



# Wheat: Short Fallow

## Central Zone - East

Winter 2009

**1. GROSS MARGIN BUDGET:**

PREVIOUS CROP:

After	<b>INCOME:</b>		
Pulse	3.50 tonnes/ha @	\$271.00	/tonne (on farm) (PH)
Canola	3.30 tonnes/ha @	\$244.00	/tonne (on farm) (AH)
Cereal	2.80 tonnes/ha @	\$244.00	/tonne (on farm) (AH)

CEREAL Standard Budget \$/Ha	CANOLA Standard Budget \$/Ha	PULSE Standard Budget \$/Ha	Your Budget \$/Ha
		\$948.50	
\$683.20	\$805.20		
<b>\$683.20</b>	<b>\$805.20</b>	<b>\$948.50</b>	
\$8.05	\$8.05	\$8.05	
\$56.72	\$56.72	\$56.72	
\$220.07	\$220.07	\$160.57	
\$40.06	\$35.38	\$35.38	
\$0.00	\$0.00	\$0.00	
\$51.60	\$57.60	\$60.00	
\$6.97	\$8.21	\$9.67	
\$14.01	\$16.51	\$19.44	
\$0.00	\$0.00	\$0.00	
<b>\$397.47</b>	<b>\$402.53</b>	<b>\$349.83</b>	
<b>\$285.73</b>	<b>\$402.67</b>	<b>\$598.67</b>	

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

**VARIABLE COSTS:**

See opposite page for detail

Cultivation.....	\$8.05	\$8.05	\$8.05
Sowing .....	\$56.72	\$56.72	\$56.72
Fertiliser.....	\$220.07	\$220.07	\$160.57
Herbicide.....	\$40.06	\$35.38	\$35.38
Insecticide.....	\$0.00	\$0.00	\$0.00
Contract-harvesting.....	\$51.60	\$57.60	\$60.00
Levies.....	\$6.97	\$8.21	\$9.67
Crop Insurance.....	\$14.01	\$16.51	\$19.44
Cartage, grading & bagging.....	\$0.00	\$0.00	\$0.00

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

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

**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 Department of Primary Industries over any other equivalent product from another manufacturer

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$204 /t	\$224 /t	<b>\$244 /t</b>	\$264 /t	\$284 /t	
After Cereal						
1.80	-\$17	\$18	\$53	\$88	\$123	
2.30	\$82	\$126	\$171	\$216	\$260	
<b>2.80</b>	\$177	\$231	<b>\$286</b>	\$340	\$394	←
3.30	\$270	\$334	\$398	\$462	\$526	
3.80	\$363	\$437	\$510	\$584	\$658	

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$204 /t	\$224 /t	<b>\$244 /t</b>	\$264 /t	\$284 /t	
After Canola						
1.80	-\$12	\$23	\$58	\$92	\$127	
2.30	\$87	\$131	\$176	\$220	\$265	
2.80	\$182	\$236	\$290	\$345	\$399	
<b>3.30</b>	\$275	\$339	<b>\$403</b>	\$467	\$531	←
3.80	\$368	\$441	\$515	\$589	\$662	
4.30	\$460	\$544	\$627	\$711	\$794	
4.80	\$553	\$646	\$739	\$832	\$926	

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$231 /t	\$251 /t	<b>\$271 /t</b>	\$291 /t	\$311 /t	
After Pulse						
2.00	\$87	\$126	\$164	\$203	\$242	
2.50	\$186	\$234	\$283	\$331	\$379	
3.00	\$278	\$337	\$395	\$453	\$511	
<b>3.50</b>	\$371	\$439	<b>\$599</b>	\$575	\$643	←
4.00	\$464	\$542	\$619	\$697	\$774	
4.50	\$557	\$644	\$732	\$819	\$906	
5.00	\$650	\$747	\$844	\$941	\$1,038	

### NOTES:

#### Place in rotation:

- The performance of short fallow wheat crops can vary depending on the previous crop.
- Pulse and canola crops can provide an effective disease break if grass weeds are adequately controlled before and during canola/pulse crop. Additionally, a pulse crop improves soil nitrogen thereby reducing the amount of fertiliser required to achieve PH quality.
- Short Fallow: Fallow or weed-free period of 5-6 months between harvest of one crop and sowing of the next crop. For example, canola harvested in November would be under a 5-6 month fallow until sowing the next May.

#### Sowing time:

- Sowing at the optimum time for the selected variety is critical for maximum yield potential.
- There is a 4 to 7% yield loss for every week delay past the optimum sowing time.
- Seed price used above is for purchased seed; if using retained seed, adjust budget accordingly.

#### Weed control:

- Weed control, if required, should be implemented either pre-emergent or within 4 to 6 weeks after sowing time to limit yield loss.
- Rotate herbicide groups and use other non-chemical methods to avoid herbicide resistance developing.

#### Fertiliser:

- Adequate phosphorus is essential before applying extra nitrogen fertiliser.
- To achieve AH quality, wheat must have a protein level of 11.5% or higher. Seasonal conditions will also have a large effect on protein content.
- Nitrogen fertiliser applications may be split i.e. some applied pre-sowing and some post-emergent.
- The later nitrogen fertiliser is applied to a crop, the greater its effect on raising protein levels, and the less effect it has on increasing yield.

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 Central Zone - East

## Winter 2009

### CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Weed control eg: glyphosate 450 g/litre	Jan	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Weed control eg: Garlon®	Jan	with above			0.12 L	\$29.93/L	<b>\$3.59</b>	<b>\$3.59</b>
Cultivation	Mar	0.17	47.03	<b>\$8.05</b>				<b>\$8.05</b>
Weed control eg: glyphosate 450 g/litre	Apr	0.05	43.36	<b>\$2.34</b>	0.80 L	\$7.38/L	<b>\$5.90</b>	<b>\$8.24</b>
Weed control eg: 2,4-D amine (Surpass®)	Apr	with above			1.20 L	\$6.22/L	<b>\$7.46</b>	<b>\$7.46</b>
Nitrogen Fertiliser- After Canola eg: Urea	May	0.17	64.36	<b>\$10.82</b>	120 kg	\$0.85/kg	<b>\$102.00</b>	<b>\$112.82</b>
Nitrogen Fertiliser- After Cereal eg: Urea	May	0.17	64.36	<b>\$10.82</b>	120 kg	\$0.85/kg	<b>\$102.00</b>	<b>\$112.82</b>
Nitrogen Fertiliser- After Pulses eg: Urea	May	0.17	64.36	<b>\$10.82</b>	50 kg	\$0.85/kg	<b>\$42.50</b>	<b>\$53.32</b>
Sowing	May	0.17	64.36	<b>\$10.82</b>	50 kg	\$0.92/kg	<b>\$45.90</b>	<b>\$56.72</b>
Starter fertiliser eg: MAP	May	with above			110 kg	\$0.98/kg	<b>\$107.25</b>	<b>\$107.25</b>
Weed control pre-emergent eg: Chlorsulfuron (Glean®)	May	0.05	43.36	<b>\$2.34</b>	20.0 g	\$0.12/g	<b>\$2.35</b>	<b>\$4.69</b>
Broadleaf weed control eg: MCPA LVE®	Jun/July	with above			0.50 L	\$9.81/L	<b>\$4.90</b>	<b>\$4.90</b>
Contract-harvest - After Canola	Nov	contract		<b>\$57.60</b>				<b>\$57.60</b>
Contract-harvest - After Cereal	Nov	contract		<b>\$51.60</b>				<b>\$51.60</b>
Contract-harvest - After Pulse	Nov			<b>\$60.00</b>				<b>\$60.00</b>
Crop Levies - After Canola					1.02%	of on-farm value		<b>\$8.21</b>
Crop Levies - After Cereal					1.02%	of on-farm value		<b>\$6.97</b>
Crop Levies - After Pulses					1.02%	of on-farm value		<b>\$9.67</b>
Crop Insurance - After Canola					2.05%	of on-farm value		<b>\$16.51</b>
Crop Insurance - After Cereal					2.05%	of on-farm value		<b>\$14.01</b>
Crop Insurance - After Pulses					2.05%	of on-farm value		<b>\$19.44</b>

\*\*\* Input and crop prices are correct at the time of writing (March 2009). Market uncertainty makes estimation of future pricing impractical.

### NOTES (cont):

- Machinery:**
- A tractor with 149 kW (200 HP) pto power and 177 kW (240 HP) engine power is assumed.
  - Contract-harvesting does not include the cost of fuel.
- Labour:**
- The labour required for machinery operations is 1.26 hrs/ha
  - Using a labour cost of \$14/hr, an additional \$17.59 can be deducted from the budget
- Important notes:**
- These gross margins are only a guide. They do not include overhead costs.
  - **Use your own figures and price assumptions to estimate your own gross margin.**
  - Use of a particular brand name does NOT imply recommendation of that brand by NSW Department of Primary Industries.

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: Long Fallow

## Central Zone - East

## Winter 2009

### CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Weed control eg: glyphosate 450 g/litre	Aug	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Weed control eg: 2,4-D amine 300g/L (Surpass®)	Aug	with above			1.20 L	\$6.22/L	<b>\$7.46</b>	<b>\$7.46</b>
Cultivation	Nov/Dec	0.17	47.03	<b>\$8.05</b>				<b>\$8.05</b>
Weed control eg: glyphosate 450 g/litre	Feb	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Weed control eg: Garlon®	Feb	with above			0.12 L	\$29.93/L	<b>\$3.59</b>	<b>\$3.59</b>
Weed control eg: glyphosate 450 g/litre	Apr/May	0.05	43.36	<b>\$2.34</b>	0.80 L	\$7.38/L	<b>\$5.90</b>	<b>\$8.24</b>
Sowing	May	0.17	64.36	<b>\$10.82</b>	50 kg	\$0.92/kg	<b>\$45.90</b>	<b>\$56.72</b>
Starter fertiliser eg: MAP	May	with above			100 kg	\$0.98/kg	<b>\$97.50</b>	<b>\$97.50</b>
Weed control eg: Chlorsulfuron (Glean®)	Jun	0.05	43.36	<b>\$2.34</b>	20 g	\$0.12/g	<b>\$2.35</b>	<b>\$4.69</b>
Weed control eg: MCPA LVE®	Jul	0.05	43.36	<b>\$2.34</b>	0.70 L	\$9.81/L	<b>\$6.86</b>	<b>\$9.20</b>
Contract-harvest	Nov	contract		<b>\$60.00</b>				<b>\$60.00</b>
Crop Levies					1.02%	of on-farm value		<b>\$9.67</b>
Crop Insurance					2.05%	of on-farm value		<b>\$19.44</b>

\*\*\* Input and crop prices are correct at the time of writing (March 2009). Market uncertainty makes estimation of future pricing impractical.

