Supplementary Materials

The Australian digital Online Farm Trials database increases the quality of systematic reviews and meta-analyses in grains crop research

Judi R. Walters^{A,B} and Kate Light^A

^ACentre for eResearch and Digital Innovation, Federation University Australia, Greenhill Enterprise Centre Ballarat Technology Park, Mount Helen, Vic. 3350, Australia.

 $^{\mathrm{B}}$ Corresponding author. Email: jr.walters@federation.edu.au

Supplementary Material Tables

Table S1. List of the published papers from the Web of Science database eligible for inclusion in a systematic review (Review) and those eligible for inclusion in a meta-analysis (Analysis) of sowing timing and grain yield in Australian winter crops

Author(s)	Public ation year	Title	Source title	Vol	Pages	Review	Analysis	Study period	Publica tion lag (years)	Null	Significant ^A
Anderson WK, Sharma DL, Shackley BJ, D'Antuono MF	2004	Rainfall, sowing time, soil type, and cultivar influence optimum plant population for wheat in Western Australia	Australian Journal of Agricultural Science	55	921–930	V	-	1996– 2001	4	_	V
Batten GD, Fettell NA, Mead JA, Khan MA	1999	Effect of sowing date on the uptake and utilisation of phosphorus by wheat (cv. Osprey) grown in central New South Wales	Australian Journal of Agricultural Science	39	161–170	√	-	1988– 1989	10		V
Gomez- Macpherson H, Richards RA	1995	Effect of sowing time on yield and a gronomic characteristics of wheat in south-eastern Australia	Australian Journal of Agricultural Science	46	1381– 1399	V	V	1989– 1990	5	V	
Hocking PJ, Stapper M	2001	Effects of sowing time and nitrogen fertiliser on canola and wheat, and nitrogen fertiliser on Indian mustard. I. Dry matter production, grain yield, and yield components	Australian Journal of Agricultural Science	52	623–634	V	V	1990	11	_	V

Khangum RK, Barbetti MJ	2004	Time of sowing and fungicides affect blackleg (<i>Leptosphaeria maculans</i>) severity and yield in canola	Australian Journal of Agricultural Science	44	1205- 1213	V	_	2000	4	_	\checkmark
Kirkegaard JA, Lilley JM, Brill RD, Sprague SJ, Fettell NA, Pengilley GC	2016	Re-evaluating sowing time of spring canola (Brassica napus L.) in south-eastern Australiahow early is too early?	Crop & Pasture Science	67	381–396	V	_	2002- 2012	4	-	V
Lawes RA, Huth ND, Hochman Z	2016	Commercially a vailable wheat cultivars are broadly adapted to location and time of sowing in Australia's grain zone	European Journal of Agronomy	77	38–46	V	V	2011– 2012	4	_	√
Manning BK, Adhikari KN, Trethowan, R	2020	Impact of sowing time, genotype, environment and maturity on biomass and yield components in faba bean (Vicia faba)	Crop & Pasture Science	71	147–154	V	V	2012– 2013	7	-	√
ManupeempanT, Pearson CJ	1993	Apex size, flowering and grain-yield of wheat as a ffected by sowing date	Australian Journal of Agricultural Science	32	41–57	1	-	1987– 1988	5	_	V
McKirdy SJ, Jones RAC	1997	Effect of sowing time on barley yellow dwarf virus infection in wheat: Virus incidence and grain yield losses	Euphytica	48	199–206	V	V	1991– 1993	4	_	√
McMurrayLS, DavidsonJA,	2011	Combining management and breeding advances to improve	Australian Journal of	180	69-88	√	$\sqrt{}$	2006-	2	_	$\sqrt{}$

