to remove pasture or hard to kill weeds. Cultivation can replace herbicides if needed and can aid in moisture infiltration in some paddocks. Be careful cultivating light soils for risk of erosion.
 - Wetting agent LI700 is used at 350ml/100L of spray solution, but most farmers spray @50L/ha.
 - See *Weed control in winter crops 2012*. Weed control will vary between paddocks and season.

Sowing time:

- Increase seeding rate by 10% if sowing time is delayed after May.
 - See Winter crop variety sowing guide 2012 for recommended sowing windows for each variety.

Fertiliser:

- Phosphorus and nitrogen fertiliser are important for good yields. It is important to match fertiliser rates with conditions at sowing, and expected yield potential.

Machinery:

- A tractor with 149 kW (200 HP) pto power and 177kW (240 HP) engine power is assumed.
 - Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.

Labour:

- The labour required for machinery operations is 1.42 hr/ha.
 - Using a labour cost of \$22/hr, an additional \$31.34/ha can be deducted from the budget.

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.



OATS: Grazing & Grain (Short Fallow)

Southern Zone - West

Dryland Winter 2012

1. GROSS MARGIN BUDGET:

	Standard Budget \$/ha	Your Budget \$/ha
INCOME:		
1.6 tonnes/ha @ \$140 /t on farm (feed)	\$224	
2 beasts/ha @ 1.00 kg/day x 75 days x \$1.80/kg	\$270	
A. TOTAL INCOME \$/ha:	\$494	
VARIABLE COSTS:		
see opposite page for details		
Cultivation	\$51	
Sowing	\$28	
Fertiliser	\$76	
Herbicide	\$9	
Contract harvesting	\$37	
Levies	\$2	
Crop Insurance	\$5	
Cartage	\$0	
B. TOTAL VARIABLE COSTS \$/ha:	\$207	
C. GROSS MARGIN (A-B) \$/ha:	\$287	

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	\$140 /t	\$160 /t	\$180 /t	
0.60	\$165	\$177	\$188	\$200	\$211	
1.10	\$213	\$235	\$256	\$277	\$299	
1.60	\$262	\$293	\$287	\$355	\$386	←
2.10	\$310	\$351	\$391	\$432	\$473	
2.60	\$359	\$409	\$459	\$509	\$560	

OATS: Grazing & Grain (Short Fallow)

Southern Zone - West

Dryland Winter 2012

CALENDAR OF OPERATIONS:								
Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Harrow	Mar	0.17	\$47.90	\$8.14				\$8.14
Scarify	Mar/Apr	0.35	\$72.14	\$25.25				\$25.25
Wideline	Apr	0.20	\$85.84	\$17.17				\$17.17
Sow (seed cost is based on farmer's own seed)	Apr	0.17	\$91.67	\$15.58	40 kg/ha	\$0.30/kg	\$12.00	\$27.58
Starter fertiliser eg: DAP		with above			100 kg/ha	\$760/t	\$76.00	\$76.00
Broadleaf weed control: eg chlorsulfuron (Glean®)	Jun	0.05	\$53.37	\$2.87	0.02 kg/ha	\$132/t	\$2.64	\$5.51
Broadleaf weed control: eg MCPA LVE		with above			0.50 L/ha	\$6.76/L	\$3.38	\$3.38
Contract harvest	Nov	contract		\$37.07				\$37.07
Crop Levies					1.02%	of on-farm value		\$2.27
Crop Insurance					2.22%	of on-farm value		\$4.98

AGRONOMIC NOTES:

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- Cropcheck:** - Monitor and record crop performance. Key checks include establishment, weeds, insects, tiller numbers, disease and grain fill.
- Rotation:** - Sown as a second crop in a rotation of wheat long fallow.
- Varieties:** - See NSW DPI *Winter crop variety sowing guide 2012*.
- Seed:** - Using own seed treat with registered seed dressing.
- Budgets are based on cost of using own seed. Consider retail seed price at \$850/tonne, if growing a new or hybrid variety.
- Sowing date:** - Increase seeding rate if sowing time is delayed beyond 31st May.
- See *Winter crop variety sowing guide 2012* for recommended sowing window for each variety.
- Weed control:** - See *Weed control in winter crops 2012*. Good weed control is required in previous years.
- Chlorsulfuron (eg. Glean®) is the only herbicide available for the control of ryegrass in oats.
- Beware of residual effect of some herbicides eg chlorsulfuron on high pH soils
- Timing of chlorsulfuron application is crucial for crop safety and weed control.
- Grazing:** - Do not graze lower than 10cm, and remove stock before first node stage.
- Grains yields may be improved by topdressing with urea after grazing.
- Machinery:** - A tractor with 149 kW (200 HP) pto power and 177kW (240 HP) engine power is assumed.
- Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.
- Labour:** - The labour required for machinery operations is 1.18 hrs/ha.
- At \$22/hour this costs: \$25.96 /ha changing the gross margin to \$260.68 /ha
- 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.



OATS: Grain (Short Fallow)

Southern Zone - West

Dryland Winter 2012

1. GROSS MARGIN BUDGET:

INCOME:

2.0 tonnes/ha @ \$150 /t on farm (milling)

A. TOTAL INCOME \$/ha:

VARIABLE COSTS:

see opposite page for details

Cultivation

Sowing

Fertiliser

Herbicide

Contract harvesting

Levies

Crop Insurance

Cartage

B. TOTAL VARIABLE COSTS \$/ha:

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

Standard Budget \$/ha	Your Budget \$/ha
\$300	
\$300	
\$51	
\$31	
\$53	
\$9	
\$37	
\$3	
\$7	
\$0	
\$191	
\$109	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$110 /t	\$130 /t	\$150 /t	\$170 /t	\$190 /t	
0.50	-\$91	-\$81	-\$72	-\$62	-\$52	
1.00	-\$38	-\$18	\$1	\$20	\$40	
1.50	\$16	\$45	\$74	\$103	\$132	
2.00	\$69	\$107	\$109	\$185	\$224	←
2.50	\$122	\$170	\$218	\$267	\$315	
3.00	\$169	\$227	\$285	\$343	\$401	
3.50	\$216	\$284	\$352	\$419	\$487	