### NOTES:

#### Long fallow:

- Country coming out of lucerne or long-term pasture is usually fallowed.
- Fallow is usually commenced in August- September to conserve moisture and prevent annual weeds setting seed. Preferably a spray is substituted for the opening cultivation, allowing extended grazing time, weed control and moisture conservation.
- For Gross Margin comparisons NOTE: in a long fallow situation winter cropping cannot be carried out annually.

#### Sowing time:

- Sowing at the optimum time for the selected variety is critical for maximum yield.
- There is a 4 to 7% yield loss for every week delay past the optimum sowing time.
- Seed price used above is for purchased seed; if using retained seed adjust budget accordingly.

#### Weed control:

- Weed control, if required, should be implemented either pre-emergent or within 4 to 6 weeks after sowing to limit yield loss.
- Rotate herbicide groups and use other non-chemical methods to avoid herbicide resistance developing.

#### Fertiliser:

- Good nitrogen fertility is required to produce high yields and high protein.
- To achieve PH quality, wheat must have a protein level of 13% or higher.
- Adequate phosphorus is essential before applying extra nitrogen fertiliser.
- Higher protein wheat is likely to be grown on fallow country with a good legume history.

#### Wheat price:

#### Machinery:

- A tractor with 149 kW (200 HP) pto power and 177 kW (240 HP) engine power is assumed.
- Contract-harvesting does not include the cost of fuel.

#### Labour:

- The labour required for machinery operations is 0.55 hrs/ha
- Using a labour cost of \$14/hr, an additional \$7.65 can be deducted from the total gross margin budget

#### Important notes:

- These gross margins are only a guide. They do not include overhead costs.
- **Use your own figures and price assumptions to estimate your own gross margin.**
- Use of a particular brand name does not imply a recommendation of that brand by NSW Department of Primary Industries.



# Triticale: Short Fallow

## Central Zone - East

## Winter 2009

### 1. GROSS MARGIN BUDGET:

#### INCOME:

2.50 tonnes/ha @ \$173.00 /tonne (on farm)

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

#### VARIABLE COSTS:

See opposite page for detail

Cultivation.....	\$8.05
Sowing.....	\$57.14
Fertiliser.....	\$92.50
Herbicide.....	\$57.38
Insecticide.....	\$0.00
Contract-harvesting.....	\$54.00
Levies.....	\$4.33
Crop Insurance.....	\$8.87
Cartage, grading & bagging.....	\$0.00

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

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

Standard Budget \$/Ha	Your Budget \$/Ha
\$432.50	
<b>\$432.50</b>	
\$8.05	
\$57.14	
\$92.50	
\$57.38	
\$0.00	
\$54.00	
\$4.33	
\$8.87	
\$0.00	
<b>\$282.26</b>	
<b>\$150.24</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$133 /t	\$153 /t	<b>\$173 /t</b>	\$193 /t	\$213 /t	
1.00	-\$134	-\$115	-\$95	-\$76	-\$57	
1.50	-\$70	-\$41	-\$11	\$18	\$47	
2.00	-\$5	\$34	\$72	\$111	\$150	
<b>2.50</b>	\$53	\$102	<b>\$150</b>	\$199	\$247	←
3.00	\$112	\$170	\$228	\$286	\$344	
3.50	\$170	\$238	\$306	\$374	\$442	
4.00	\$229	\$306	\$384	\$461	\$539	
4.50	\$287	\$374	\$462	\$549	\$636	

#### 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 Department of Primary Industries over any other equivalent product from another manufacturer.

# Triticale: Short Fallow

## Central Zone - East

## Winter 2009

### CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs/ha	Cost	Total	Rate/ha	Cost	Total	
			\$/hour	\$/ha		\$	\$/ha	
Weed control eg: glyphosate 450 g/litre	Jan/Feb	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Weed control eg: Garlon®	Jan/Feb	with above			0.12 L	\$29.93/L	<b>\$3.59</b>	<b>\$3.59</b>
Cultivation	Mar	0.17	47.03	<b>\$8.05</b>				<b>\$8.05</b>
Weed control eg: glyphosate 450 g/litre	Apr/May	0.05	43.36	<b>\$2.34</b>	0.80 L	\$7.38/L	<b>\$5.90</b>	<b>\$8.24</b>
Weed control eg: 2,4-D amine (Surpass®)	Apr/May	with above			1.20 L	\$6.22/L	<b>\$7.46</b>	<b>\$7.46</b>
Sowing	May	0.17	64.36	<b>\$10.82</b>	60 kg	\$0.77/kg	<b>\$46.32</b>	<b>\$57.14</b>
Nitrogen fertiliser eg: Urea	May	with above			40 kg	\$0.85/kg	<b>\$34.00</b>	<b>\$34.00</b>
Starter fertiliser eg: MAP	May	with above			60 kg	\$0.98/kg	<b>\$58.50</b>	<b>\$58.50</b>
Grass weed control eg: Diclofop-methyl (Hoegrass®)	Jun	0.05	43.36	<b>\$2.34</b>	1.00 L	\$17.33/L	<b>\$17.33</b>	<b>\$19.67</b>
Broadleaf weed control eg: MCPA LVE®	Jul	0.05	43.36	<b>\$2.34</b>	0.50 L	\$9.81/L	<b>\$4.90</b>	<b>\$7.24</b>
Contract-harvest	Dec	contract		<b>\$54.00</b>				<b>\$54.00</b>
Crop Levies					1.00%	of on-farm value		<b>\$4.33</b>
Crop Insurance					2.05%	of on-farm value		<b>\$8.87</b>

\*\*\* Input and crop prices are correct at the time of writing (March 2009). Market uncertainty makes estimation of future pricing impractical.

### NOTES:

<b>Soil:</b>	- Suitable crop for growing on light textured acid soils with moderate to high aluminium levels.
<b>Seed:</b>	- Seed price used above is for purchased seed; if using retained seed adjust budget accordingly.
<b>Place in rotation:</b>	- Can be grown in rotation with oats or a legume crop such as lupins on acid soils. - Short Fallow: Fallow or weed free period of 5-6 months between harvest of one crop and sowing of the next crop.
<b>Weed control:</b>	- Weed control, if required, should be implemented within 6-8 weeks of sowing to limit yield loss. - Glyphosate for fallow weed control. MCPA® for broadleaf winter weeds, and diclofop-methyl for ryegrass/wild oats control. A wide range of herbicides can be used. - Rotate herbicide groups and use other non-chemical methods to avoid herbicide resistance developing.
<b>Machinery:</b>	- Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs. - Contract-harvesting does not include the cost of fuel.
<b>Labour:</b>	- The labour required for machinery operations is 0.69 hrs/ha - Using a labour cost of \$14/hr, an additional \$9.71 can be deducted from the budget
<b>Important notes:</b>	- These gross margins are only a guide. They do not include overhead costs. - <b>Use your own figures and price assumptions to estimate your own gross margin.</b> - Use of a particular brand name does NOT imply a recommendation of that brand by NSW Department of Primary Industries.



## Oats: Grain (Short Fallow) Central Zone - East

### Winter 2009

#### 1. GROSS MARGIN BUDGET:

##### INCOME:

2.80 tonnes/ha @ \$190.00 /tonne (on farm) (feed)

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

##### VARIABLE COSTS:

See opposite page for detail

Cultivation.....	\$8.05	
Sowing .....	\$72.12	
Fertiliser.....	\$92.50	
Herbicide.....	\$45.83	
Insecticide.....	\$0.00	
Contract-harvesting.....	\$57.60	
Levies.....	\$5.40	
Crop Insurance.....	\$10.91	
Cartage, grading & bagging.....	\$0.00	

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

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

Standard Budget \$/Ha	Your Budget \$/Ha
\$532.00	
<b>\$532.00</b>	
\$8.05	
\$72.12	
\$92.50	
\$45.83	
\$0.00	
\$57.60	
\$5.40	
\$10.91	
\$0.00	
<b>\$292.41</b>	
<b>\$239.59</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)				
	\$150 /t	\$170 /t	\$190 /t	\$210 /t	\$230 /t
1.30	-\$77	-\$52	-\$27	-\$2	\$23
1.80	-\$5	\$30	\$65	\$100	\$135
2.30	\$64	\$109	\$154	\$198	\$243
<b>2.80</b>	\$131	\$185	<b>\$240</b>	\$294	\$348
3.30	\$198	\$262	\$326	\$390	\$454
3.80	\$264	\$338	\$412	\$485	\$559
4.30	\$331	\$414	\$498	\$581	\$665
4.80	\$398	\$491	\$584	\$677	\$770

Gross Margin  
(\$/ha)

#### 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 Department of Primary Industries over any other equivalent product from another manufacturer.

# Oats: Grain (Short Fallow)

## Central Zone - East

## Winter 2009

CALENDAR OF OPERATIONS:								
Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Weed control eg: glyphosate 450 g/litre	Dec	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Weed control eg: Garlon®	Dec	with above			0.12 L	\$29.93/L	<b>\$3.59</b>	<b>\$3.59</b>
Weed control eg: glyphosate 450 g/litre	Feb	0.05	43.36	<b>\$2.34</b>	1.00 L	\$7.38/L	<b>\$7.38</b>	<b>\$9.71</b>
Weed control eg: 2,4-D amine (Surpass®)	Mar	with above			1.20 L	\$6.22/L	<b>\$7.46</b>	<b>\$7.46</b>
Cultivation	Mar/Apr	0.17	47.03	<b>\$8.05</b>				<b>\$8.05</b>
Sowing	May	0.17	64.36	<b>\$10.82</b>	50 kg	\$1.23/kg	<b>\$61.30</b>	<b>\$72.12</b>
Nitrogen fertiliser eg: Urea	May	with above			40 kg	\$0.85/kg	<b>\$34.00</b>	<b>\$34.00</b>
Starter fertiliser eg: MAP	May	with above			60 kg	\$0.98/kg	<b>\$58.50</b>	<b>\$58.50</b>
Early post-emergent weed control eg: Chlorsulfuron (Glean®)	Jun	0.05	43.36	<b>\$2.34</b>	20 g	\$0.12/g	<b>\$2.35</b>	<b>\$4.69</b>
Early post-emergent weed control eg: MCPA LVE®	Jul/Aug	0.05	43.36	<b>\$2.34</b>	0.70 L	\$9.81/g	<b>\$6.86</b>	<b>\$9.20</b>
Contract-harvest	Nov	contract		<b>\$57.60</b>				<b>\$57.60</b>
Crop Levies					1.02% of on-farm value			<b>\$5.40</b>
Crop Insurance					2.05% of on-farm value			<b>\$10.91</b>

\*\*\* Input and crop prices are correct at the time of writing (March 2009). Market uncertainty makes estimation of future pricing impractical.