Lines MD, Leonforte A, Salam MU		field pea (Pisum sativum L.) grain yields under changing climatic conditions in south- eastern Australia	Agricultural Science					2009			
O'Connor GE, Evans J, Fettell NA, Bamforth I, Stuchberry J, Heenan DP, Chalk PM	1993	Sowing date and varietal effects on the N ₂ fixation of field pea and implications for improvement of soil-nitrogen	Australian Journal of Agricultural Science	44	151–163	V	_	1988– 1989	4	-	V
Regan KL, Siddique KHM, Brandon NJ, Seymour M, Loss SP	2006	Response of chickpea (Cicer arietinum L.) varieties to time of sowing in Mediterraneantype environments of southwestern Australia	Australian Journal of Agricultural Science	46	295–404	√	-	1995– 1998	8		√
Robertson MJ, Holland JF, Bambach R	2004	Response of canola and Indian mustard to sowing date in the grain belt of north-eastern Australia	Australian Journal of Agricultural Science	44	43–52	7	_	1998– 2000	4		√
Sadras V, Roget D, O'Leary G	2002	On-farm assessment of environmental and management constraints to wheat yield and efficiency in the use of rainfall in the Mallee	Australian Journal of Agricultural Science	53	587–598	V	_	1998– 2000	2	-	√
Schmidt CP, Belford RK	1993	A comparison of different tillage seeding systems - the interaction of tillage and time of sowing on sandplain soils in Western Australia	Australian Journal of Agricultural Science	33	895–900	V	V	1990– 1991	2	-	√

Shackley BJ, Anderson WK	1995	Responses of wheat cultivars to time of sowing in the southern wheat best of Western Australia	Australian Journal of Agricultural Science	35	579–587	V	_	1998– 1991	4	_	V
Sharma DL, Anderson WK	2004	Small grain screenings in wheat: interactions of cultivars with season, site, and management practices	Australian Journal of Agricultural Science	55	797–809	V	V	1999– 2001	3	-	V
Sharma DL, D'Antuono MF, Anderson WK, Shackley BJ, Zaicou-Kunesch CM, Amjad M	2008	Varia bility of optimum sowing time for wheat yield in Western Australia	Australian Journal of Agricultural Science	59	958–970	V	-	2003– 2005	3	_	V
Siddique KHM, Loss SP, Pritchard DL, Regan KL, Tennant D, Jettner RL, Wilkinson D	1998	Adaptation of lentil (Lens culinaris Medik.) to Mediterranean-type environments: effect of time of sowing on growth, yield, and water use	Australian Journal of Agricultural Science	49	613–626	V	V	1994– 1996	2	_	V

^AStatistically significant, as reported by author of the paper.

Table S2. List of the 240 Trial Projects identified from the Online Farm Trials database eligible for inclusion in a systematic review (Review) and those eligible for inclusion in a meta-analyses (Analysis) of sowing timing and grain yield in Australian winter crops

Trial Projects with numerical data entered in the database are indicated (Export), and Projects eligible for analysis that report a null result (Null), and/or a significant result (Significant) are indicated. Where there was insufficient information to determine whether the result, the Project is marked as 'Indeterminate'

Trialname	Year(s)	Organisation	Review	Analysis	Export	Null	Significant A
Yardstick demonstrations for the Albany and Esperance port zones	2018 20 19	Kalyx Australia Pty Ltd	V	V	_	-	V
Can we extend the sowing window of canola in WA#1 Tenindewa	2018	Department of Primary Industries and Regional Development WA	V	-	-	-	-
Can we extend the sowing window of canola in WA: #2 Wongan Hills	2018	Department of Primary Industries and Regional Development WA	٧	-	-	-	_
Can we extend the sowing window of canola in WA: #3 Beverley	2018	Department of Primary Industries and Regional Development WA	V	V	1	V	-
Canola phenology	2018	Birchip Cropping Group	V	V	V	V	V
Chickpea sowing time, HRZ Western District (Lake Bolac), Victoria	2018	Southern Pulse Agronomy	V	_	_	-	_

Chickpea, sowing time HRZ Western District (Inverleigh), Victoria	2018	Southern Pulse Agronomy	V	_	_	-	-
Chickpea, sowing time MRZ Wimmera (Horsham), Victoria	2018	Southern Pulse Agronomy	V	V	-	V	-
Chickpea, sowing time, LRZ Central Mallee (Ouyen), Victoria	2018	Southern Pulse Agronomy	V	_	_	_	-
Effect of sowing time × seed rate × herbicides on ryegrass management in barley (Roseworthy, SA)	2018	School of Agriculture, Food and Wine - The University of Adelaide	V	_	-	_	_
Effect of sowing time × seed rate × herbicides on ryegrass management in wheat (Lake Bolac, VIC)	2018	School of Agriculture, Food and Wine - The University of Adelaide	V	-	I.	-	-
Effect of sowing time × seed rate × herbicides on ryegrass management in wheat (Minnipa, SA)	2018	School of Agriculture, Food and Wine - The University of Adelaide	V	-	Ĺ	T	1
Effect of sowing time, seed rate and herbicides on brome grass management in barley	2018	School of Agriculture, Food and Wine - The University of Adelaide	V	_	<u>-</u>	-	_
Effect of sowing time, seed rate and herbicides on ryegrass management in faba beans	2018	School of Agriculture, Food and Wine - The University of Adelaide	V	_	_	_	_

