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

1. GROSS MARGIN BUDGET:

INCOME:

1.60 tonnes/ha@ $200.00 /tonne on farm

A. TOTAL INCOME $/ha:

$320.00

VARIABLE COSTS:

See following page for detail

Cultivation $0.00
Sowing $52.21
Fertiliser & application $53.00
Herbicide & application $76.66
Insecticide $14.65
Fungicide & application $2.94
Contract harvesting $49.40
Levies $3.26
Crop Insurance $8.69
Cartage $0.00

B. TOTAL VARIABLE COSTS $/ha:

$260.82

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

$59.18

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

<table>
<thead>
<tr>
<th>YIELD tonnes/ha</th>
<th>ON FARM PRICE ($/tonne)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$140 /t</td>
</tr>
<tr>
<td>1.00</td>
<td>-$114</td>
</tr>
<tr>
<td>1.20</td>
<td>-$87</td>
</tr>
<tr>
<td>1.40</td>
<td>-$60</td>
</tr>
<tr>
<td><strong>1.60</strong></td>
<td>-$33</td>
</tr>
<tr>
<td>1.80</td>
<td>-$6</td>
</tr>
<tr>
<td>2.00</td>
<td>$21</td>
</tr>
<tr>
<td>2.20</td>
<td>$48</td>
</tr>
</tbody>
</table>

PRODUCT TRADE NAMES

The product trade names in this publication are supplied on the understanding that no preference between equivalent products is intended and that the inclusion of a product does not imply endorsement by NSW DPI over any other equivalent product from another manufacturer.

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NARROW LEAF LUPINS: (Direct Drill)
Southern Zone - east
Dryland Winter: 2012

CALENDAR OF OPERATIONS:

<table>
<thead>
<tr>
<th>Operation</th>
<th>Month</th>
<th>Cost</th>
<th>Total Cost</th>
<th>Rate/ha</th>
<th>Total Rate/ha</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fallow broadleaf &amp; grass weed control eg ground spray glyphosate 450 and Triclopyr 600 (Garlon® 600)</td>
<td>Jan</td>
<td>0.05</td>
<td>70.67</td>
<td>$3.81</td>
<td>1.50 L/ha</td>
<td>$4.20/L</td>
</tr>
<tr>
<td>Fallow broadleaf &amp; grass weed control eg ground spray glyphosate 450</td>
<td>Feb/Mar</td>
<td>0.05</td>
<td>70.67</td>
<td>$3.81</td>
<td>1.25 L/ha</td>
<td>$4.20/L</td>
</tr>
<tr>
<td>Fallow broadleaf &amp; grass weed control eg ground spray glyphosate 450 and Apply pre-emergent herbicide eg ground spray Trifluralin 480</td>
<td>Apr</td>
<td>0.05</td>
<td>70.67</td>
<td>$3.81</td>
<td>1.50 L/ha</td>
<td>$4.20/L</td>
</tr>
<tr>
<td>Sow (seed cost is based on farmer's own seed)</td>
<td>Apr</td>
<td>0.17</td>
<td>91.67</td>
<td>$15.41</td>
<td>80kg/ha</td>
<td>$0.40 /kg</td>
</tr>
<tr>
<td>Apply seed dressing eg. Iprodione (Rovral®)</td>
<td>Apr</td>
<td>with above</td>
<td></td>
<td></td>
<td>0.14 L/ha</td>
<td>$21.00/L</td>
</tr>
<tr>
<td>Apply seed inoculant</td>
<td>Apr</td>
<td>with above</td>
<td></td>
<td></td>
<td>80kg/ha</td>
<td>$0.06 /kg</td>
</tr>
<tr>
<td>Apply starter fertiliser eg. Legume Starter</td>
<td>Apr</td>
<td>with above</td>
<td></td>
<td></td>
<td>100kg/ha</td>
<td>$0.53 /kg</td>
</tr>
<tr>
<td>Pre-emergent residual soil herbicide eg ground spray simazine</td>
<td>Apr</td>
<td>0.05</td>
<td>70.67</td>
<td>$3.81</td>
<td>3.00 L/ha</td>
<td>$6.00/L</td>
</tr>
<tr>
<td>In crop grass weed control eg. ground spray haloxyfop-R (Verdict®)</td>
<td>July</td>
<td>0.05</td>
<td>70.67</td>
<td>$3.81</td>
<td>0.10 L/ha</td>
<td>$48.90/L</td>
</tr>
<tr>
<td>Haloxyfop-R (Verdict®)</td>
<td>July</td>
<td>contract aerial</td>
<td>$9.60</td>
<td>0.036 L/Ha</td>
<td>$140.39/L</td>
<td>$5.05</td>
</tr>
<tr>
<td>Contract harvest</td>
<td>Dec</td>
<td>contract</td>
<td>$49.40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research Levy</td>
<td></td>
<td></td>
<td>1.02% of on-farm value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crop Insurance</td>
<td></td>
<td></td>
<td>2.72% of on-farm value</td>
<td></td>
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</tbody>
</table>

NOTES:

Use of a particular brand name does NOT imply a recommendation of that brand by NSW DPI. Always read chemical labels and follow directions carefully, as it is your legal responsibility to do so.

Topcrop:
- Aim to achieve 35 - 40 plants/m². Dig up roots to check for nodulation.
- Monitor weekly for heliothis at budding.

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

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

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

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

Sowing time:
- April-May, reduce seeding rates in April

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

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

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

Prices:
- Prices for this crop can fluctuate widely.
- The labour required for machinery operations is 0.41 hrs/ha.
- At $22/hour this costs: $9.07 /ha changing the gross margin to $50.12 /ha

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

Economic note:
- These gross margins are only a guide. They do not include overhead costs or GST.
- Note: Input and crop prices are correct at the time of writing (April 2012). Market uncertainty makes estimation of future pricing impractical.
- Use your own figures and price assumptions to estimate your own gross margin.

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