### NOTES:

<b>Soil:</b>	- Well adapted to all soil types. Oats are more suited to the light sandy acid soils than wheat or barley.
<b>Place in rotation:</b>	- Short Fallow: Fallow or weed free period of 5-6 months between harvest of one crop and sowing of the next crop. For example, a paddock harvested in November would allow for a 5-6 month fallow until sowing in May. - Oats are not a disease break crop. It should be regarded as a host to common cereal root diseases. - There are a wide range of herbicide combinations which can be used.
<b>Seed:</b>	- Seed price used above is for purchased seed; if using retained seed adjust budget accordingly.
<b>Variety:</b>	- Seek advice from district agronomist or see Winter Crop Variety sowing Guide - 2009 for variety selection.
<b>Weed control:</b>	- Rotate herbicide groups and use other non-chemical methods to avoid herbicide resistance.
<b>Machinery:</b>	- A tractor with 149 kW (200 HP) pto power and 177 kW (240 HP) engine power is assumed. - Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs. - Contract-harvesting does not include the cost of fuel.
<b>Labour:</b>	- The labour required for machinery operations is 0.56 hrs/ha - Using a labour cost of \$14/hr, an additional \$7.82 can be deducted from the budget
<b>Important notes:</b>	- These gross margins are only a guide. They do not include overhead costs. - <b>Use your own figures and price assumptions to estimate your own gross margin.</b> - Use of a particular brand name does not imply a recommendation of that brand by - NSW Department of Primary Industries.



# Oats/Wheat: Grazing/Grain (Short Fallow)

## Central Zone - East

## Winter 2009

### 1. GROSS MARGIN BUDGET:

#### INCOME:

Grain - Oats:	1.80	tonnes/ha @	\$190 /tonne (on farm) (feed)
Grain - Wheat:	2.50	tonnes/ha @	\$244 /tonne (on farm) (feed)
Grazing Oats:	2.5 hd/ha @	1.00 kg/d x	80 days x \$1.90/kg
Grazing Wheat:	2.3 hd/ha @	1.00 kg/d x	80 days x \$1.90/kg

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

#### VARIABLE COSTS:

See opposite page for detail

Cultivation.....	\$8.05	\$8.05
Sowing.....	\$108.90	\$84.26
Fertiliser.....	\$230.55	\$230.55
Herbicide.....	\$45.83	\$45.83
Insecticide.....	\$0.00	\$0.00
Contract-harvesting.....	\$48.00	\$54.00
Levies.....	\$3.47	\$6.22
Crop Insurance.....	\$7.01	\$12.51
Cartage, grading & bagging.....	\$0.00	\$0.00

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

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

Oats Standard Budget \$/Ha	Wheat Standard Budget \$/Ha	Your Budget \$/Ha
\$342.00		
	\$610.00	
\$380.00		
	\$349.60	
<b>\$722.00</b>	<b>\$959.60</b>	
\$8.05	\$8.05	
\$108.90	\$84.26	
\$230.55	\$230.55	
\$45.83	\$45.83	
\$0.00	\$0.00	
\$48.00	\$54.00	
\$3.47	\$6.22	
\$7.01	\$12.51	
\$0.00	\$0.00	
<b>\$451.82</b>	<b>\$441.42</b>	
<b>\$270.18</b>	<b>\$518.18</b>	

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

#### Oats

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$150 /t	\$170 /t	<b>\$190 /t</b>	\$210 /t	\$230 /t	
0.80	\$55	\$70	\$86	\$102	\$117	
1.30	\$128	\$153	\$178	\$203	\$228	
<b>1.80</b>	\$200	\$235	<b>\$270</b>	\$305	\$340	
2.30	\$269	\$314	\$359	\$403	\$448	
2.80	\$336	\$390	\$445	\$499	\$553	
3.30	\$403	\$467	\$531	\$595	\$659	

#### Wheat

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$204 /t	\$224 /t	<b>\$244 /t</b>	\$264 /t	\$284 /t	
1.50	\$230	\$259	\$288	\$317	\$346	
2.00	\$328	\$367	\$406	\$445	\$483	
<b>2.50</b>	\$421	\$470	<b>\$518</b>	\$567	\$615	
3.00	\$514	\$572	\$630	\$689	\$747	
3.50	\$607	\$675	\$743	\$811	\$878	
4.50	\$793	\$880	\$967	\$1,054	\$1,142	
5.50	\$978	\$1,085	\$1,192	\$1,298	\$1,405	

#### 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 Department of Primary Industries over any other equivalent product from another manufacturer.

# Oats/Wheat: Grazing/Grain (Short Fallow)

## Central Zone - East

## Winter 2009

### CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs/ha	Cost	Total	Rate/ha	Cost	Total	
			\$/hour	\$/ha		\$	\$/ha	
Weed control eg: glyphosate 450 g/litre	Dec	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Weed control eg: Garlon®	Dec	with above			0.12 L	\$29.93/L	<b>\$3.59</b>	<b>\$3.59</b>
Cultivation	Jan	0.17	47.03	<b>\$8.05</b>				<b>\$8.05</b>
Weed control eg: glyphosate 450 g/litre	Feb	0.05	43.36	<b>\$2.34</b>	1.00 L	\$7.38/L	<b>\$7.38</b>	<b>\$9.71</b>
Weed control eg: 2,4-D amine (Surpass®)	Feb	with above			1.20 L	\$6.22/L	<b>\$7.46</b>	<b>\$7.46</b>
Sowing - oat	Mar	0.17	64.36	<b>\$10.82</b>	80 kg	\$1.23/kg	<b>\$98.08</b>	<b>\$108.90</b>
Sowing - wheat	Mar	0.17	64.36	<b>\$10.82</b>	80 kg	\$0.92/kg	<b>\$73.44</b>	<b>\$84.26</b>
Nitrogen fertiliser eg: Urea	Mar	with above			70 kg	\$0.85/kg	<b>\$59.50</b>	<b>\$59.50</b>
Starter fertiliser eg: MAP	Mar	with above			80 kg	\$0.98/kg	<b>\$78.00</b>	<b>\$78.00</b>
Weed control eg: Chlorsulfuron (Glean®)	Apr	0.05	43.36	<b>\$2.34</b>	20 g	\$0.12 /g	<b>\$2.35</b>	<b>\$4.69</b>
Nitrogen fertiliser eg: Urea	Jun	0.17	47.03	<b>\$8.05</b>	100 kg	\$0.85/kg	<b>\$85.00</b>	<b>\$93.05</b>
Broadleaf weed control eg: MCPA LVE®	Jul	0.05	43.36	<b>\$2.34</b>	0.70 L	\$9.81/L	<b>\$6.86</b>	<b>\$9.20</b>
Contract-harvest (oats)	Nov	contract		<b>\$48.00</b>				<b>\$48.00</b>
Contract-harvest (wheat)	Nov	contract		<b>\$54.00</b>				<b>\$54.00</b>
Crop Levies - Oats					1.02%	of on-farm value		<b>\$3.47</b>
Crop Insurance - Oats					2.05%	of on-farm value		<b>\$7.01</b>
Crop Levies - Wheat					1.02%	of on-farm value		<b>\$6.22</b>
Crop Insurance - Wheat					2.05%	of on-farm value		<b>\$12.51</b>

\*\*\* Input and crop prices are correct at the time of writing (March 2009). Market uncertainty makes estimation of future pricing impractical.

### NOTES:

<b>Place in rotation:</b>	- Short Fallow: Fallow or weed free period of 5-6 months between harvest of one crop and sowing of the next crop. For example, a paddock harvested in November would create 5-6 month fallow until sowing in May.
<b>Paddock Selection:</b>	- Oats are more tolerant of acid soils than wheat or barley. - Wheat is suited to better soil types.
<b>Seed:</b>	- Seed price used above is for purchased seed; if using retained seed adjust budget accordingly
<b>Varieties:</b>	- Seek advice from district agronomist or see Winter Crop Variety Sowing Guide - 2009 for variety choice.
<b>Fertiliser:</b>	- A starter fertiliser is recommended at sowing. - Topdressing of urea in June increases dry matter and grain production.
<b>Weed control:</b>	- Rotate herbicide groups and use other non-chemical methods to avoid herbicide resistance developing.
<b>Machinery:</b>	- A tractor with 149 kW (200 HP) pto power and 177 kW (240 HP) engine power is assumed. - Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs. - Contract-harvesting does not include the cost of fuel.
<b>Labour:</b>	- The labour required for machinery operations is 1.12 hrs/ha - Using a labour cost of \$14/hr, an additional \$15.65 can be deducted from the budget
<b>Important notes:</b>	- These gross margins are only a guide. They do not include overhead costs. - <b>Use your own figures and price assumptions to estimate your own gross margin.</b> - Use of a particular brand name does NOT imply recommendation of that brand by NSW Department of Primary Industries.