Faba bean sowing time and plant density, HRZWestern District (Lake Bolac), Victoria	2018	Southern Pulse Agronomy	$\sqrt{}$	_	-	-	-
Field pea sowing time, HRZ Western District (Inverleigh), Victoria	2018	Southern Pulse Agronomy	V	_	_	_	-
Field pea sowing time, HRZ Western District (Lake Bolac), Victoria	2018	Southern Pulse Agronomy	V	_	_	_	_
Growing profitable irrigated durum wheat Part 1	2018	Irrigated Cropping Council	V	V	V	V	-
Impact of Sowing Set-up in Chickpeas - Narrabri	2018	Northern Grower Alliance	V	V	_	_	V
Improving farm profits with longer season wheat crops	2018	Central West Farming Systems	V	V	_	V	V
Integration of crop competition and herbicide strategies for the management of annual ryegrass in canola (Washpool, SA)	2018	School of Agriculture, Food and Wine - The University of Adelaide	V	-	-	-	_
Lentil, sowing time, HRZ Western District (Inverleigh), Victoria	2018	Southern Pulse Agronomy	V	V	_	V	_

Lentil, sowing time, HRZ Western District (Lake Bolac), Victoria	2018	Southern Pulse Agronomy	V	_	_	_	-
Lentil, sowing time, LRZ Central Mallee (Ouyen), Victoria	2018	Southern Pulse Agronomy	V	-	-	-	-
Lentil, sowing time, MRZ Wimmera (Horsham), Victoria	2018	Southern Pulse Agronomy	V	-	-	-	-
Which wheats for when? Western Australia	2018	Department of Primary Industries and Regional Development WA	V	-	-	-	_
Barley a gronomy in the HRZ - variety specific agronomic package for Planet, Westminster and Maltstar	2017	Southern Farming Systems	V	V	-	_	V
Early sown winter wheats	2017	Hart Field Site Group	V	√	_	√	_
Growing profitable irrigated durum wheat Part 1	2017	Irrigated Cropping Council	V	V	V	V	-
Herbicide efficacy in retained stubble systems	2017	Eyre Peninsula Agricultural Research Foundation	V	V	_	_	√
Managing early sown wheat	2017	Birchip Cropping Group	V	_	-	_	_

New fungicides offer improved a scochyta blight control and yield benefit in field pea	2015 20 16 2017	Hart Field Site Group	V	√	V	_	\checkmark
What effect does time of sowing and nitrogen have on wheat yield?	2017	Hart Field Site Group	V	-	_	-	-
Wheat grain yield response to elevated temperature and nitrogen	2017	Hart Field Site Group	V	-	Ί	Ί	-
Agronomy for early sown canola	2016	Department of Agriculture and Food WA	V	-	-	-	-
Barley a gronomy: time of sowing and plant growth regulators	2016	Southern Farming Systems	V	-	-	-	-
Canola agronomy and phenology to optimise yield	2016	Hart Field Site Group	V	√	V	_	√
Early or delayed sowing for improved ryegrass control: summary of three seasons	2014 20 15 2016	Hart Field Site Group	V	V	_	V	-
Effect of sowing date on phenology and grain yield of 19 bread wheat and five durum cultivars - Tam worth 2016	2016	Department of Primary Industries NSW	V	V	V	V	_

Effect of time of sowing and variety on grain yield: MAC demonstration	2016	SARDI Minnipa Agricultural Centre	V	_	_	_	-
Faba bean a gron omy and canopy management	2016	Hart Field Site Group	V	V	V	_	√
Impact of sowing date on phenology and yield of lentil and fababean	2016	SARDI Minnipa Agricultural Centre	V	-	_	_	-
Increasing weed competition with barley	2016	Birchip Cropping Group	V	V	V	V	_
Optimising cultivar and time of sowing in wheat	2016	Hart Field Site Group	V	V	V	V	_
Very early sown canola variety trial	2016	Department of Agriculture and Food WA	V	_	_	-	-
Agronomy for early sown canola	2015	Department of Agriculture and Food WA	V	-	-	-	-
Canola variety by time of sowing in the northern agricultural region	2015	Northern Agri Group	V	V	V	_	V
Canola variety by time of sowing in the northern region	2015	Department of Agriculture and Food WA	V	_	_	-	-
Chickpeas - sowing time, LRZ Yenda	2015	Southern Pulse Agronomy	V	V	_	V	_