OATS: Grain (Short Fallow)

Southern Zone - West

Dryland Winter 2012

CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Harrow	Mar	0.17	\$47.90	\$8.14				\$8.14
Scarify	Mar/Apr	0.35	\$72.14	\$25.25				\$25.25
Wideline	Apr/May	0.20	\$85.84	\$17.17				\$17.17
Sow (seed cost is based on farmer's own seed)	May	0.17	\$87.87	\$14.94	55 kg/ha	\$0.30/kg	\$16.50	\$31.44
Starter fertiliser eg: DAP		with above			70 kg/ha	\$760.00/t	\$53.20	\$53.20
Broadleaf weed control: eg chlorsulfuron (Glean®)	June	0.05	\$53.37	\$2.87	0.02 kg/ha	\$132.00 /kg	\$2.64	\$5.51
Broadleaf weed control: eg MCPA LVE		with above			0.50 L/ha	\$6.76/L	\$3.38	\$3.38
Contract harvest	Nov	contract		\$37.07				\$37.07
Crop Levies					1.02%	of on-farm value		\$3.05
Crop Insurance					2.22%	of on-farm value		\$6.67

AGRONOMIC NOTES:

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- Cropcheck:** - Monitor and record crop performance. Key checks include establishment, weeds, insects, tiller numbers, disease and grain fill.
- Rotation:** - Sown as a second crop in a rotation of wheat long fallow.
- Varieties:** - See NSW DPI *Winter crop variety sowing guide 2012*.
- Care is needed at harvest for some varieties as seed is often blown from head in windy conditions.
- Seed:** - Using own seed treat with registered seed dressing.
- Budgets are based on cost of using own seed. Consider retail seed price at \$850/tonne, if growing a new or hybrid variety.
- Sowing date:** - Increase seeding rate if sowing time is delayed past May.
- See *Winter crop variety sowing guide 2012* for recommended sowing window for each variety.
- Weed control:** - See *Weed control in winter crops 2012*. Weed control varies according to paddock history and season
- Beware of residual effect of some herbicides chlorsulfuron (eg. Glean®) on higher pH soils.
- Timing of Glean® application is crucial for crop safety and weed control.
- Machinery:** - A tractor with 149 kW (200 HP) pto power and 177kW (240 HP) engine power is assumed.
- Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.
- Labour:** - The labour required for machinery operations is 1.18 hrs/ha.
- At \$22/hour this costs: \$25.96 /ha changing the gross margin to \$83.17 /ha
- 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.



OATEN Hay: Short Fallow

Southern Zone - West

Dryland Winter 2012

1. GROSS MARGIN BUDGET:

INCOME:

6.00 tonnes/ha @ \$165 /t on farm

A. TOTAL INCOME \$/ha:

VARIABLE COSTS:

see opposite page for details

Cultivation

Sowing

Fertiliser

Herbicide

Contract cutting, raking, and baling

Contract cartage

B. TOTAL VARIABLE COSTS \$/ha:

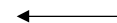
C. GROSS MARGIN (A-B) \$/ha:

Standard Budget \$/ha	Your Budget \$/ha
\$990	
\$990	
\$45	
\$40	
\$76	
\$9	
\$257	
\$0	
\$426	
\$564	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)				
	\$145 /t	\$155 /t	\$165 /t	\$175 /t	\$185 /t
3.00	\$138	\$168	\$198	\$228	\$258
4.00	\$240	\$280	\$320	\$360	\$400
5.00	\$342	\$392	\$442	\$492	\$542
6.00	\$444	\$504	\$564	\$624	\$684
7.00	\$547	\$617	\$687	\$757	\$827
8.00	\$649	\$729	\$809	\$889	\$969
9.00	\$751	\$841	\$931	\$1021	\$1111

Gross Margin (\$/ha)



OATEN Hay: Short Fallow
Southern Zone - West

Dryland Winter 2012

CALENDAR OF OPERATIONS:								
Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Burn Stubble	Feb/Mar							
Scarify	Mar/Apr	0.35	\$72.14	\$25.25				\$25.25
Wideline + harrow	Apr/May	0.20	\$97.34	\$19.47				\$19.47
Sow (seed cost is based on farmer's own seed)	May	0.17	\$91.67	\$15.58	80 kg/ha	\$0.30/kg	\$24.00	\$39.58
Starter fertiliser eg: DAP		with above			100 kg/ha	\$760/t	\$76.00	\$76.00
Broadleaf weed control: eg chlorsulfuron (Glean®)	Jun	0.05	\$53.37	\$2.87	0.02 kg/ha	\$132/kg	\$2.64	\$5.51
Broadleaf weed control: MCPA LVE		with above			0.50 L/ha	\$6.76/L	\$3.38	\$3.38
Contract cut, rake + bale	Oct/Nov	contract	8.55	bales/ha	\$30.00	\$/bale	\$256.50	\$256.50

NOTES:	
	<p>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.</p>
Cropcheck:	- Monitor and record crop performance. Key checks include establishment, weeds, insects, tiller numbers, disease and grain fill.
Rotation:	<p>- Sown as a second crop in a rotation of wheat long fallow. Good option for weedy paddocks</p> <p>- Oats is not an ideal cover crop for establishing pasture.</p> <p>- Where suitable machinery is available, stubble retention is preferred over burning for sustainable farming. Standing stubbles will reduce quality of subsequent hay cuts.</p>
Varieties:	- See NSW DPI <i>Winter crop variety sowing guide 2012</i> .
Sowing date:	<p>- Sow mid May to early June to minimise risk of weather damage at cutting.</p> <p>- See <i>Winter crop variety sowing guide 2012</i> for recommended sowing window for each variety.</p>
Weed control:	<p>- Chlorsulfuron (eg. Glean®) is the only herbicide available for the control of ryegrass in oats.</p> <p>- Timing of chlorsulfuron application is crucial for crop safety and weed control.</p> <p>- Beware of residual effect of some herbicides on high pH soils eg Glean®</p> <p>- See <i>Weed control in winter crops 2012</i>. Weed control varies according to paddock history and season</p>
Machinery:	<p>- A tractor with 149 kW (200 HP) pto power and 177kW (240 HP) engine power is assumed.</p> <p>- Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.</p>
Labour:	<p>-The labour required for machinery operations is 0.97 hrs/ha.</p> <p>- At \$22/hour this costs: \$21.28 /ha changing the gross margin to \$543.02 /ha</p>
Economic note:	<p>- These gross margins are only a guide. They do not include overhead costs or GST.</p> <p>- Use your own figures and price assumptions to estimate your own gross margin.</p>



