

## RICE - MEDIUM GRAIN (aerial sown)

Farm Enterprise Budget Series - Murrumbidgee Valley

Summer 2011/2012

### 1. GROSS MARGIN BUDGET:

#### INCOME:

10.00 t/ha @ \$230.00 /t (on farm)

Standard Budget \$/ha	Your Budget \$/ha
\$2,300	

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

<b>\$2,300</b>	
----------------	--

#### VARIABLE COSTS:

See following page for detail

Cultivation.....	\$19	
Sowing.....	\$88	
Fertiliser.....	\$341	
Herbicide.....	\$385	
Insecticide.....	\$3	
Irrigation.....	\$186	
Aerial image.....	\$4	
Levies & Insurance.....	\$68	
Harvest.....	\$264	
Cartage .....	\$120	
<b>B. TOTAL VARIABLE COSTS \$/ha:</b>	<b>\$1,478</b>	

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

<b>\$822</b>	
--------------	--

#### D. GROSS MARGIN \$/ML:

<b>\$59</b>	
-------------	--

### SENSITIVITY TABLES

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

YIELD t/ha	On Farm Water Price				
	\$180 /t	\$205 /t	\$230 /t	\$255 /t	\$280 /t
7.00	-\$81	\$92	\$264	\$436	\$608
8.50	\$125	\$334	\$543	\$752	\$961
<b>10.00</b>	\$331	\$576	<b>\$822</b>	\$1,068	\$1,314
11.50	\$536	\$819	\$1,102	\$1,384	\$1,667
13.00	\$742	\$1,061	\$1,381	\$1,701	\$2,020

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

YIELD t/ha	On Farm Price				
	\$180 /t	\$205 /t	\$230 /t	\$255 /t	\$280 /t
7.00	-\$6	\$7	\$19	\$31	\$43
8.50	\$9	\$24	\$39	\$54	\$69
<b>10.00</b>	\$24	\$41	<b>\$59</b>	\$76	\$94
11.50	\$38	\$58	\$79	\$99	\$119
13.00	\$53	\$76	\$99	\$121	\$144

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. Estimated prices are GST - exclusive

# RICE - MEDIUM GRAIN (aerial sown)

Farm Enterprise Budget Series - Murrumbidgee Valley

Summer 2011/2012

CALENDAR OF OPERATIONS:		Machinery			Inputs			Total Cost \$/ha	
Operation	Month	hrs/ha	Cost \$/hour	% of area	Total \$/ha	Rate/ha	Cost		Total \$/ha
Chisel plough	Aug	0.22	48.80		\$10.89				<b>\$10.89</b>
Broadcast phosphorus fertiliser eg: <b>broadcast Superfect®</b>	Sept	0.10	16.61		\$1.58	125kg/ha	\$347.00/t	\$43.38	<b>\$44.96</b>
Apply nitrogen fertiliser eg: <b>drill urea</b>	Sep/Oct	0.28	46.71		\$13.08	250kg/ha	\$677.00/t	\$169.25	<b>\$182.33</b>
Reform banks	Sep/Oct	1.18	21.15	4%	\$1.00				<b>\$1.00</b>
Rolling	Sep/Oct	0.20	38.55		\$7.56				<b>\$7.56</b>
Grass weed control eg: <b>aerial spray molinate</b>	Oct	contract			\$22.20	1.50 L/ha	\$23.25/L	\$34.88	<b>\$57.08</b>
Aquatic weed control eg: <b>aerial spray benzofenap (Taipan®)</b>	Oct	with above				2.00 L/ha	\$66.19/L	\$132.38	<b>\$132.38</b>
Bloodworm control eg: <b>aerial spray chlorpyrifos</b>	Oct	with above				0.15 L/ha	\$9.45/L	\$1.42	<b>\$1.42</b>
Aerial sow	Oct	contract			\$37.00	150kg/ha	\$0.34/kg	\$51.00	<b>\$88.00</b>
Aquatic weed control eg: <b>aerial spray thiobencarb (Saturn®)</b>	Oct/Nov	contract			\$22.20	3.75kg/ha	\$25.90/kg	\$97.13	<b>\$119.33</b>
Bloodworm control eg: <b>aerial spray alpha cypermethrin (Dominex Duo®)</b>	Oct/Nov	with above				0.10 L/ha	\$13.43/L	\$1.34	<b>\$1.34</b>
Aquatic weed control eg: <b>aerial spray Basagran M60</b>	Nov/Dec	contract			\$26.00	2.50 L/ha	\$20.00/L	\$50.00	<b>\$76.00</b>
Aerial Image	Dec				\$3.85				<b>\$3.85</b>
Topdress Nitrogen fertiliser eg: <b>aerial topdress urea</b>	Jan	contract			\$29.00	125kg/ha	\$677.00/t	\$84.63	<b>\$113.63</b>
Harvest	Apr/May	contract				10.0 t/ha	\$25.00/t	\$250.00	<b>\$250.00</b>
Chaser bin		0.32	45.05		\$14.19				<b>\$14.19</b>
Irrigation*						14.0ML/ha	\$13.27/ML	\$185.78	<b>\$185.78</b>
Cartage						10.0 t/ha	\$12.00/t	\$120.00	<b>\$120.00</b>
Research levy (farm gate value)						10.0 t/ha	\$3.00	\$30.00	<b>\$30.00</b>
Crop insurance (estimated crop value)						\$2,300	1.65%	\$37.95	<b>\$37.95</b>