# Narrowleaf and Albus Lupins: Short Fallow (No-till ) Central Zone - East Winter 2009

## 1. GROSS MARGIN BUDGET:

**INCOME:**

Narrowleaf	2.20 tonnes/ha @	\$350.00 /tonne (on farm)
Albus	2.30 tonnes/ha @	\$480.00 /tonne (on farm)

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

**VARIABLE COSTS:**

See opposite page for detail

Sowing seed.....	\$120.02	\$83.62
Fertiliser.....	\$76.05	\$76.05
Herbicide.....	\$65.48	\$65.48
Insecticide.....	\$21.30	\$21.30
Contract-harvesting.....	\$50.00	\$50.00
Levies.....	\$11.21	\$7.82
Crop Insurance.....	\$28.29	\$19.73
Cartage, grading & bagging.....	\$0.00	\$0.00

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

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

ALBUS Standard Budget \$/Ha	NARR. LEAF Standard Budget \$/ha	Your Budget \$/Ha
	\$770.00	
\$1,104.00		
<b>\$1,104.00</b>	<b>\$770.00</b>	
\$120.02	\$83.62	
\$76.05	\$76.05	
\$65.48	\$65.48	
\$21.30	\$21.30	
\$50.00	\$50.00	
\$11.21	\$7.82	
\$28.29	\$19.73	
\$0.00	\$0.00	
<b>\$372.34</b>	<b>\$323.99</b>	
<b>\$731.66</b>	<b>\$446.01</b>	

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

### Albus Variety

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)				
	\$400 /t	\$440 /t	<b>\$480 /t</b>	\$520 /t	\$560 /t
1.70	\$323	\$388	\$454	\$520	\$585
1.90	\$400	\$473	\$547	\$620	\$693
2.10	\$477	\$558	\$639	\$720	\$801
<b>2.30</b>	\$554	\$643	<b>\$732</b>	\$820	\$909
2.50	\$631	\$728	\$824	\$921	\$1,017
2.70	\$709	\$813	\$917	\$1,021	\$1,125
2.90	\$786	\$898	\$1,009	\$1,121	\$1,233

Gross Margin (\$/ha)

### Narrowleaf Variety

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)				
	\$270 /t	\$310 /t	<b>\$350 /t</b>	\$390 /t	\$430 /t
1.60	\$120	\$182	\$244	\$305	\$367
1.80	\$172	\$242	\$311	\$380	\$450
2.00	\$224	\$301	\$379	\$456	\$533
<b>2.20</b>	\$276	\$361	<b>\$446</b>	\$531	\$616
2.40	\$328	\$421	\$514	\$606	\$699
2.60	\$380	\$481	\$581	\$681	\$782
2.80	\$433	\$541	\$648	\$756	\$864

Gross Margin (\$/ha)

### 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 Department of Primary Industries over any other equivalent product from another manufacturer.

# Narrowleaf and Albus Lupins: Short Fallow (No-till )

## Central Zone - East

### Winter 2009

#### CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Weed control eg: glyphosate 450 g/litre	Jan/Feb	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Weed control eg: Garlon®	Jan/Feb	with above			0.12 L	\$29.93/L	<b>\$3.59</b>	<b>\$3.59</b>
Weed control eg: glyphosate 450 g/litre	Apr	0.05	43.36	<b>\$2.34</b>	1.00 L	\$7.38/L	<b>\$7.38</b>	<b>\$9.71</b>
Weed control eg: 2,4-D amine (Surpass®)	Apr	with above			1.20 L	\$6.22/L	<b>\$7.46</b>	<b>\$7.46</b>
Weed control eg: trifluralin 480 g/L	Apr	0.05	43.36	<b>\$2.34</b>	1.20 L	\$8.05/L	<b>\$9.66</b>	<b>\$11.99</b>
Sowing - Narrowleaf variety	Apr	0.17	64.36	<b>\$10.82</b>	80 kg	\$0.91/kg	<b>\$72.80</b>	<b>\$83.62</b>
Sowing - Albus variety	Apr	0.17	64.36	<b>\$10.82</b>	120 kg	\$0.91/kg	<b>\$109.20</b>	<b>\$120.02</b>
Fertiliser eg: Single Super	Apr	with above			130 kg	\$0.59/kg	<b>\$76.05</b>	<b>\$76.05</b>
Weed control eg: Simazine (Post-sow/pre-emergence)	Apr	0.05	43.36	<b>\$2.34</b>	2.00 L	\$9.60/L	<b>\$19.20</b>	<b>\$21.54</b>
Heliothis control eg: alpha-cypermethrin eg: (Fastac Duo®)	Oct	contract		<b>\$18.15</b>	0.30 L	\$10.50/L	<b>\$3.15</b>	<b>\$21.30</b>
Contract-harvest	Dec	contract		<b>\$50.00</b>				<b>\$50.00</b>
Crop Levies - Albus variety					1.02%	of on-farm value		<b>\$11.21</b>
Crop Insurance - Albus variety					2.56%	of on-farm value		<b>\$28.29</b>
Crop Levies - Narr. Leaf variety					1.02%	of on-farm value		<b>\$7.82</b>
Crop Insurance - Narr. Leaf variety					2.56%	of on-farm value		<b>\$19.73</b>

\*\*\* Input and crop prices are correct at the time of writing (March 2009). Market uncertainty makes estimation of future pricing impractical.

#### NOTES:

<b>Soil:</b>	<ul style="list-style-type: none"> <li>- Adapted for rotations in sandy acid soils and well-drained loamy soils.</li> <li>- Soils <b>must</b> be well drained for Albus lupins.</li> <li>- Avoid very acid soils with Albus lupins.</li> </ul>
<b>Place in rotation:</b>	<ul style="list-style-type: none"> <li>- Suitable for rotation with cereals to break disease cycles, control weeds and improve soil nitrogen levels.</li> <li>- Short Fallow: Fallow or weed free period of 5-6 months between harvest of one crop and sowing of the next crop.</li> </ul>
<b>Sowing time:</b>	<ul style="list-style-type: none"> <li>- Late April to mid-May is optimal. Avoid early April plantings as these appear more susceptible to aphid activity and cucumber mosaic virus disease (Narrowleaf lupins only).</li> <li>- Seed price used above is for purchased seed; if using retained seed adjust budget accordingly.</li> </ul>
<b>Inoculation:</b>	<ul style="list-style-type: none"> <li>- Group G inoculum is essential.</li> </ul>
<b>Fertiliser:</b>	<ul style="list-style-type: none"> <li>- Single super is one of many available alternatives - adequate levels of phosphorus and sulfur should be applied.</li> <li>- Granulock 12 or MAP can also be used as alternative fertilisers, the choice of which depends on rates and cost variations.</li> </ul>
<b>Insect control:</b>	<ul style="list-style-type: none"> <li>- Monitor heliothis from flowering through to pod fill.</li> </ul>
<b>Weed control:</b>	<ul style="list-style-type: none"> <li>- Simazine/Trifluralin pre-emergent herbicide treatment to control selected annual grass and broadleaf weeds</li> <li>- Rotate herbicide groups and use other non-chemical methods to avoid herbicide resistance developing.</li> </ul>
<b>Machinery:</b>	<ul style="list-style-type: none"> <li>- A tractor with 149 kW (200 HP) pto power and 177 kW (240 HP) engine power is assumed.</li> <li>- Contract-harvesting does not include the cost of fuel.</li> </ul>
<b>Labour:</b>	<ul style="list-style-type: none"> <li>- The labour required for machinery operations is 0.69 hrs/ha</li> <li>- Using a labour cost of \$14/hr, an additional \$9.65 can be deducted from the budget</li> </ul>
<b>Important notes:</b>	<ul style="list-style-type: none"> <li>- These gross margins are only a guide. They do not include overhead costs.</li> <li>- <b>Use your own figures and price assumptions to estimate your own gross margin.</b></li> <li>- Use of a particular brand name does NOT imply a recommendation of that brand by NSW Department of Primary Industries.</li> </ul>

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.



## NSW DEPARTMENT OF PRIMARY INDUSTRIES

# Linseed or Linola: Short Fallow (No-till)

## Central Zone - East

## Winter 2009

### 1. GROSS MARGIN BUDGET:

**INCOME:**

1.60 tonnes/ha @ \$800.00 /tonne (on farm)

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

See opposite page for detail

Cultivation.....	\$0.00
Sowing.....	\$40.82
Fertiliser.....	\$131.50
Herbicide.....	\$53.91
Insecticide.....	\$42.60
Contract-harvesting.....	\$50.00
Levies.....	\$13.06
Crop Insurance.....	\$45.92
Cartage, grading & bagging.....	\$0.00

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

Standard Budget \$/Ha	Your Budget \$/Ha
\$1,280.00	
<b>\$1,280.00</b>	
\$0.00	
\$40.82	
\$131.50	
\$53.91	
\$42.60	
\$50.00	
\$13.06	
\$45.92	
\$0.00	
<b>\$377.80</b>	
<b>\$902.20</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$720 /t	\$760 /t	<b>\$800 /t</b>	\$840 /t	\$880 /t	
1.00	\$368	\$406	\$444	\$482	\$521	
1.20	\$505	\$551	\$597	\$643	\$689	
1.40	\$643	\$696	\$750	\$803	\$856	
<b>1.60</b>	\$780	\$841	<b>\$902</b>	\$963	\$1,024	←
1.80	\$917	\$986	\$1,055	\$1,124	\$1,192	
2.00	\$1,055	\$1,131	\$1,207	\$1,284	\$1,360	
2.20	\$1,192	\$1,276	\$1,360	\$1,444	\$1,528	

**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 Department of Primary Industries over any other equivalent product from another manufacturer.

# Linseed or Linola: Short Fallow (No-till)

## Central Zone - East

## Winter 2009

### CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Weed control eg: glyphosate 450 g/litre	Jan	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Weed control eg: glyphosate 450 g/litre	Apr	0.05	43.36	<b>\$2.34</b>	0.80 L	\$7.38/L	<b>\$5.90</b>	<b>\$8.24</b>
Weed control eg: trifluralin 480® g/litre	Apr	0.05	43.36	<b>\$2.34</b>	1.20 L	\$8.05/L	<b>\$9.66</b>	<b>\$11.99</b>
Sowing	May	0.17	64.36	<b>\$10.82</b>	25 kg	\$1.20/kg	<b>\$30.00</b>	<b>\$40.82</b>
Nitrogen fertiliser eg: Urea	Apr	with above			40 kg	\$0.85/kg	<b>\$34.00</b>	<b>\$34.00</b>
Starter fertiliser eg: Starter 15®	May	with above			100 kg	\$0.98/kg	<b>\$97.50</b>	<b>\$97.50</b>
Broadleaf weed control eg: Bromoxynil (Linseed only)	Jun	0.05	43.36	<b>\$2.34</b>	1.40 L	\$14.40/L	<b>\$20.16</b>	<b>\$22.50</b>
Heliothis control eg: alpha-cypermethrin (Fastac Duo®)	Sep	contract		<b>\$18.15</b>	0.30 L	\$10.50/L	<b>\$3.15</b>	<b>\$21.30</b>
Heliothis control eg: alpha-cypermethrin (Fastac Duo®)	Oct	contract		<b>\$18.15</b>	0.30 L	\$10.50/L	<b>\$3.15</b>	<b>\$21.30</b>
Contract-harvest	Nov	contract		<b>\$50.00</b>				<b>\$50.00</b>
Crop Levies					1.02%	of on-farm value		<b>\$13.06</b>
Crop Insurance					3.59%	of on-farm value		<b>\$45.92</b>

\*\*\* Input and crop prices are correct at the time of writing (March 2009). Market uncertainty makes estimation of future pricing impractical.