NARROW LEAF LUPINS: After Cereal - No till

Southern Zone - West

Dryland Winter 2012

1. GROSS MARGIN BUDGET:

INCOME:

1.3 tonnes/ha @ \$200 /t on farm

A. TOTAL INCOME \$/ha:

VARIABLE COSTS:

see opposite page for details

Cultivation

Sowing

Fertiliser

Herbicide

Insecticide

Contract harvesting

Levies

Crop Insurance

Cartage

B. TOTAL VARIABLE COSTS \$/ha:

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

Standard Budget \$/ha	Your Budget \$/ha
\$260	
\$260	
\$0	
\$80	
\$61	
\$61	
\$26	
\$49	
\$3	
\$7	
\$0	
\$287	
(\$27)	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$160 /t	\$180 /t	\$200 /t	\$220 /t	\$240 /t	
0.90	-\$139	-\$121	-\$104	-\$87	-\$69	←
1.10	-\$108	-\$87	-\$66	-\$44	-\$23	
1.30	-\$77	-\$52	-\$27	-\$2	\$23	
1.50	-\$46	-\$17	\$11	\$40	\$69	
1.70	-\$16	\$17	\$50	\$83	\$115	

NARROW LEAF LUPINS: After Cereal - No till

Southern Zone - West

Dryland Winter 2012

CALENDAR OF OPERATIONS:								
Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Broadleaf and grass spray eg: Glyphosate	Dec	0.05	\$53.37	\$2.87	0.80 L/ha	\$4.20/L	\$3.36	\$6.23
Melon grass eg: Garlon®	with above				0.06 L/ha	\$20.30/L	\$1.22	\$1.22
Wetting agent LI700	with above				0.18 L/ha	\$7.00/L	\$0.61	\$0.61
Broadleaf and grass spray eg: Glyphosate	Jan/Feb	0.05	\$53.37	\$2.87	0.80 L/ha	\$4.20	\$3.36	\$6.23
Broadleaf control eg: Surpass®	with above				0.60 L/ha	\$6.97	\$4.18	\$4.18
Wetting agent LI700	with above				0.18 L/ha	\$7.00	\$0.61	\$0.61
Broadleaf and grass spray eg: Glyphosate	Apr/May	0.05	\$53.37	\$2.87	1.20 L/ha	\$4.20	\$5.04	\$7.91
Pre sowing spray eg: IBS Treflan®480	with above				1.50 L/ha	\$8.50	\$12.75	\$12.75
Wetting agent LI700	with above				0.18 L/ha	\$7.00	\$0.61	\$0.61
Broadleaf & grass weed control eg: Simazine 500		0.05	\$53.37	\$2.87	2.00 L/ha	\$6.00/L	\$12.00	\$14.87
Sow	Ap/May	0.17	\$91.67	\$15.58	75 kg/ha	\$0.82/kg	\$61.50	\$77.08
Phosphorus and Sulphur fertiliser eg: Grain Legume Super	with above				90 kg/ha	\$680 /t	\$61.20	\$61.20
Seed Inoculant	with above				75 kg/ha	\$0.04/kg	\$3.00	\$3.00
Grass weed control: eg haloxyfop-R (Verdict®)		0.05	\$53.37	\$2.87	0.06 L/ha	\$48.90/L	\$2.93	\$5.81
Aerial spray for insect control eg: esfenvalerate (Hallmark® 50 EC)	Sep	contract		\$18.15	0.30 L/ha	\$25.00/L	\$7.50	\$25.65
Contract harvest	Nov	contract		\$49.42				\$49.42
Crop Levies					1.02%	of on-farm value		\$2.64
Crop Insurance					2.72%	of on-farm value		\$7.06

NOTES:

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Cropcheck

- Monitor and record crop performance. Key checks include establishment, nodulation, weeds, insects, disease and grain fill.

Rotation

- Pulse crops are used in rotation with cereals to provide good soil nitrogen, break disease cycles and increase yields and protein content.
The true budget value from pulse crops should be calculated considering the extra yield in the following wheat crop.

Seed Dressing

- Fungicide seed dressing may be required to prevent brown leaf spot.

Sowing Rates

- 80-100 Kg/ha for narrow-leaved lupins. Check seed size.

Weed control

- See NSW DPI *Weed Control in Winter Crops 2012*.
- If Brodal® used for the control of wild radish and mustards, add another \$19.84/ha.
- Wetting agent LI700 is used at 350ml/100L of spray solution, but most farmers spray @50L/ha.

Pest control

- See *Insect and mite control in field crops 2011*. Control insects when thresholds are exceeded.

Machinery

- A tractor with 149 kW (200 HP) pto power and 177kW (240 HP) engine power is assumed.
- Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.