Crop establishment on non-wetting soil	2015	Eyre Peninsula Agricultural Research Foundation	√	V	-	V	V
Durum wheat variety response to nitrogen management and sowing time - Ta marang 2015	2015	Department of Primary Industries NSW	V	V	V	V	√
Durum wheat variety response to nitrogen management and sowing time - Tulloona 2015	2015	Department of Primary Industries NSW	٧	٧	٧	V	V
Early or delayed sowing for improved ryegrass control?	2015	Hart Field Site Group	٧	V	-	-	V
Early sowing of wheat	2015	Birchip Cropping Group	√	√	V	-	√
Faba beans - time of sowing, HRZ Junee Reefs	2015	Southern Pulse Agronomy	√	√	_	_	√
Faba beans - time of sowing, HRZ Wagga Wagga	2015	Southern Pulse Agronomy	V	V	_	_	V
Lentils - plant density × sowing time, MRZ Wimmera	2015	Southern Pulse Agronomy	٧	-	no report	-	-
Lentils - sowing time and plant density, HRZWagga Wagga	2015	Southern Pulse Agronomy	٧	٧	V	-	V

Maximising canola yield by getting establishment right - MACS5 Trial 1	2015	SARDI Minnipa Agricultural Centre	V	$\sqrt{}$	_	-	\checkmark
Milling oat variety trial	2015	Irrigated Cropping Council	V	V	V	V	_
Nitrogen response of eight wheat varieties and two sowing times - Trangie 2015	2015	Department of Primary Industries NSW	V		_	-	_
Oat a gronomy - response to seeding rate applied and time of sowing	2015	Department of Agriculture and Food WA	√	I.	_	1	_
Oat a gronomy - response to applied nitrogen and time of sowing	2015	Department of Agriculture and Food WA	V	_	-	_	-
Optimising cultivar and time of sowing in wheat	2015	Hart Field Site Group	V	V	V	_	√
Reducing risk in canola	2015	SARDI Minnipa Agricultural Centre	V	V	_	_	√
Risk management strategies for growing canola in the low rainfall zone	2015	Mallee Sustainable Farming Inc.	V	_	-	_	-
Risk management strategies for growing canola in the low rainfall zone	2015	Central West Farming Systems	V	1	_	1	-

Sowing strategies to improve productivity on sandy mallee soils	2015	Mallee Sustainable Farming Inc.	√	-	_	_	_
Sowing strategies to improve productivity on sandy mallee soils	2015	Mallee Sustainable Farming Inc.	V	-	_	-	_
Wheat or barley - the best options for early sowing at Dandaragan	2015	West Midlands Group	V	_	_	-	_
Wheat yield and its components in response to early sowing and nitrogen fertiliser rate	2015	Hart Field Site Group	V	-	_	-	-
Barley a gronomy - common knowledge or progressive practice?	2014	Southern Farming Systems	V	V	-	-	V
Canola growth and development - impact of ToS and seasonal conditions	2014	Hart Field Site Group	V	V	V	V	V
Crop establishment on non-wetting soil	2013 20 14	Eyre Peninsula Agricultural Research Foundation	V	V	V	-	V
Early or delayed sowing for ryegrass control?	2014	Hart Field Site Group	√	√	√	-	V
Early sowing of wheat	2014	Birchip Cropping Group	V	V	V	V	_

Forage peas - a potential new break crop option	2014	Hart Field Site Group	√	√	-	V	-
Gippsland's canola - should we sow early?	2014	Southern Farming Systems	√	V	V	-	V
Grain & Graze 3 - Grazing crops and frost	2014	Facey Group	V	V	V	V	-
Grazing wheat varieties in Gippsland	2014	Southern Farming Systems	V	V	V	V	-
Increasing yield and reducing risk through early sowing in South Western NSW	2014	Central West Farming Systems	V	V	I.	V	V
Managing dryland wheat for maximum yield potential - Tamamag 2014	2014	Department of Primary Industries NSW	V	V	Ĺ	_	V
Maximising canola yield by getting establishment right - time of sowing	2014	SARDI Minnipa Agricultural Centre	V	V	V	_	V
Optimising cultivar × time of sowing in wheat and barley	2014	Hart Field Site Group	٧	V	V	V	V
Sow on time or early - getting the best out of our wheat varieties in 2014	2014	Southern Farming Systems	٧	V	V	V	٧
Sowing date, HRZ Mid North (Tarlee), South Australia	2014	Southern Pulse Agronomy	V	_	_	_	-