### NOTES:

<b>Soil:</b>	- Suited to heavier textured soils with good fertility.
<b>Place in rotation:</b>	- Good break crop for cereal diseases and particularly useful as break for root lesion nematode. - Short Fallow: Fallow or weed free period of 5-6 months between harvest of one crop and sowing of the next crop. For example, a paddock harvested in November would allow for a 5-6 month fallow until sowing.
<b>Seed:</b>	- Seed price used above is for purchased seed; if using retained seed adjust budget accordingly.
<b>Weed control:</b>	- Glyphosate for fallow weed control. Trifluralin for pre-emergent weed control. - Rotate herbicide groups and use other non-chemical methods to avoid herbicide resistance developing.
<b>Insecticides:</b>	- Heliothis control is critical and two sprays are likely each year, beginning from budding. Consult your local agronomist for heliothis control measures or refer to Insect & Mite Control in Field Crops-2009. - Cutworms may need control during establishment (June), 1 year in 5.
<b>Marketing:</b>	- Linseed or Linola is a specialist market and forward contracts are essential with crushing companies.
<b>Machinery:</b>	- A tractor with 149 kW (200 HP) pto power and 177 kW (240 HP) engine power is assumed. - Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs. - Contract-harvesting does not include the cost of fuel.
<b>Labour:</b>	- The labour required for machinery operations is 0.48 hrs/ha - Using a labour cost of \$14/hr, an additional \$6.71 can be deducted from the budget
<b>Important notes:</b>	- These gross margins are only a guide. They do not include overhead costs. - <b>Use your own figures and price assumptions to estimate your own gross margin.</b> - Use of a particular brand name does NOT imply a recommendation of that brand by NSW Department of Primary Industries.

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.



## Field Peas: Short Fallow (No-till) Central Zone - East

### Winter 2009

#### 1. GROSS MARGIN BUDGET:

##### INCOME:

2.50 tonnes/ha @ \$300.00 /tonne (on farm)

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

##### VARIABLE COSTS:

See opposite page for detail

Sowing seed.....	\$112.68
Fertiliser.....	\$76.05
Herbicide.....	\$52.11
Insecticide.....	\$21.30
Contract-harvesting.....	\$50.00
Levies.....	\$7.61
Crop Insurance.....	\$26.91
Cartage, grading & bagging.....	\$0.00

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

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

Standard Budget \$/Ha	Your Budget \$/Ha
\$750.00	
<b>\$750.00</b>	
\$112.68	
\$76.05	
\$52.11	
\$21.30	
\$50.00	
\$7.61	
\$26.91	
\$0.00	
<b>\$346.65</b>	
<b>\$403.35</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)				
	\$220 /t	\$260 /t	\$300 /t	\$340 /t	\$380 /t
1.60	\$24	\$85	\$146	\$207	\$268
1.90	\$87	\$159	\$232	\$304	\$377
2.20	\$150	\$234	\$317	\$401	\$485
<b>2.50</b>	\$213	\$308	<b>\$403</b>	\$499	\$594
2.80	\$276	\$382	\$489	\$596	\$703
3.10	\$338	\$457	\$575	\$693	\$812
3.40	\$401	\$531	\$661	\$791	\$920

Gross  
Margin  
(\$/ha)

#### 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 Department of Primary Industries over any other equivalent product from another manufacturer.

# Field Peas: Short Fallow (No-till)

## Central Zone - East

## Winter 2009

### CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs/ha	Cost	Total	Rate/ha	Cost	Total	
			\$/hour	\$/ha		\$	\$/ha	
Weed control eg: glyphosate 450 g/litre	Jan/Feb	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Weed control eg: Garlon®	Jan/Feb	with above			0.12 L	\$29.93/L	<b>\$3.59</b>	<b>\$3.59</b>
Weed control eg: glyphosate 450 g/litre	Apr	0.05	43.36	<b>\$2.34</b>	1.00 L	\$7.38/L	<b>\$7.38</b>	<b>\$9.71</b>
Sowing - inoculated seed	May	0.17	64.36	<b>\$10.82</b>	110 kg	\$0.93/kg	<b>\$101.86</b>	<b>\$112.68</b>
Phosphorus fertiliser eg: Single Super	May	with above			130 kg	\$0.59/kg	<b>\$76.05</b>	<b>\$76.05</b>
Broadleaf weed control eg: Metribuzin (Lexone DF®) (post-sow/pre-emergence)	May	0.05	43.36	<b>\$2.34</b>	0.30 kg	\$60.35/kg	<b>\$18.11</b>	<b>\$20.44</b>
Grass weed control eg: Verdict®	Jul	0.05	43.36	<b>\$2.34</b>	0.05 L	\$96.88/L	<b>\$4.84</b>	<b>\$7.18</b>
Heliothis control eg: alpha-cypermethrin (Fastac Duo®)	Sept	contract		<b>\$18.15</b>	0.30 L	\$10.50/L	<b>\$3.15</b>	<b>\$21.30</b>
Contract-harvest	Dec	contract		<b>\$50.00</b>				<b>\$50.00</b>
Crop Levies					1.02%	of on-farm value		<b>\$7.61</b>
Crop Insurance					3.59%	of on-farm value		<b>\$26.91</b>

\*\*\* Input and crop prices are correct at the time of writing (March 2009). Market uncertainty makes estimation of future pricing impractical.

### NOTES:

<b>Soils:</b>	<ul style="list-style-type: none"> <li>- Adaptable to many soil types, avoid soil pH<sub>c</sub> &lt; 4.8 in both topsoil and subsoil.</li> <li>- Paddock should be level or rolled if necessary to aid harvest management. Avoid paddock with sticks and stones. Best harvested with crop lifters or a pea front.</li> </ul>
<b>Place in rotation:</b>	<ul style="list-style-type: none"> <li>- Useful as a break crop in cereal rotations for disease control, weed control and nitrogen benefits at the lower fertility end of the rotation.</li> <li>- Short Fallow. Fallow or weed free period of 5-6 months between harvest of one crop and sowing of the next crop.</li> </ul>
<b>Inoculation:</b>	<ul style="list-style-type: none"> <li>- Group E inoculum is essential.</li> </ul>
<b>Seed source:</b>	<ul style="list-style-type: none"> <li>- Seed should be obtained from central and northern areas and preferably certified growers to minimise the risk of pea weevil introduction.</li> <li>- Where possible choose powdery mildew tolerant varieties.</li> <li>- Seed price used above is for purchased seed; if using retained seed adjust budget accordingly.</li> </ul>
<b>Sowing time:</b>	<ul style="list-style-type: none"> <li>- Ideally mid-May to mid-June.</li> </ul>
<b>Fertiliser:</b>	<ul style="list-style-type: none"> <li>- Single super is one of many available alternatives - adequate levels of phosphorus and sulfur should be applied. Granulock 12 or MAP can also be used as alternative fertiliser the choice of which depends on rates and cost variations.</li> </ul>
<b>Weed control:</b>	<ul style="list-style-type: none"> <li>- May require grass control with fluzafop, haloxyfop, quizalafop-ethyl or sethoxydim.</li> <li>- Metribuzin may be used for broadleaf weed control, applied either Post-sow/pre-emergence or early post-emergence (before third node).</li> <li>- Rotate herbicide groups and use other non-chemical methods to avoid herbicide resistance developing.</li> </ul>
<b>Insect control:</b>	<ul style="list-style-type: none"> <li>- Crops must be monitored from flowering for pea weevil and heliothis.</li> </ul>
<b>Harvest:</b>	<ul style="list-style-type: none"> <li>- Desiccation may be required in seasons with wet springs.</li> </ul>
<b>Machinery:</b>	<ul style="list-style-type: none"> <li>- Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries &amp; repairs.</li> <li>- A tractor with 149 kW (200 HP) pto power and 177 kW (240 HP) engine power is assumed.</li> </ul>
<b>Labour:</b>	<ul style="list-style-type: none"> <li>- The labour required for machinery operations is 0.41 hrs/ha</li> <li>- Using a labour cost of \$14/hr, an additional \$5.77 can be deducted from the budget</li> </ul>
<b>Important notes:</b>	<ul style="list-style-type: none"> <li>- These gross margins are only a guide. They do not include overhead costs.</li> <li>- <b>Use your own figures and price assumptions to estimate your own gross margin.</b></li> <li>- Use of a particular brand name does NOT imply a recommendation of that brand Industries. by NSW Department of Primary NSW Department of Primary Industries.</li> </ul>

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: Short Fallow (No-till)

## Central Zone - East

### Winter 2009

#### CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Weed control eg: glyphosate 450 g/litre	Jan/Feb	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Weed control eg: Garlon®	Jan/Feb	with above			0.12 L	\$29.93/L	<b>\$3.59</b>	<b>\$3.59</b>
Weed control eg: glyphosate 450 g/litre	Apr	0.05	43.36	<b>\$2.34</b>	1.00 L	\$7.38/L	<b>\$7.38</b>	<b>\$9.71</b>
Weed control eg: 2,4-D amine (Surpass®)	Apr	with above			1.20 L	\$6.22/L	<b>\$7.46</b>	<b>\$7.46</b>
Sowing seed	Apr/May	0.17	64.36	<b>\$10.82</b>	110 kg	\$1.09/kg	<b>\$119.90</b>	<b>\$130.72</b>
Phosphorus fertiliser eg: Single Super	Apr/May	with above			130 kg	\$0.59/kg	<b>\$76.05</b>	<b>\$76.05</b>
Weed control eg: pre-emergent Simazine 500®	Apr/May	0.05	43.36	<b>\$2.34</b>	2.00 L	\$9.60/L	<b>\$19.20</b>	<b>\$21.54</b>
Grass weed control eg: haloxyfop (Verdict®)	Jun/July	0.05	43.36	<b>\$2.34</b>	0.06 L	\$96.88/L	<b>\$5.81</b>	<b>\$8.15</b>
Disease control eg: mancozeb (Dithane®)	Jun/july	with above			2.00 kg	\$11.00/kg	<b>\$22.00</b>	<b>\$22.00</b>
Disease control eg: mancozeb (Dithane®)	Aug	0.05	43.36	<b>\$2.34</b>	2.00 kg	\$11.00/kg	<b>\$22.00</b>	<b>\$24.34</b>
Disease control eg: mancozeb (Dithane®)	Sept	0.05	43.36	<b>\$2.34</b>	2.00 kg	\$11.00/kg	<b>\$22.00</b>	<b>\$24.34</b>
Heliathis control eg: alpha-cypermethrin Fastac Duo®	Oct	contract		<b>\$18.15</b>	0.30 L	\$10.50/L	<b>\$3.15</b>	<b>\$21.30</b>
Heliathis control eg: alpha-cypermethrin Fastac Duo®	Oct	contract		<b>\$18.15</b>	0.30 L	\$10.50/L	<b>\$3.15</b>	<b>\$21.30</b>
Desiccation eg: Roundup PowerMax®	Oct	contract		<b>\$18.15</b>	1.80 L	\$10.67/L	<b>\$19.20</b>	<b>\$37.35</b>
Contract-harvest	Nov			<b>\$50.00</b>				<b>\$50.00</b>
Crop Levies					1.02%	of on-farm value		<b>\$6.12</b>
Crop Insurance					3.08%	of on-farm value		<b>\$18.45</b>

\*\*\* Input and crop prices are correct at the time of writing (March 2009). Market uncertainty makes estimation of future pricing impractical.