Labour

- The labour required for machinery operations is 0.41 hrs/ha.
- At \$22/hour this costs: \$9.12 /ha changing the gross margin to (\$36.23)

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.**



Juncea Canola: Long Fallow
Southern Zone - West

Dryland Winter 2012

1. GROSS MARGIN BUDGET:

INCOME:

1.3 tonnes/ha @ \$500 /t on farm

A. TOTAL INCOME \$/ha:

VARIABLE COSTS:

see opposite page for details

Cultivation

Sowing

Fertiliser

Herbicide

Insecticide

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
\$650	
\$650	
\$0	
\$54	
\$148	
\$38	
\$13	
\$50	
\$54	
\$9	
\$25	
\$0	
\$391	
\$259	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)				
	\$420 /t	\$460 /t	\$500 /t	\$540 /t	\$580 /t
-0.20	-\$437	-\$445	-\$452	-\$460	-\$468
0.30	-\$238	-\$227	-\$215	-\$204	-\$192
0.80	-\$39	-\$8	\$22	\$52	\$83
1.30	\$160	\$210	\$259	\$309	\$358
1.80	\$359	\$428	\$496	\$565	\$633
2.30	\$558	\$646	\$734	\$821	\$909
2.80	\$777	\$884	\$991	\$1097	\$1204

Gross Margin (\$/ha)



Juncea Canola: Long Fallow
Southern Zone - West

Dryland Winter 2012

CALENDAR OF OPERATIONS:								
Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Broadleaf & grass weed control eg: glyphosate 450	Jul	0.05	\$53.37	\$2.87	1.25 L/ha	\$4.20/L	\$5.25	\$8.12
Broadleaf & grass weed control eg: glyphosate 450	Mar	0.05	\$53.37	\$2.87	1.25 L/ha	\$4.20/L	\$5.25	\$8.12
Nitrogen and sulphur fertiliser eg: Canola Special®	Apr	0.17	\$91.67	\$15.58	150 kg/ha	0.53 kg/ha	\$79.65	\$95.23
Broadleaf and grass weed control eg: trifluralin	Apr	0.05	\$53.37	\$2.87	1.50 L/ha	\$8.50/L	\$12.75	\$15.62
Sow	Apr/May	0.17 with above	\$91.67	\$15.58	3 kg/ha	\$12.85/kg	\$38.55	\$54.13
Apply starter fertiliser eg: DAP					70 kg/ha	\$0.76/t	\$53.20	\$53.20
Mite control eg: bifenthrin (Talstar®)		0.05	\$53.37	\$2.87	75ml/ha	\$46.00/L	\$3.45	\$6.32
Grass weed control: eg haloxyfop (Verdict®)	Jun	0.05	\$53.37	\$2.87	0.06 L/ha	\$49/L	\$2.93	\$5.81
Insect control eg: aerial spray alpha-cypermethrin (Dominex 100 EC ®) (1 in 3 years)	Aug/Sep	contract		\$18.15	0.20 L/ha	\$7.95/L	\$1.59	\$6.58
Contract windrow	Oct	contract		\$50.00				\$50.00
Contract harvest	Nov/Dec	contract		\$54.36				\$54.36
Crop levies					\$1.50/tonne + 1.015% of on-farm value			\$8.55
Crop insurance					3.80% of on-farm value			\$24.72

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.

Cropcheck	- Monitor and record crop performance. Key checks include establishment, weeds, insects. Monitor nitrogen and sulphur status of crop. - See Primefact <i>Juncea canola in the low rainfall zone of south west NSW</i>
Rotation	- Juncea canola is usually sown following a cereal, however can also follow a fallow. - Maintain a three-year break between Juncea canola crops. Juncea-canola is more tolerant of blackleg than canola.
Varieties:	- See NSW DPI <i>Winter crop variety sowing guide 2012</i> .
Sowing time	- Late April/mid May, reduce seeding rates if sowing early.
Soil	- Juncea canola is sensitive to acidic soils. Preferred soils are those with a pH above 5.0 (CaCl ₂).
Fertilisers	- Ensure sulphur requirements are met before or at sowing. - Apply 40 kg/ha of Canola Special (33%N:12%S) at a minimum. Rates may be higher where yields are increased or where N and S soil levels are low. Use soil tests as a guide to nutrition requirements. - Treflan® is incorporated by soow soil between rows using knife points and press wheels. Ensure sowing speeds do not cause soil to be thrown between rows.
Oil Content	- An oil bonus/discount of 1.5% of price is applied for every 1% above/below 40% oil content. - This may vary however between various contracts.
Weed control	- See <i>Weed control in winter crops 2012</i> . Will vary between paddocks and seasons. Be careful if applying Lontrel, as Juncea canola has shown to be sensitive to this herbicide, especially when applied in the later part of the application window.
Pest control	- A bare earth spray may be necessary if mites are not controlled the previous spring.
Windrowing	- Reduces the risk of seed loss at harvest due to shattering and uneven ripening. Juncea canola will still shatter, however is more resistant than canola. Windrowing is usually necessary 1 in every 2 years.
Prices	- Prices may fluctuate. Consider forward selling some of crop if prices are high.
Machinery	- A tractor with 149 kW (200 HP) pto power and 177kW (240 HP) engine power is assumed. - Machinery costs refer to variable costs: fuel, oil, filters, tyres, batteries & repairs.
Labour	- The labour required for machinery operations is 0.76 hrs/ha. - At \$22/hour this costs: \$16.76/ha changing the gross margin \$242.46/ha
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.



FIELD PEAS: After Cereal - No till
Southern Zone - West

Dryland Winter 2012

1. GROSS MARGIN BUDGET:

INCOME:

1.5 tonnes/ha @ \$220 /t on farm

A. TOTAL INCOME \$/ha:

VARIABLE COSTS:

see opposite page for details

Cultivation

Sowing

Fertiliser

Herbicide

Insecticide

Contract harvesting

Levies

Crop Insurance

Cartage

B. TOTAL VARIABLE COSTS \$/ha:

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

Standard Budget \$/ha	Your Budget \$/ha
\$330	
\$330	
\$12	
\$145	
\$61	
\$43	
\$19	
\$49	
\$3	
\$13	
\$0	
\$346	
(\$16)	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$180 /t	\$200 /t	\$220 /t	\$240 /t	\$260 /t	
1.00	-\$159	-\$140	-\$121	-\$102	-\$83	
1.50	-\$73	-\$45	-\$16	\$13	\$41	
2.00	\$13	\$51	\$89	\$127	\$165	
2.50	\$148	\$195	\$243	\$290	\$338	

