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Crop-sequence effects on productivity in a wheat-based cropping system at Wongan Hills, Western Australia

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1 Supplementary table. Management details for dynamic crop sequence trial at Wongan Hills, Western Australia, 2009 to 2013

	Pre-emergent herbicides	Sowing	Fertiliser	Post-emergent herbicides	Insecticides	Harvest	Other
2009							
Wheat and barley	2 L/ha Sprayseed 250 + 2 L/ha Triflur X IBS	80 kg/ha wheat or barley sown on 25/6/2009	80 kg/ha Macropro Plus at sowing, 60 L/ha Flexi-N 25/8/2009	300 mL/ha Axial 2/08/2009, 1.4 L/ha Broadside 17/8/2009		24/11/2009	
Lupin	1.6 L/ha Sprayseed 250 + 1.1 kg/ha Simazine IBS	100 kg/ha lupin sown 3/6/2009	80 kg/ha BigPhos at sowing, 100 kg/ha MOP* topdressed at sowing	500 mL/ha Status 28/7/2009, 150 mL/ha Brodal 2/8/2009 0.8 L/ha Gramoxone 27/10/2009	100 mL/ha Talstar IAS 200 mL/ha α - cypermethrin	16/11/2009	
Canola (TT)	As for lupin	5 kg/ha sown 3/6/2009	As for lupin, plus 60 L/ha Flexi N/S	1.1 kg/ha atrazine 28/7/2009	As for lupin	12/11/2009	

			11/8/2009			
Juncea	1.6 L/ha Sprayseed	4 kg/ha juncea	As for canola (TT)	400 mL/ha Intervix	As for lupin	24/11/2009
canola	250 + 1.5 L/ha Triflur X IBS	canola sown 3/6/2009		28/7/2009		
Oats	500 mL/ha Metalochlor + 550 mL/ha diuron IBS	80 kg/ha oats sown 25/6/2009	As for wheat and barley	1.4 L/ha Broadside 17/8/2009		Cut for hay 20/10/2009 Hay baled 1/11/2009
Serradella	As for juncea canola	10 kg/ha serradella sown 3/6/2009	100 kg/ha Super:Potash 3:2 at sowing	1.5 L/ha Roundup Powermax 27/10/2009 0.8 L/ha Gramoxone 30/10/2009	As for lupin	Mown 18/9/2009
Volunteer pasture				As for serradella		As for serradella
Fallow				1.5 L/ha Roundup Powermax 14/9/2009		

2010

Wheat and barley	2 L/ha Sprayseed 250 + 2 L/ha Triflur X at sowing	100 kg/ha wheat sown 11/6/2010	100 kg/ha Macropro Plus at sowing	1.4 L/ha Broadside 27/10/2010		10/11/2010 (barley) 16/11/2010 (wheat)
Wheat mouldboard	As for wheat and barley	As for wheat and barley	As for wheat and barley	1.4 L/ha Broadside 10/9/2010		16/11/2010 Top 30 cm soil inverted with mouldboard plough and rolled 9/6/2010
Lupin	2 L/ha Sprayseed 250 + 1.5 L/ha Triflur X + 1.1 kg/ha Simazine IBS	100 kg/ha lupins sown 2/6/2010	80 kg/ha BigPhos at sowing, 100 kg/ha MOP*	100 mL/ha Brodal 14/7/2010 500 mL/ha Status	100 mL/ha Talstar IAS	15/11/2010

			topdressed at	3/8/2010		
			sowing	0.8 L/ha Gramoxone		
				4/10/2010		
Canola (TT)	2 L/ha Sprayseed 250	5 kg/ha canola	200 kg/ha	1.1 kg/ha Atrazine	As for lupin	3/11/2010
	+ 1.1 kg/ha simazine	sown 2/6/2010	BigPhos at	14/7/2010		
	2/6/2010		sowing, 100	500 mL/ha Status		
			kg/ha MOP*	3/8/2010		
			topdressed at	3 L/ha Reglone		
			sowing	26/10/2010		
Canola (RR)	2 L/ha Sprayseed 250	5 kg/ha canola	As for canola (TT)	900 g/ha Roundup Ready®	As for lupin	4/11/2010
	+1.5 L/ha Triflur X IBS	2/6/2010		27/7/2010		
				3 L/ha Reglone		
				26/10/2010		
Oats	500 mL/ha	120 kg/ha oats	As for wheat and	As for wheat and barley		Cut for hay
	Metalochlor + 550	sown on	barley			24/9/2010,

	mL/ha diuron IBS	11/6/2010				baled
						30/9/2010
Serradella	As for canola (RR)	10 kg/ha	100 kg/ha	0.8 L/ha Gramoxone	As for lupin	Mowed
		serradella sown	Super:Potash 3:2	4/10/2010		7/5/2010
		2/6/2010	at sowing			
Volunteer pasture				As for serradella		Mowed
						7/5/2010
						Mowed
						11/8/2010
Fallow				1.5 L/ha Roundup		Mowed
				Powermax 14/7/2010		7/5/2010
2011						
Wheat	1.5 L/ha Roundup	100 kg/ha	80 kg/ha	1 L/ha Jaguar 5/8/2011		29/11/2011
	3/6/2011	wheat sown	Macropro Plus +			
	2 L/ha Sprayseed 250	10/6/2011	50 kg/ha urea at			

+ 1.5 L/ha Triflur X IBS

sowing

2012

Wheat	2 L/ha Roundup	100 kg/ha	80 kg/ha	670 mL/ha Velocity	23/11/2012	300 mL/ha
	15/6/2012	wheat sown	Macropro Plus at	13/8/2012		Prosaro
	2 L/ha Sprayseed 250	21/6/2012	sowing			23/8/2012
	+ 2 L/ha Triflur X or		60 L/ha Flexi-N			
	118 g/ha Sakura IBS		28/8/2012			
