Department of Primary Industries

FLOOD IRRIGATED LUCERNE - Maintenance

Farm Enterprise Budget Series - Murrumbidgee Valley/Murray Valley

Summer 2012/2013

1. GROSS MARGIN BUDGET: Based on small bale production.

INCOME:				**Standard Budget $/ha**
9.00 t/ha	@	$350.00	/t (on farm)	$3,150
6.00 t/ha	@	$250.00	/t (on farm)	$1,500
15.00 t/ha		**$310.00**	/t (on farm)*	
(5 cuts @ 3 t/ha/cut)				
		A. TOTAL INCOME $/ha:		**$4,650**

VARIABLE COSTS:

See following page for detail

Cultivation and Sowing.....	$0
Fertiliser.....	$125
Herbicide.....	$32
Insecticide.....	$4
Irrigation.....	$168
Levies.....	$0
Cut, Rake and Bale…….....	$1,200
Cartage and Stack……..	$720
B. TOTAL VARIABLE COSTS $/ha:	**$2,249**
C. GROSS MARGIN (A-B) $/ha:	**$2,401**
D. GROSS MARGIN $/ML:	**$185**

* weighted average price used

SENSITIVITY TABLES

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

YIELD	**On Farm Price**				
t/ha	$210 /t	$260 /t	**$310 /t**	$360 /t	$410 /t
11.00	$643	$1,193	$1,743	$2,293	$2,843
13.00	$820	$1,470	$2,120	$2,770	$3,420
15.00	$997	$1,747	**$2,401**	$3,247	$3,997
17.00	$1,174	$2,024	$2,874	$3,724	$4,574
19.00	$1,350	$2,300	$3,250	$4,200	$5,150

3. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER MEGALITRE:

YIELD	**On Farm Price**				
t/ha	$210 /t	$260 /t	**$310 /t**	$360 /t	$410 /t
11.00	$49	$92	$134	$176	$219
13.00	$63	$113	$163	$213	$263
15.00	$77	$134	**$185**	$250	$307
17.00	$90	$156	$221	$286	$352
19.00	$104	$177	$250	$323	$396

The budget is ONLY A GUIDE and should be altered for movements in crop and input prices, changes in seasonal conditions and the farm characteristics. Estimated prices are GST - exclusive

FLOOD IRRIGATED LUCERNE - Maintenance

Farm Enterprise Budget Series - Murrumbidgee Valley/Murray Valley

Summer 2012/2013

CALENDAR OF OPERATIONS:		Machinery			Inputs			**Total**
			Cost	Total		Cost	Total	**Cost**
Operation	Month	hrs/ha	$/hour	$/ha	Rate/ha		$/ha	**$/ha**
Control broadleaf & grass weeds - **boom spray e.g. Sprayseed® (paraquat + diquat) and**	Jun/Jul	0.05	41.38	$2.23	2.40 L/ha	$9.25/L	$22.20	**$24.43**
Diuron		with above			1.00kg/ha	$7.65/kg	$7.65	**$7.65**
Topdress with single super phosphate fertiliser **e.g. Superfect®**	Aug	0.10	16.61	$1.58	350kg/ha	$352.00/t	$123.20	**$124.78**
Mite/Aphid control - **boom spray e.g. dimethoate**	Sept	0.05	41.38	$2.23	0.15 L/ha	$10.55/L	$1.58	**$3.81**
Irrigation					13.0ML/ha	$12.96/ML	$168.48	**$168.48**
Cut rake and bale		contract			600 bales	$2.00/bale	$1,200.00	**$1,200.00**
Cartage + stacking		to farm shed			600 bales	$1.20/bale	$720.00	**$720.00**

The budget is ONLY A GUIDE and should be altered for movements in crop and input prices, changes in seasonal conditions and the farm characteristics. Estimated prices are GST - exclusive

AGRONOMIC NOTES:	
Prices	- Prices are estimated and GST-exclusive. Hay prices are highly sensitive to supply and demand. Higher quality can improve returns. - Prices based on small (25kg) bales - Price per bale basis (between $8-$12/bale)
Rotation	- Expected productive stand life 3 - 4 years. - Terminate stand when no longer economicaly viable (i.e. less than 50 plants/m^2) or weedy or thinning. Rotate with cereals to reduce disease and insect problems.
Weed Control	- Apply herbicides to dormant lucerne in winter after cutting or grazing to control broadleaf and grass weeds (consult "Weed control in Lucerne and Pastures").
Insect Control	- Regularly monitor for insects. Cut, graze or spray when necessary to control insect pests.
Irrigation	- Good irrigation management is critical for high yields and persistence. Fast irrigation is essential on flood layouts. - Irrigation scheduling allows efficient water use and helps to avoid waterlogging. - The MIA variable water costs are used in the budget. The budget is based on the assumption of 100% water allocation.For water costs in other irrigation districts, check Murrumbidgee irrigation web site. For water costs in the CIA, please go to the Coleambally Irrigation web site.
Fertiliser	- High inputs of phosphorus fertiliser are needed to replace nutrients removed by highly productive hay stands.
Production	-Five cuts are made during the season (6-7 possible). Assume 1 tonne=40 small square bales. - Assume 9 t is high quality and 6 t is downgraded by weather, weeds, etc.
Cutting Management	- For stand persistence under flood irrigation allow 2 cm regrowth before the next irrigation to avoid scald. To avoid damage to crown buds, do not cut stems below 7cm.
Risk	- The production of good quality lucerne hay involves significant risk (mainly weather) which potential growers should take into account.
Machinery	- Machinery costs include variable costs only for the tractor and implements. Two tractors: of 57 kW (77 HP) PTO and 66 kW (90 HP) engine; and of 141 kW (190 HP) PTO and 148 kW (225 HP) engine are assumed. - Baling and mowing prices are based on contract small bale prices.
More information	**See DPI NSW publications: "Lucerne for Pasture and Fodder", "Weed Control in Lucerne and Pastures" and "Insect & Mite Control in field crops"**

The budget is ONLY A GUIDE and should be altered for movements in crop and input prices, changes in seasonal conditions and the farm characteristics. Estimated prices are GST - exclusive