FIELD PEAS: After Cereal - No till

Southern Zone - West

Dryland Winter 2012

CALENDAR OF OPERATIONS:								
Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Broadleaf and grass spray eg: Glyphosate	Dec	0.05	\$53.37	\$2.87	0.80 L/ha	\$4.20/L	\$3.36	\$6.23
Melon grass eg: Garlon®		with above			0.06 L/ha	\$20.30/L	\$1.22	\$1.22
Wetting agent LI700		with above			0.18 L/ha	\$7.00/L	\$0.61	\$0.61
Broadleaf and grass spray eg: Glyphosate	Jan/Feb	0.05	\$53.37	\$2.87	0.80 L/ha	\$4.20/L	\$3.36	\$6.23
Broadleaf control eg: surpass®		with above			0.60 L/ha	\$6.97/L	\$4.18	\$4.18
Wetting agent LI700		with above			0.18 L/ha	\$7.00/L	\$0.61	\$0.61
Broadleaf and grass spray eg: Glyphosate	May	0.05	\$53.37	\$2.87	0.80 L/ha	\$4.20/L	\$3.36	\$6.23
Pre sowing spray eg: IBS Diuron®500		with above			1.50 L/ha	\$7.70/L	\$11.55	\$11.55
Wetting agent LI700		with above			0.18 L/ha	\$7.00/L	\$0.61	\$0.61
Sow	May	0.17	\$91.67	\$15.58	100 kg/ha	\$1.27/kg	\$127.00	\$142.58
Phosphorus and Sulphur fertiliser eg: Grain Legume Super		with above			90 kg/ha	\$680 /t	\$61.20	\$61.20
Seed Inoculant		with above			70 kg/ha	\$0.04/kg	\$2.80	\$2.80
Rolling		0.42	29.28	\$12.30				\$12.30
Grass weed control, eg: sethoxydim (Sertin®)		0.05	\$53.37	\$2.87	0.05 L/ha	\$48.90/L	\$2.45	\$5.32
Aerial spray for insect control eg: alpha-cypermethrin (eg Fastac Duo®)	Sep	contract		\$18.15	0.10 L/ha	\$7.95/L	\$0.80	\$18.95
Contract harvest		contract		\$49.42				\$49.42
Crop Levies					1.02%	of on-farm value		\$3.35
Crop Insurance					3.80%	of on-farm value		\$12.55

NOTES:	
	<p>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.</p>
Cropcheck:	- Monitor and record crop performance. Key checks include establishment, nodulation, weeds, insects, disease and grain fill.
Rotation:	- Pulse crops are used in rotation with cereals to provide good soil nitrogen and break disease cycles and increase yields and protein content in following wheat crop. - Avoid rough paddock surfaces as this leads to harvesting difficulties and grain contamination. - Roll paddock after sowing to press rocks and sticks into soil surface to reduce header damage.
Seed:	- Use only certified seed and test for bacterial blight disease.
Varieties:	- See NSW DPI <i>Winter crop variety sowing guide 2012</i> .
Sowing date:	- Mid May-June. Increase seeding rate if sowing delayed past 31st May.
Sowing rate:	- Adjust rate for seed size and variety and germination %. See <i>Winter crop variety sowing guide 2012</i> for recommended plant populations for each variety.
Weed control:	- See <i>Weed control in winter crops 2012</i> . Weed control will vary between paddocks and seasons. - Wetting agent LI700 is used at 350ml/100L of spray solution, but most farmers spray @50L/ha.
Pest control:	- See <i>Insect and mite control in field crops 2011</i> . - Monitor weekly for pea weevil and heliothis from start of flowering (fumigate carry over seed).
Harvesting:	- Using pea pluckers or crop lifters helps reduce losses in many cases. - Take care during harvesting, transporting and storing to minimise split grain.
Machinery:	- A tractor with 149 kW (200 HP) pto power and 177kW (240 HP) engine power is assumed. - Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.
Labour:	- The labour required for machinery operations is 0.80 hrs/ha. - At \$22/hour this costs: \$17.71 /ha changing the gross margin to (\$33.66)
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.

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: After Cereal: No till
Southern Zone - West

Dryland Winter 2012

1. GROSS MARGIN BUDGET:

INCOME:

1.3 tonnes/ha @ \$440.0 /t on farm

A. TOTAL INCOME \$/ha:

VARIABLE COSTS:

see opposite page for details

Cultivation

Sowing

Fertiliser

Herbicide

Insecticide

Fungicide

Contract harvesting

Levies

Crop Insurance

Cartage

B. TOTAL VARIABLE COSTS \$/ha:

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

Standard Budget \$/ha	Your Budget \$/ha
\$572	
\$572	
\$0	
\$120	
\$61	
\$67	
\$26	
\$0	
\$59	
\$6	
\$16	
\$0	
\$355	
\$217	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)				
	\$420 /t	\$400 /t	\$440 /t	\$480 /t	\$520 /t
0.50	-\$131	-\$141	-\$122	-\$103	-\$83
0.80	-\$10	-\$26	\$5	\$36	\$67
1.30	\$192	\$167	\$217	\$267	\$317
1.80	\$394	\$360	\$429	\$498	\$568
2.30	\$596	\$552	\$641	\$729	\$818

Gross Margin (\$/ha)