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. Estimated prices are GST - exclusive

<b>AGRONOMIC NOTES</b>	<b>See <i>RICECHECK Recommendations and Rice Crop Protection Guide 2011.</i></b> Note that average yield in the past 5 years for Amaroo in the MIA is 10t/ha.
<b>Price</b>	- Indications are that the medium grain price will be around \$230 per tonne for the C2012 pool. This budget is based on Reiziq. Costs may vary for other varieties.
<b>Varieties</b>	- Reiziq is now the standard medium grain variety. Other medium grain varieties include Sherpa & Quest for mid-late October sowing,
<b>Rotation</b>	- This is the first crop following a winter cereal or previous rice crop.
<b>Weed Control</b>	- Herbicides used in the budget are based on the Taipan <sup>®</sup> with standard Saturn <sup>®</sup> & Molinate Primer program (program 3). Seek advice for using alternative programs and see the 'Rice Crop Protection Guide 2011'. Sound weed management for aquatic weeds delays the build up of herbicide resistance. Management programs emphasise the importance of using 2 herbicides on each weed and/or rotating herbicides to avoid using the same herbicide in consecutive rice crops.
<b>Insect Control</b>	- Bloodworms are a major insect pest at establishment and should be controlled before or at sowing. Alpha cypermethrin (Dominex Duo <sup>®</sup> ) and Fipronil (Cosmos <sup>®</sup> ) seed dressing are alternatives to chlorpyrifos (See Rice Crop Protection Guide 2011). Other Pests: Ducks may need controlling, especially in the more western areas. Duck control is not included in this budget. Mice populations also need monitoring and may require control late in the season. Snail control is not included in these budgets
<b>Pesticide Residues</b>	- Drainage water containing pesticides must be retained on-farm for at least 28 days after application for MIA and 21 days for CIA.
<b>Fertiliser</b>	- Split apply urea to minimise risk of cold damage. Conduct NIR tissue test at PI to verify urea topdress requirement. Total nitrogen rate depends on paddock history and seasonal conditions. Apply phosphorus where Colwell soil P is less than 20mg/kg.
<b>Aerial Image</b>	- An aerial image should be used at PI to help identify the factors influencing rice crop growth variability and crop yield. This image may then be used to target NIR sampling at PI.
<b>Sowing costs</b>	- Aerial sown rice has a lower labour requirement than other sowing alternatives but consequently incurs higher application costs. The cost of dry broadcast sowing is \$70.20/ha at a sowing rate of 180kg/ha compared to \$106.50 in the aerial sown budget with 150 kg/ha seed rate.
<b>Irrigation</b>	- High yields require good water depth management. Aim for 20-25cm water depth at microspore. Crop water use varies with variety, seasonal conditions, soil type and depth of watertable. - The medium grain varieties eg. Amaroo, Quest, Jarrah are more tolerant of salinity than long grain varieties (Langi, Doongara, Kyeema). There is some evidence that the medium grain varieties Reiziq and Illabong are more sensitive to salinity than the other medium grain varieties. It is suggested that growers monitor and very carefully manage water salinity levels if growing more sensitive varieties. - The MIA variable water costs are used in the budget. The budget is based on the assumption of 50% water allocation. For water costs in other irrigation districts or river pumpers, check Murrumbidgee irrigation web site. For water costs in the CIA, please go to the web site for the appropriate irrigation authority.
<b>Machinery</b>	- 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 66 kW (90 HP) engine; and of 141 kW (190 HP) PTO and 148 kW (225 HP) engine are assumed.
<b>More information</b>	See Production of Quality Rice in South East Australia available from your District Agronomist. Also Rice Crop Production Guide, Choose a Rice Variety, Ricecheck and Using Groundwater for rice production, DPI NSW website

**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. Estimated prices are GST - exclusive**