#### NOTES:

<b>Soils:</b>	- Suited to the better clay loam and heavy self mulching clay soils. - Soils should be well drained.
<b>Place in rotation:</b>	- Useful as a break crop in cereal rotations for disease control, weed control and nitrogen benefits for following cereal crops. - Short Fallow: Fallow or weed free period of 5-6 months between harvest of one crop and sowing of the next crop.
<b>Inoculation:</b>	- Group F inoculum is essential.
<b>Fertiliser:</b>	- Single super is one of many available alternatives. Adequate levels of phosphorus and sulfur should be applied.
<b>Seed:</b>	- Seed price used above is for purchased seed; if using retained seed adjust budget accordingly.
<b>Insect control:</b>	- Monitor from flowering through to podding for heliothis.
<b>Weed control</b>	- Grass control with fluazifop, haloxyfop, quizalafop, sethoxydim or clethodim herbicides. - Weed control is critical pre-emergent broadleaf weed control herbicide is essential.
<b>Fungicide:</b>	- Fungicide programs are required to control chocolate spot and rust.
<b>Machinery:</b>	- A tractor with 149 kW (200 HP) pto power and 177 kW (240 HP) engine power is assumed. - Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs. - Contract-harvesting does not include the cost of fuel.
<b>Labour:</b>	- The labour required for machinery operations is 0.61 hrs/ha
<b>Important notes:</b>	- These gross margins are only a guide. They do not include overhead costs. - <b>Use your own figures and price assumptions to estimate your own gross margin.</b> - Use of a particular brand name does NOT imply a recommendation of that brand by NSW Department of Primary Industries.

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# Chickpeas: Short Fallow (No-till)

## Central Zone - East

### Winter 2009

CALENDAR OF OPERATIONS:								
Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Weed control eg: glyphosate 450 g/litre	Jan/Feb	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Weed control eg: Garlon®	Jan/Feb	with above			0.12 L	\$29.93/L	<b>\$3.59</b>	<b>\$3.59</b>
Weed control eg: glyphosate 450 g/litre	Mar/Apr	0.05	43.36	<b>\$2.34</b>	1.00 L	\$7.38/L	<b>\$7.38</b>	<b>\$9.71</b>
Weed control eg: 2,4-D amine (Surpass®)	Mar/Apr	with above			1.20 L	\$6.22/L	<b>\$7.46</b>	<b>\$7.46</b>
Sowing seed- inoculated and treated seed	May	0.17	64.36	<b>\$10.82</b>	80 kg	\$1.19/kg	<b>\$95.28</b>	<b>\$106.10</b>
Phosphorus fertiliser eg: Single Super	May	with above			130 kg	\$0.59/kg	<b>\$76.05</b>	<b>\$76.05</b>
Weed control eg: Simazine 500® (Post-sow/pre-emergence)	May	0.05	43.36	<b>\$2.34</b>	1.50 L	\$9.60/L	<b>\$14.40</b>	<b>\$16.74</b>
Broadleaf weed control eg: Balance® Post-sow/pre-emergence	May	with above			50 g	\$0.34/L	<b>\$16.88</b>	<b>\$16.88</b>
Disease control eg: mancozeb (Dithane®)	July	0.05	43.36	<b>\$2.34</b>	1.00 kg	\$11.00/kg	<b>\$11.00</b>	<b>\$13.34</b>
Disease control eg: mancozeb (Dithane®)	Aug/Sept	0.05	43.36	<b>\$2.34</b>	1.00 kg	\$11.00/L	<b>\$11.00</b>	<b>\$13.34</b>
Disease control eg: mancozeb (Dithane®)	Oct	0.05	43.36	<b>\$2.34</b>	1.00 kg	\$11.00/L	<b>\$11.00</b>	<b>\$13.34</b>
Heliothis control eg: alpha-cypermethrin (Fastac Duo®)	Oct	contract		<b>\$18.15</b>	0.30 L	\$10.50/L	<b>\$3.15</b>	<b>\$21.30</b>
Desiccate eg: Roundup PowerMax®	Dec	contract		<b>\$18.15</b>	1.00 L	\$10.67/L	<b>\$10.67</b>	<b>\$28.82</b>
Desiccate eg: Ally®	Dec	with above			5.00 g	\$0.13/g	<b>\$0.66</b>	<b>\$0.66</b>
Contract-harvest	Dec			<b>\$50.00</b>				<b>\$50.00</b>
Crop Levies					1.02%	of on-farm value		<b>\$10.96</b>
Crop Insurance					2.56%	of on-farm value		<b>\$27.68</b>

\*\*\* Input and crop prices are correct at the time of writing (March 2009). Market uncertainty makes estimation of future pricing impractical.

#### NOTES:

- Soil:** - Suited to the better loam, clay loam or heavy self mulching clay soils. Soils must be well drained.
- Place in rotation:** - Useful as a break crop later in cereal rotations for disease control, weed control and nitrogen benefits for following cereal crops.  
- Should NOT be grown more than one year in four in a paddock.  
- Short fallow: Fallow or weed free period of 5-6 months between harvest of one crop and sowing of the next crop.
- Seed:** - Seed price used above is for purchased seed; if using retained seed adjust budget accordingly
- Inoculation:** - Group N inoculum is essential.
- Fertiliser:** - Single super is one of many available alternatives. Adequate levels of phosphorus and sulfur should be applied.
- Fungicide:** - Strategic fungicide programs are required to control the disease Ascochyta in chickpeas.  
Program may vary with variety (see Variety Management Package - VMP at [www.pulseaus.com.au](http://www.pulseaus.com.au)).  
See "Fungicide strategies for the control of ascochyta in chickpeas".
- Weed control:** - Chickpeas are poor weed competitors and weed control is critical and a pre-emergent broadleaf herbicide is essential.  
- Optional grass control with fluzafop, haloxyfop, quizalafop, sethoxydim or clethodim herbicides.  
- Note: Balance® herbicide is not recommended for use on Yorker chickpeas.
- Insect control:** - Heliothis must be monitored from flowering through to podding.
- Harvest:** - Desiccation is recommended in most seasons to ensure even ripening. Timing is critical.
- Machinery:** - A tractor with 149 kW (200 HP) pto power and 177 kW (240 HP) engine power is assumed.  
- Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.
- Labour:** - Contract-harvesting does not include the cost of fuel.  
- The labour required for machinery operations is 0.41 hrs/ha  
- Using a labour cost of \$14/hr, an additional \$5.77 can be deducted from the budget
- Important notes:** - These gross margins are only a guide. They do not include overhead costs.  
- **Use your own figures and price assumptions to estimate your own gross margin.**  
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by NSW Department of Primary Industries



# Cereal Rye: Short Fallow Central Zone - East

## Winter 2009

### CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Weed control eg: glyphosate 450 g/litre	Dec/Jan	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Weed control eg: Garlon®	Dec/Jan	with above			0.12 L	\$29.93/L	<b>\$3.59</b>	<b>\$3.59</b>
Cultivation	Feb	0.17	47.03	<b>\$8.05</b>				<b>\$8.05</b>
Weed control eg: glyphosate 450 g/litre	Apr/May	0.05	43.36	<b>\$2.34</b>	0.80 L	\$7.38/L	<b>\$5.90</b>	<b>\$8.24</b>
Weed control eg: 2,4-D amine (Surpass®)	Apr/May	with above			1.20 L	\$6.22/L	<b>\$7.46</b>	<b>\$7.46</b>
Sowing	May	0.17	64.36	<b>\$10.82</b>	60 kg	\$1.00/kg	<b>\$60.00</b>	<b>\$70.82</b>
Nitrogen fertiliser eg: Urea	May	with above			40 kg	\$0.85/kg	<b>\$34.00</b>	<b>\$34.00</b>
Starter fertiliser eg: MAP	May	with above			60 kg	\$0.98/kg	<b>\$58.50</b>	<b>\$58.50</b>
Broadleaf weed control eg: MCPA LVE®	Jun	0.05	43.36	<b>\$2.34</b>	0.50 L	\$9.81/L	<b>\$4.90</b>	<b>\$7.24</b>
Early post-emergent weed control eg: Chlorsulfuron (Glean®)	Jun	0.05	43.36	<b>\$2.34</b>	20 g	\$0.12/gm	<b>\$2.35</b>	<b>\$4.69</b>
Contract-harvest	Dec	contract		<b>\$48.00</b>				<b>\$48.00</b>
Crop Levies					1.01%	of on-farm value		<b>\$5.79</b>
Crop Insurance					2.05%	of on-farm value		<b>\$11.81</b>

\*\*\* Input and crop prices are correct at the time of writing (March 2009). Market uncertainty makes estimation of future pricing impractical.

### NOTES:

#### Paddock selection:

- Light textured acid soils with moderate to high aluminium levels where it will out-yield both wheat and barley.
- On wheat growing soils, cereal rye will generally yield 50 - 60% of wheat yield.
- Short Fallow: Fallow or weed free period of 5-6 months between harvest of one crop and sowing of the next crop. For example, a paddock harvested in November would allow for a 5-6 month fallow until sowing in May.