CHICKPEAS: After Cereal: No till

Southern Zone - West

Dryland Winter 2012

CALENDAR OF OPERATIONS:								
Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Broadleaf and grass spray eg: Glyphosate +	Dec	0.05	\$53.37	\$2.87	0.80 L/ha	4.20 L/ha	\$3.36	\$6.23
Melon control eg Garlon®		with above			0.06 L/ha	\$20.30	\$1.22	\$1.22
Wetting agent LI700		with above			0.18 L/ha	\$7.00	\$0.61	\$0.61
Broadleaf and grass spray eg: Glyphosate +	Jan/Feb	0.05	\$53.37	\$2.87	0.80 L/ha	4.20 L/ha	\$3.36	\$6.23
Broadleaf control eg Surpass®		with above			0.60 L/ha	6.97 L/ha	\$4.18	\$4.18
Wetting agent LI700		with above			0.18 L/ha	7.00 L/ha	\$0.61	\$0.61
Broadleaf and grass spray eg: Glyphosate +	Apr/May	0.05	\$53.37	\$2.87	1.20 L/ha	4.20 L/ha	\$5.04	\$7.91
Wetting agent LI700		with above			0.18 L/ha	7.00 L/ha	\$0.61	\$0.61
Sow	May	0.17	\$91.67	\$15.58	80 kg/ha	\$1.27/kg	\$101.60	\$117.18
Phosphorus and Sulphur fertiliser eg: Grain Legume Super	May	with above			90 kg/ha	\$0.68/kg	\$61.20	\$61.20
Seed Inoculant	May	with above			80 kg/ha	\$0.04/kg	\$3.20	\$3.20
Broadleaf and grass weed control eg prometryn	May	0.05	\$53.37	\$2.87	1.50 L/ha	\$14.48/L	\$21.72	\$24.59
Broadleaf and grass weed control, eg: simazine 500	May	with above			1.50 L/ha	\$6.00/L	\$9.00	\$9.00
Grass weed control: eg haloxyfop (Verdict®)	Jun	0.05	\$53.37	\$2.87	0.06 L/ha	\$48.90/L	\$2.93	\$5.81
Aerial spray for heliothis control eg: esfenvalerate	Sep	contract		\$18.15	0.30 L/ha	\$25.00/L	\$7.50	\$25.65
Contract harvest	Nov/Dec	contract		\$59.31				\$59.31
Crop Levies					1.02%	of on-farm value		\$5.81
Crop Insurance					2.72%	of on-farm value		\$15.54

NOTES:

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- Cropcheck:** - Monitor and record crop performance. Key checks include establishment, nodulation, weeds, insects, disease and grain fill.
- Rotation:**
 - Pulse crops are used in rotation with cereals to provide good soil nitrogen, break disease cycles and increase yields and protein content.
 - Where suitable machinery is available, stubble retention is preferred over burning for sustainable farming.
 - The true budget value from pulse crops should be calculated considering the extra yield in the following wheat crop.
- Soils:** - Prefers well drained loams/self-mulching soils. Sensitive to waterlogging.
- Varieties:** - See NSW DPI *Winter crop variety sowing guide 2012*.
- Weed control:**
 - Control weeds (especially thistles) in rotation beforehand.
 - Herbicides are boom sprayed in a dry year and aerial sprayed in a wet year.
 - Wetting agent LI700 is used at 350ml/100L of spray solution, but most farmers spray @50L/ha.
- Sowing date:** - Critical. May - early June.
- Sowing rate:** - Adjust for variety and seed size.
- Disease Control:**
 - Budget assumes an ascochyta resistant variety
 - Fungicide timing is crucial if crop is attacked by ascochyta blight, and varies for more resistant varieties.
 - See latest fungicide application guide. See www.pulseaus.com.au for the latest fungicide application guide.
- Machinery:**
 - A tractor with 149 kW (200 HP) pto power and 177kW (240 HP) engine power is assumed.
 - Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.
- Labour:**
 - The labour required for machinery operations is 0.35 hrs/ha.
 - At \$22/hour this costs: \$7.64 /ha changing the gross margin \$209.45 /ha
- 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.**

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: Long Fallow
Southern Zone - West

Dryland Winter 2012

1. GROSS MARGIN BUDGET:

	Standard Budget \$/ha	Your Budget \$/ha
INCOME:		
1.5 tonnes/ha @ \$520 /t on farm	\$780	
A. TOTAL INCOME \$/ha:	\$780	
VARIABLE COSTS:		
see opposite page for details		
Cultivation	\$34	
Sowing	\$44	
Fertiliser	\$141	
Herbicide	\$38	
Insecticide	\$13	
Contract windrowing	\$50	
Contract harvesting	\$54	
Levies	\$10	
Crop Insurance	\$30	
Cartage	\$0	
B. TOTAL VARIABLE COSTS \$/ha:	\$414	
C. GROSS MARGIN (A-B) \$/ha:	\$366	

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	\$520 /t	\$560 /t	\$600 /t	
0.00	-\$374	-\$374	-\$374	-\$374	-\$374	
0.50	-\$165	-\$146	-\$127	-\$108	-\$89	
1.00	\$43	\$81	\$119	\$158	\$196	
1.50	\$252	\$309	\$366	\$423	\$480	←
2.00	\$461	\$537	\$613	\$689	\$765	
2.50	\$689	\$784	\$879	\$975	\$1070	
3.00	\$898	\$1012	\$1126	\$1240	\$1355	

CANOLA: Long Fallow
Southern Zone - West

Dryland Winter 2012

CALENDAR OF OPERATIONS:								
Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Broadleaf & grass weed control eg: glyphosate 450	Jul	0.05	\$53.37	\$2.87	1.25 L/ha	\$4.20/L	\$5.25	\$8.12
Chisel Plough	Oct	0.22	\$78.09	\$17.18				\$17.18
Wideline	Dec/Jan	0.20	\$85.84	\$17.17				\$17.17
Broadleaf & grass weed control eg: glyphosate 450	Mar	0.05	\$53.37	\$2.87	1.25 L/ha	\$4.20/L	\$5.25	\$8.12
Nitrogen and sulphur fertiliser eg: Canola Special®	Apr	0.17	\$91.67	\$15.58	150 kg/ha	\$0.53/kg	\$79.65	\$95.23
Broadleaf and grass weed control eg: trifluralin	Apr	0.05	\$53.37	\$2.87	1.50 L/ha	\$8.50/L	\$12.75	\$15.62
Sow	Apr/May	0.17	\$91.67	\$15.58	2.20 kg/ha	\$12.85/kg	\$28.27	\$43.85
Apply starter fertiliser eg: DAP		with above			60 kg/ha	\$0.76/kg	\$45.60	\$45.60
Mite control eg: bifenthrin (Talstar®)		0.05	\$53.37	\$2.87	75ml/ha	\$46.00/L	\$3.45	\$6.32
Grass weed control: eg haloxyfop (Verdict®)	Jun	0.05	\$53.37	\$2.87	0.06 L/ha	\$49/L	\$2.93	\$5.81
Insect control eg: aerial spray alpha-cypermethrin (Dominex 100 EC ®) (1 in 3 years)	Aug/Sep	contract		\$18.15	0.20 L/ha	\$7.95/L	\$1.59	\$6.58
Contract windrow	Oct	contract		\$50.00				\$50.00
Contract harvest	Nov/Dec	contract		\$54.36				\$54.36
Crop levies					\$1.50/tonne + 1.015% of on-farm value			\$10.17
Crop insurance					3.80% of on-farm value			\$29.66