**Seed:** - Seed price used above is for purchased seed; if using retained seed adjust budget accordingly.

#### Weed control:

- Weed control should be implemented 6 - 8 weeks after sowing to avoid yield loss.
- Chlorsulfuron can be applied early post-emergent for grass and broadleaf weed control.
- Rotate herbicide groups and use other non-chemical methods to avoid herbicide resistance developing.

#### Grazing:

- Does not recover as well as oats from heavy grazing. Grain yield may be 50% of ungrazed crops.

#### Marketing:

- Due to variation in prices it should be grown under contract with millers.

#### Machinery:

- Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.
- Contract-harvesting does not include the cost of fuel.

#### Labour:

- The labour required for machinery operations is 0.69 hrs/ha
- Using a labour cost of \$14/hr, an additional \$9.71 can be deducted from the budget

#### Important notes:

- These gross margins are only a guide. They do not include overhead costs.
- **Use your own figures and price assumptions to estimate your own gross margin.**
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# Canola: Short Fallow (No-till) Central Zone - East

Winter 2009

**1. GROSS MARGIN BUDGET:**

**INCOME:**  
1.80 tonnes/ha @ \$480.00 /tonne (on farm)

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

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

Sowing..... \$37.82  
Fertiliser..... \$241.59  
Herbicide..... \$67.07  
Insecticide..... \$44.37  
Contract-harvesting..... \$125.00  
Levies..... \$11.47  
Crop Insurance..... \$31.00  
Cartage, grading & bagging..... \$0.00

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

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

Standard Budget \$/Ha	Your Budget \$/Ha
\$864.00	
<b>\$864.00</b>	
\$37.82	
\$241.59	
\$67.07	
\$44.37	
\$125.00	
\$11.47	
\$31.00	
\$0.00	
<b>\$558.32</b>	
<b>\$305.68</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$400 /t	\$440 /t	<b>\$480 /t</b>	\$520 /t	\$560 /t	
0.90	-\$174	-\$139	-\$105	-\$71	-\$36	
1.20	-\$60	-\$14	\$32	\$78	\$123	
1.50	\$54	\$112	\$169	\$226	\$283	
<b>1.80</b>	\$168	\$237	<b>\$306</b>	\$374	\$443	←
2.10	\$280	\$360	\$441	\$521	\$601	
2.40	\$388	\$480	\$572	\$663	\$755	
2.70	\$496	\$599	\$702	\$805	\$909	
3.00	\$604	\$719	\$833	\$948	\$1,062	

**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 Department of Primary Industries over any other equivalent product from another manufacturer.

# Canola: Short Fallow (No-till)

## Central Zone - East

### Winter 2009

#### CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Weed control eg: glyphosate 450 g/litre	Dec/Jan	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Weed control eg: Garlon®	Dec/Jan	with above			0.12 L	\$29.93/L	<b>\$3.59</b>	<b>\$3.59</b>
Weed control eg: glyphosate 450 g/litre	Feb/Mar	0.05	43.36	<b>\$2.34</b>	0.80 L	\$7.38/L	<b>\$5.90</b>	<b>\$8.24</b>
Weed control eg: 2,4-D amine (Surpass®).	Feb/Mar	with above			1.20 L	\$6.22/L	<b>\$7.46</b>	<b>\$7.46</b>
Weed control eg: trifluralin 480 g/L	Apr	0.05	43.36	<b>\$2.34</b>	1.70 L	\$8.05/L	<b>\$13.68</b>	<b>\$16.02</b>
Nitrogen and sulfur fertiliser eg: Extra Sul®	Apr	0.17	47.03	<b>\$8.05</b>	84 kg	\$0.78/kg	<b>\$65.52</b>	<b>\$73.57</b>
Sowing - treated seed	Apr/May	0.17	64.36	<b>\$10.82</b>	3.00 kg	\$9.00/kg	<b>\$27.00</b>	<b>\$37.82</b>
Starter fertiliser eg: MAP	Apr/May	with above			100 kg	\$0.98/kg	<b>\$97.50</b>	<b>\$97.50</b>
Mite control eg: omethoate (Le-mat®)	May	0.05	79.73	<b>\$4.30</b>	0.10 L	\$33.67/L	<b>\$3.37</b>	<b>\$7.66</b>
Topdress Urea	Jun/Jul	0.17	64.36	<b>\$11.02</b>	70.00 Kg	\$0.85/kg	<b>\$59.50</b>	<b>\$70.52</b>
Weed control eg: clopyralid (Lontrel®)	Jun	0.05	43.36	<b>\$2.34</b>	0.30 L	\$44.67/L	<b>\$13.40</b>	<b>\$15.74</b>
Weed control eg: (Verdict®)	Jun	with above			0.05 L	\$96.88/L	<b>\$4.84</b>	<b>\$4.84</b>
Heliothis control (every year) eg: Fastac Duo®	Oct	contract		<b>\$18.15</b>	0.30 L	\$10.50/L	<b>\$3.15</b>	<b>\$21.30</b>
Aphid control (1 year in 2) eg: Pirimicarb (Pirimor WG®)	Sep	contract		<b>\$18.15</b>	0.5 kg	\$25.35/kg	<b>\$12.68</b>	<b>\$15.41</b>
Contract Windrow	Nov			<b>\$75.00</b>				<b>\$75.00</b>
Contract-harvest		contract		<b>\$50.00</b>				<b>\$50.00</b>
Crop Levies					\$1.50/tonne + 1.02% of on-farm value			<b>\$11.47</b>
Crop Insurance					3.59% of on-farm value			<b>\$31.00</b>

\*\*\* Input and crop prices are correct at the time of writing (March 2009). Market uncertainty makes estimation of future pricing impractical.

#### NOTES:

##### Place in rotation:

This budget applies to canola following cereal.

- Excellent disease and weed break crop for wheat.
- Short Fallow: Fallow or weed free period of 5-6 months between harvest of one crop and sowing of the next crop. For example, a paddock harvested in November would allow for a 5-6 month fallow until sowing in May.

##### Paddock selection:

- Avoid acidic soils with exchangeable aluminium and manganese. Avoid hard pans.
- Apply lime on acid soils where pH<sub>Ca</sub> is below 5.0.
- Subsoil moisture of at least 60 cm is recommended.

##### Sowing time:

- Sow from mid April to late May.
- High stubble loads directly over seeding row may result in poor crop establishment.
- Adjust seeding rates accordingly.
- Seed price used above is for purchased seed of open pollinated varieties. Farmer retained seed is not recommended.

##### Fertiliser:

- Canola has high requirements for essential nutrients phosphorus, nitrogen and sulfur.
- A starter fertiliser is recommended at sowing. Canola is very responsive to phosphorus.
- Phosphorus is essential for good growth and development and effective utilisation of other nutrients.
- Needs 30% more nitrogen than equivalent yielding wheat. All nitrogen should be applied before stem elongation. Soils low in sulfur, particularly red soils, should receive 25 kg sulfur per hectare.

##### Weed control:

- Trifluralin as a pre-emergent for selected grass and broadleaf weeds.
- Clopyralid for broadleaf weed control (capeweed and saffron thistle).
- Rotate herbicide groups & use other non-chemical methods to delay herbicide resistance.

##### Insect control:

- Earthmite control is essential to protect seedlings.
- Monitor regularly from flowering onwards for chewing and sucking insects eg. aphids and heliothis.
- Heliothis control is needed in most years.

##### Windrowing:

- Is recommended to promote even ripening and minimise shattering losses.

##### Machinery:

- A tractor with 149 kW (200 HP) pto power and 177 kW (240 HP) engine power is assumed.
- Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.
- Contract-harvesting does not include the cost of fuel.

##### Labour:

- The labour required for machinery operations is 0.76 hrs/ha
- Using a labour cost of \$14/hr, an additional \$10.65 can be deducted from the budget

##### Important notes:

- These gross margins are only a guide. They do not include overhead costs.
- **Use your own figures and price assumptions to estimate your own gross margin.**
- Use of a particular brand name does NOT imply recommendation of that brand by NSW Department of Primary Industries.



# Canola: Long Fallow After Lucerne Central Zone - East

Winter 2009

**1. GROSS MARGIN BUDGET:**

**INCOME:**  
2.40 tonnes/ha @ \$480.00 /tonne (on farm)

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

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

- Cultivation.....
- Sowing.....
- Fertiliser.....
- Herbicide.....
- Insecticide.....
- Contract-harvesting.....
- Levies.....
- Crop Insurance.....
- Cartage, grading & bagging.....

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

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

Standard Budget \$/Ha	Your Budget \$/Ha
\$1,152.00	
<b>\$1,152.00</b>	
\$21.19	
\$37.82	
\$206.02	
\$48.21	
\$44.37	
\$133.00	
\$15.29	
\$41.33	
\$0.00	
<b>\$547.24</b>	
<b>\$604.76</b>	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)				
	\$400 /t	\$440 /t	\$480 /t	\$520 /t	\$560 /t
1.50	\$88	\$145	\$202	\$259	\$316
1.80	\$202	\$270	\$339	\$408	\$476
2.10	\$314	\$394	\$474	\$554	\$634
<b>2.40</b>	\$422	\$513	<b>\$605</b>	\$696	\$788
2.70	\$530	\$633	\$736	\$839	\$942
3.00	\$638	\$752	\$867	\$981	\$1,096
3.30	\$746	\$872	\$998	\$1,123	\$1,249

Gross Margin (\$/ha)

**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 Department of Primary Industries over any other equivalent product from another manufacturer.