NOTES:	
	<p>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.</p>
Cropcheck:	- Monitor and record crop performance. Key checks include establishment, weeds, insects. Monitor nitrogen and sulphur status of crop.
Rotation:	- Canola is the first crop following a legume pasture phase or fallow. - 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.
Varieties:	- See NSW DPI <i>Winter crop variety sowing guide 2012</i> .
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 above 5.0 (CaCl ₂).
Fertilisers:	- Ensure sulphur requirements are met before or at sowing. - Apply 150 kg/ha of Canola Special (33%N:12%S). - Use nitrogen soil tests as a guide to nitrogen requirements. - Treflan® and/or Avadex BW® is incorporated when applying fertiliser.
Oil Content:	- An oil bonus/discount of 1.5% of price is applied for every 1% above/below 40% oil content.
Weed control:	- See Weed control in winter crops 2012. Will vary between paddocks and seasons.
Pest control:	- A bare earth spray may be necessary if mites are not controlled the previous spring.
Windrowing:	- Reduces the risk of seed loss at harvest due to shattering.
Prices:	- Prices may fluctuate. Consider forward selling some of crop if prices are high.
Machinery:	- A tractor with 149 kW (200 HP) pto power and 177kW (240 HP) engine power is assumed. - Machinery costs refer to variable costs: fuel, oil, filters, tyres, batteries & repairs.
Labour:	- The labour required for machinery operations is 1.29 hrs/ha. - At \$22/hour this costs: \$28.31/ha changing the gross margin \$337.88/ha
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.

BROAD LEAF LUPINS: After Cereal - No till

Southern Zone - West

Dryland Winter 2012

1. GROSS MARGIN BUDGET:

	Standard Budget \$/ha	Your Budget \$/ha
INCOME:		
1.5 tonnes/ha @ \$250 /t on farm	\$375	
A. TOTAL INCOME \$/ha:	\$375	
VARIABLE COSTS:		
see opposite page for details		
Cultivation	\$0	
Sowing	\$115	
Fertiliser	\$61	
Herbicide	\$67	
Insecticide	\$9	
Contract harvesting	\$49	
Levies	\$4	
Crop Insurance	\$10	
Cartage	\$0	
B. TOTAL VARIABLE COSTS \$/ha:	\$315	
C. GROSS MARGIN (A-B) \$/ha:	\$60	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$210 /t	\$230 /t	\$250 /t	\$270 /t	\$290 /t	
1.10	-\$78	-\$57	-\$36	-\$15	\$6	←
1.30	-\$38	-\$13	\$12	\$37	\$62	
1.50	\$2	\$31	\$60	\$89	\$118	
1.70	\$43	\$76	\$108	\$141	\$174	
1.90	\$83	\$120	\$156	\$193	\$230	

BROAD LEAF LUPINS: After Cereal - No till
Southern Zone - West

Dryland Winter 2012

CALENDAR OF OPERATIONS:								
Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Broadleaf and grass spray eg: Glyphosate	Dec	0.05	53.37	\$2.87	0.80 L/ha	\$4.20/L	\$3.36	\$6.23
Melon grass eg: Garlon®	with above				0.06 L/ha	\$20.30/L	\$1.22	\$1.22
Wetting agent LI700	with above				0.18 L/ha	\$7.00/L	\$0.61	\$0.61
Broadleaf and grass spray eg: Glyphosate	Jan/Feb	0.05	53.37	\$2.87	0.80 L/ha	\$4.20/L	\$3.36	\$6.23
Broadleaf control eg: Surpass®	with above				0.60 L/ha	\$6.97/L	\$4.18	\$4.18
Wetting agent LI700	with above				0.18 L/ha	\$7.00/L	\$0.61	\$0.61
Broadleaf and grass spray eg: Glyphosate	Apr/May	0.05	53.37	\$2.87	1.20 L/ha	\$4.20/L	\$5.04	\$7.91
Pre sowing spray eg: IBS Treflan®480	with above				1.50 L/ha	\$8.50/L	\$12.75	\$12.75
Wetting agent LI700	with above				0.18 L/ha	\$7.00/L	\$0.61	\$0.61
Broadleaf & grass weed control eg: Simazine 500		0.05	\$53.37	\$2.87	3.00 L/ha	\$6.00/L	\$18.00	\$20.87
Sow	Ap/May	0.17	\$91.67	\$15.58	120 kg/ha	\$0.80/kg	\$96.00	\$111.58
Phosphorus and sulphur fertiliser eg: Grain Legume Super	with above				90kg/ha	\$680/t	\$61.20	\$61.20
Seed Inoculant	with above				75 kg/ha	\$0.04/kg	\$3.00	\$3.00
Grass weed control: eg haloxyfop (Verdict®)		0.05	\$53.37	\$2.87	0.06 L/ha	\$48.90/L	\$2.93	\$5.81
Aerial spray for insect control eg: esfenvalerate (Hallmark® 50 EC)	Sep	contract		\$18.15	0.30 L/ha	\$25.00/L	\$7.50	\$8.55
Contract harvest	Nov	contract		\$49.42				\$49.42
Crop Levies					1.02%	of on-farm value		\$3.81
Crop Insurance					2.72%	of on-farm value		\$10.19

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.
Cropcheck:	- Monitor and record crop performance. Key checks include establishment, nodulation, weeds, insects, disease and grain fill.
Rotation:	- Pulse crops are used in rotation with cereals to provide good soil nitrogen and break disease cycles and increase yields and protein content of following wheat crops. - True budget value from pulse crops should be calculated considering the extra yield in the following wheat crop.
Seed Dressing:	- Fungicide seed dressing may be required to prevent brown leaf spot.
Sowing Rates:	- 120-180 Kg/ha for broadleaved lupins.
Weed control:	- See NSW DPI <i>Weed Control in Winter Crops 2012</i> . - Brodal® used for the control of wild radish and mustards, cost \$19.84/ha. - Wetting agent LI700 is used at 350ml/100L of spray solution, but most farmers spray @50L/ha.
Pest control:	- See <i>Insect and mite control in field crops 2011</i> . Control insects when thresholds are exceeded.
Machinery:	- A tractor with 149 kW (200 HP) pto power and 177kW (240 HP) engine power is assumed. - Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.
Labour:	- The labour required for machinery operations is 0.28 hrs/ha. - At \$22/hour this costs: \$6.16 /ha changing the gross margin to \$54.04 /ha
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.



WHEAT: Short Fallow (ASW/APW/AH): No till
Southern Zone - West

Dryland Winter 2012

1. GROSS MARGIN BUDGET:

INCOME:

2.50 tonnes/ha @ \$200 /t on farm

Standard Budget \$/ha	Your Budget \$/ha
\$500	

A. TOTAL INCOME \$/ha:

\$500	
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VARIABLE COSTS:

See following page for detail

Cultivation.....
Sowing.....
Fertiliser.....
Herbicide.....
Contract harvesting.....
Levies.....
Crop insurance.....
Cartage.....

\$0	
\$24	
\$72	
\$49	
\$64	
\$5	
\$11	
\$0	
\$225	

B. TOTAL VARIABLE COSTS \$/ha:

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

\$275	
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SENSITIVITY TABLES

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)				
	\$160 /t	\$180 /t	\$200 /t	\$220 /t	\$240 /t
1.00	-\$27	-\$7	\$12	\$31	\$51
1.50	\$51	\$80	\$109	\$138	\$167
2.00	\$128	\$167	\$206	\$244	\$283
2.50	\$178	\$227	\$275	\$324	\$372
3.00	\$256	\$314	\$372	\$430	\$489
3.50	\$334	\$402	\$470	\$537	\$605
4.00	\$412	\$490	\$567	\$644	\$722

Gross Margin (\$/ha)



WHEAT: Short Fallow (ASW/APW/AH): No till

Southern Zone - West

Dryland Winter 2012

CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total
		hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	Cost \$/ha
Broadleaf and grass spray eg: Glyphosate	Dec	0.05	\$53.37	\$2.87	0.80 L/ha	\$4.20/L	\$3.36	\$6.23
Melon control eg Garlon®		with above			0.06 L/ha	\$20.30/L	\$1.22	\$1.22
Wetting agent LI700		with above			0.18 L/ha	\$7.00/L	\$0.61	\$0.61
Broadleaf and grass spray eg: Glyphosate	Jan/Feb	0.05	\$53.37	\$2.87	0.80 L/ha	\$4.20/L	\$3.36	\$6.23
Broadleaf control eg Surpass®		with above			\$0.60/L	\$6.97/L	\$4.18	\$4.18
Wetting agent LI700		with above			0.18 L/ha	\$7.00/L	\$0.61	\$1.23
Broadleaf and grass spray eg: Glyphosate	Apr/May	0.05	\$53.37	\$2.87	1.20 L/ha	\$4.20/L	\$5.04	\$7.91
Pre sowing spray eg IBS Treflan®480		with above			1.50 L/ha	\$8.50/L	\$12.75	\$12.75
Wetting agent LI700		with above			0.18 L/ha	\$7.00/L	\$1.23	\$1.23
Sow (seed cost is based on farmer's own seed)	May	0.17	87.87	14.94	30.00	0.30	9.00	\$23.94
Starter fertiliser eg: MAP		with above			50 kg/ha	\$760 /t	\$38.00	\$38.00
Sulphate of Ammonia	May	with above			50 kg/ha	\$680 /t	\$34.00	\$34.00
Broadleaf weed control eg: MCPA LVE 500	Jul	\$0.05	\$53.37	\$2.87	0.600 L/ha	\$6.76/L	\$4.06	\$6.93
Contract harvest	Nov	contract		\$64.21				\$64.21
Crop Levies					1.02%	of on-farm value		\$5.08
Crop Insurance					2.224%	of on-farm value		\$11.12

AGRONOMIC 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.

- Cropcheck:** - Monitor and record crop performance. Key checks include establishment, weeds, insects, tiller numbers, disease and grain fill.
- Rotation:** - Ideally sown as a crop following a grain legume, canola or oats.
- Higher risk of cereal root disease when following a wheat or barley crop.
Where suitable machinery is available, stubble retention is preferred over burning for sustainable farming.
- Varieties:** - See NSW DPI *Winter crop variety sowing guide 2012* for approved varieties in SNSW.
- This budget is based on Ventura.
- Seed:** - Using own seed treat with registered seed dressing. If sowing stripe rust susceptible varieties consider fungicide seed dressings such as Triadimenol (eg Baytan®) or Fluquinconazole (eg Jockey®).
- Budgets are based on cost of using own seed. Consider retail seed price at \$920/tonne, if growing a new or hybrid variety.
- Sowing time:** - Increase seeding rate by 10% if sowing time is delayed past 31st May.
- See *Winter crop variety sowing guide 2012* for recommended sowing windows for each variety.
- Weed control:** - See *Weed control in winter crops 2012*. A possible post emergence grass weed control eg Topik® may be needed in some cases.
- Wetting agent LI700 is used at 350ml/100L of spray solution, but most farmers spray @50L/ha.
- Machinery:** - A tractor with 149 kW (200 HP) pto power and 177kW (240 HP) engine power is assumed.
- Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.
- Labour:** - The labour required for machinery operations is 1.17 hr/ha.
- Using a labour cost of \$22/hr, an additional \$25.74/ha can be deducted from the budget.
- 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.