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 After Lucerne

## Central Zone - East

### Winter 2009

#### CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs/ha	Cost	Total	Rate/ha	Cost	Total	
			\$/hour	\$/ha		\$	\$/ha	
Weed control eg: glyphosate 450 g/litre	Sept	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Broadleaf weed control eg: 2,4-D amine 300g/L (Surpass®)	Sept	with above			1.20 L	\$6.22/L	<b>\$7.46</b>	<b>\$7.46</b>
Mite control eg: Omethoate (Le-mat®)	Sept/Oct	with above			0.05 L	\$33.67/L	<b>\$1.68</b>	<b>\$1.68</b>
Chisel Plough	Oct/Nov	0.22	44.83	<b>\$10.01</b>				<b>\$10.01</b>
Weed control eg: glyphosate 450 g/litre	Dec/Jan	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Weed control eg: Garlon®	Dec/Jan	with above			0.12 L	\$29.93/L	<b>\$3.59</b>	<b>\$3.59</b>
Weed control eg: glyphosate 450 g/litre	Mar	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Weed control eg: trifluralin 480 g/Litre	Apr	0.05	43.36	<b>\$2.34</b>	1.70 L	\$8.05/L	<b>\$13.68</b>	<b>\$16.02</b>
Sowing (treated seed)	Apr/May	0.17	64.36	<b>\$10.82</b>	3.00 kg	\$9.00/kg	<b>\$27.00</b>	<b>\$37.82</b>
Starter fertiliser eg: MAP	Apr/May	with above			100 kg	\$0.98/kg	<b>\$97.50</b>	<b>\$97.50</b>
Mite control eg: bifenthrin (Talstar®)	Apr/May	0.05	79.73	<b>\$4.30</b>	0.10 L	\$33.67/L	<b>\$3.37</b>	<b>\$7.66</b>
Top dress Nitrogen and Sulfur fertiliser eg: Gran Am®	Jun/July	0.17	64.36	<b>\$11.02</b>	125 kg	\$0.78/kg	<b>\$97.50</b>	<b>\$108.52</b>
Broadleaf weed control eg: Clopyralid (Lontrel®)	Jun	0.05	43.36	<b>\$2.34</b>	0.30 L	\$44.67/L	<b>\$13.40</b>	<b>\$15.74</b>
Heliothis control (every year) eg: alphacypermethrin (Fastac Duo®)	Oct	contract		<b>\$18.15</b>	0.30 L	\$10.50/L	<b>\$3.15</b>	<b>\$21.30</b>
Aphid control (1 year in 2) eg: Pirimicarb (Pirimor WG®)	Sept	contract		<b>\$18.15</b>	0.5 kg	\$25.35/kg	<b>\$12.68</b>	<b>\$15.41</b>
Contract Windrow		contract		<b>\$75.00</b>				<b>\$75.00</b>
Contract-harvest		contract		<b>\$58.00</b>				<b>\$58.00</b>
Crop Levies					\$1.50/tonne + 1.02% of on-farm value			<b>\$15.29</b>
Crop Insurance					3.59% of on-farm value			<b>\$41.33</b>

\*\*\* Input and crop prices are correct at the time of writing (March 2009). Market uncertainty makes estimation of future pricing impractical.

#### NOTES:

##### Place in rotation:

- First crop for country coming out of lucerne/sub clover pasture.
- Fallow is usually commenced in Aug-Sep to conserve moisture and stop weeds seeding.
- Extended grazing time, weed control and moisture conservation can be achieved by using a herbicide rather than cultivation early. However, paddocks coming out of lucerne invariably require a chisel ploughing.

##### Paddock Selection:

- Avoid acidic soils with exchangeable aluminium and manganese. Avoid hard pans.
- Apply lime on acid soils where  $pH_{Ca}$  falls below 5.0.
- Subsoil moisture of at least 60 cm is recommended. High stubble load directly over the seeding row may result in poor crop establishment. Adjust the seeding rates accordingly.

##### Sowing Time:

- Sow after first sufficient rain, from mid April to late May.
- Seed price used above is for purchased seed. Farmer retained seed is not recommended.
- Canola has high requirements for essential nutrients phosphorus, nitrogen and sulfur.

##### Fertiliser:

- A starter fertiliser is recommended at sowing. Canola is very responsive to phosphorus.
- Phosphorus is essential for good growth & development and effective utilisation of all other nutrients.
- Canola needs 30% more nitrogen than equivalent yielding wheat. All nitrogen should be applied before stem elongation. Soils low in sulfur, particularly red soils should receive 25 kg Sulfur /ha.

##### Weed control:

- Clopyralid for broadleaf weed control (capeweed and saffron thistle).
- Rotate herbicide groups and use other non-chemical methods to delay herbicide resistance developing.
- Monitor regularly and frequently from flowering onwards for chewing and sucking insects. eg aphids & heliothis

##### Insect Control:

- Earthmite control is essential to protect seedlings.
- Heliothis control is needed in most years.

##### Windrowing:

- Is recommended to avoid shattering losses and promotes even ripening.

##### Machinery:

- A tractor with 149 kW (200 HP) pto power and 177 kW (240 HP) engine power is assumed.
- Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.
- Contract-harvesting does not include the cost of fuel.
- The labour required for machinery operations is 0.83 hrs/ha

##### Labour:

- Using a labour cost of \$14/hr, an additional \$14.56 can be deducted from the budget

##### Important notes:

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# Barley: Short Fallow

## Central Zone - East

## Winter 2009

### CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Weed control eg: glyphosate 450 g/litre	Jan	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Weed control eg: Garlon®	Jan	with above			0.12 L	\$29.93/L	<b>\$3.59</b>	<b>\$3.59</b>
Cultivation	Mar	0.17	47.03	<b>\$8.05</b>				<b>\$8.05</b>
Weed control eg: glyphosate 450 g/litre	Apr/May	0.05	43.36	<b>\$2.34</b>	0.80 L	\$7.38/L	<b>\$5.90</b>	<b>\$8.24</b>
Weed control eg: 2,4-D amine ( Surpass®)	Feb	with above			1.00 L	\$6.22/L	<b>\$6.22</b>	<b>\$6.22</b>
Nitrogen fertiliser eg: Urea	May	0.17	64.36	<b>\$10.82</b>	70 kg	\$0.85/kg	<b>\$59.50</b>	<b>\$70.32</b>
Sowing	May	0.17	64.36	<b>\$10.82</b>	50 kg	\$1.07/kg	<b>\$53.55</b>	<b>\$64.37</b>
Starter fertiliser eg: MAP	May	with above			100 kg	\$0.98/kg	<b>\$97.50</b>	<b>\$97.50</b>
Grass weed control eg: Diclofop-methyl (Hoegrass®)	Jun	0.05	43.36	<b>\$2.34</b>	1.00 L	\$17.33/L	<b>\$17.33</b>	<b>\$19.67</b>
Broadleaf weed control eg: MCPA LVE®	Jul	0.05	43.36	<b>\$2.34</b>	0.70 L	\$9.81/L	<b>\$6.86</b>	<b>\$9.20</b>
Contract-harvest	Nov	contract		<b>\$54.00</b>				<b>\$54.00</b>
Crop Levies - 2 row feed					\$1.50/tonne + 1.015% of on-farm value			<b>\$9.68</b>
Crop Levies - malt					\$1.50/tonne + 1.015% of on-farm value			<b>\$10.59</b>
Crop Insurance - 2 row feed					2.05% of on-farm value			<b>\$10.46</b>
Crop Insurance - malt					2.05% of on-farm value			<b>\$12.30</b>

\*\*\* Input and crop prices are correct at the time of writing (March 2009). Market uncertainty makes estimation of future pricing impractical.

### NOTES:

#### Place in rotation:

- Barley is a useful crop to follow wheat in the rotation as it does not share the same leaf diseases.
- Barley will respond to good soil fertility, however it is better adapted to lower nitrogen fertility situations than wheat. Barley is more sensitive to acid soils than other cereals.
- Select lower nitrogen fertility paddocks for malting barley (less than 80-100 kg mineral soil N/ha at planting)
- Tulla and Yambla have some tolerance to acid soils.
- Barley is a useful break crop where root lesion nematode and cereal cyst nematode are a problem.
- Short Fallow: Fallow or weed-free period of 5-6 months between harvest of one crop and sowing of the next crop. For example, a paddock harvested in November would create a 5-6 month fallow until sowing in May.

#### Sowing time:

- Ideally late April to June. However, barley is more adapted to late plantings than wheat.
- Seed price used above is for purchased seed; if using retained seed adjust budget accordingly.

#### Fertiliser:

- Moderate nitrogen rates can be applied to barley without greatly affecting the malting quality.

#### Variety:

- Obtain advice from district agronomist or see Winter Crop Variety Sowing Guide-2009

#### Weed control:

- There are a wide range of herbicide combinations which can be used.
- Rotate herbicide groups and use other non-chemical methods to avoid herbicide resistance.
- A tractor with 149 kW (200 HP) pto power and 177 kW (240 HP) engine power is assumed.
- Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.
- Contract-harvesting does not include the cost of fuel.

#### Labour:

- Using a labour cost of \$14/hr, an additional \$12.65 can be deducted from the budget

#### Important notes:

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# Autumn Legume Pasture: Established into Stubble Central Zone Winter 2009

CALENDAR OF OPERATIONS:								
Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Weed control eg: glyphosate 450 g/litre	Jan	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Weed control eg: glyphosate 450 g/litre	Mar	0.05	43.36	<b>\$2.34</b>	1.20 L	\$7.38/L	<b>\$8.85</b>	<b>\$11.19</b>
Weed control eg: glyphosate 450 g/litre	May	0.05	43.36	<b>\$2.34</b>	0.80 L	\$7.38/L	<b>\$5.90</b>	<b>\$8.24</b>
Mite control eg: Omethoate (Le-mat®)		with above			0.10 L	\$33.67/L	<b>\$3.37</b>	<b>\$3.37</b>
Sowing	May	0.17	64.36	<b>\$10.82</b>	5.50 kg	\$9.22/kg	<b>\$50.71</b>	<b>\$61.53</b>
Phosphorus fertiliser eg: Single Super	May	with above			120 kg	\$0.59/kg	<b>\$70.20</b>	<b>\$70.20</b>
Weed control eg: Trifluralin®(Pre-emergent)					1.20 L	\$8.05/L	<b>\$9.66</b>	<b>\$9.66</b>

\*\*\* Input and crop prices are correct at the time of writing (March 2009). Market uncertainty makes estimation of future pricing impractical

## NOTES:

### General:

- Pasture is direct drilled into cereal stubble the following autumn with an appropriate no-till planter.
- This method of pasture establishment improves the reliability of establishment and productivity of the stand.
- The lucerne/sub-clover/medic pasture is assumed to last 5 years but costs vary depending on pasture varieties used.
- Lucerne, sub-clover and medic seed need to be inoculated with the correct rhizobium prior to sowing.
- Under certain circumstances reduced tillage practices may be more appropriate for the control of wireweed and fumitory. This may involve scarify and Trifluralin application and incorporation prior to sowing.

### Fertiliser:

- Topdressing may be required in the second or third year with 120 kg/ha single super (depending on dry matter yield).
- Phosphorus and sulfur (eg. Single super) is recommended at sowing.

### Insect Control:

- Earthmite control may be necessary at early establishment.

### Machinery:

- A tractor with 149 kW (200 HP) pto power and 177 kW (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
- Using a labour cost of \$14/hr, an additional \$5.77 can be deducted from the budget

### Important notes::

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