Sowing date, LRZ Southern Mallee (Curyo), Victoria	2014	Southern Pulse Agronomy	V	-	-	_	-
Sowing date, MRZ Mid North (Pinery), South Australia	2014	Southern Pulse Agronomy	V	-	-	-	-
Sowing date, MRZ Wimmera (Pimpinio), Victoria	2014	Southern Pulse Agronomy	V	-	_	_	_
Sowing date, MRZ Wimmera (Pimpinio), Victoria	2014	Southern Pulse Agronomy	V	V	I	V	-
Sowing date, MRZ Wimmera (Pimpinio), Victoria	2014	Southern Pulse Agronomy	V	√	1	V	-
Sowing date, MRZ Yorke Peninsula (Melton), South Australia	2014	Southern Pulse Agronomy	V	1	-	-	-
Sowing strategies to improve productivity on sandy mallee soils	2014	Mallee Sustainable Farming Inc.	V	V	V	V	-
Sowing time, LRZ Southern Mallee (Curyo), Victoria	2014	Southern Pulse Agronomy	V	_	-	-	_
Time of sowing and ryegrass managements	2014	Lower Eyre Agricultural Development Association	٧	V	V	٧	√

Turning sowing times on their head with spring-sown canola and wheat	2014	Southern Farming Systems	$\sqrt{}$	V	_	√	-
Wheat agronomy on water repellent sands	2014	West Midlands Group	V	V	-	V	_
Barley time of sowing and depth	2013	Hart Field Site Group	V	V	V	V	V
Dry sowing and a conflict with ryegrass - a methodical and measured approach	2013	Southern Farming Systems	V	V	V	-	V
Field pea varieties and disease management	2013	Southern Farming Systems	√	V	V	_	√
Has Hindmarsh barley run its race? Barley time of sowing	2013	Birchip Cropping Group	V	V	V	V	_
Managing dry sowing for wheat yield and grain quality in wheat-canola- wheat system through variety selection and agronomy at Wongan Hills	2013	Liebe Group	V	V	_	V	√
Maximising canola yield by getting establishment right - upper EP experience in 2013	2013	SARDI Minnipa Agricultural Centre	V	V	V	-	√
Southern barley agronomy - optimising time of sowing to maximise performance	2013	Southern Farming Systems	V	V	V	-	V

Sow on-time or early: getting the best out of current wheat varieties	2013	Southern Farming Systems	V	V	V	_	$\sqrt{}$
Timing is everything: the penalty for sowing wheat late in 2013	2013	Birchip Cropping Group	V	V	V	-	V
Cereal cropping in Gippsland: evaluating suitable wheat and barley varieties	2012	Southern Farming Systems	V	V	-	-	V
Chickpea sowing date, Yorke Peninsula (Arthurton), South Australia	2012	Southern Pulse Agronomy	V	V	-	V	_
Faba bean and field pea varieties and management - 2012 results Westmere	2012	Southern Farming Systems	V	V	٧	-	V
Faba bean sowing date × plant density, Mid North (Tarlee), South Australia	2012	Southern Pulse Agronomy	V	V	-	٧	-
Field pea and lentil sowing date × soil type, Mid North (Hart), South Australia	2012	Southern Pulse Agronomy	V	V	-	-	V
Field pea sowing date × stubble management, Upper Eyre Peninsula (Minnipa), South Australia	2012	Southern Pulse Agronomy	V	-	-	-	-

Improving profitability of wheat in fallow/pasture through better a gronomy	2012	Liebe Group	√	V	V	V	-
Lentils in the southern mallee: varieties, sowing dates and herbicide tolerance	2012	Birchip Cropping Group	٧	-	-	-	-
Managing frost risk through better wheat a gronomy	2012	Facey Group	V	V	V	-	√
Sowing time × fungicide regime, HMRZ (Wagga Wagga), NSW	2012	Southern Pulse Agronomy	V	V	-	-	V
Sowing time × impact dressed fertiliser, LRZ (Yenda), NSW	2012	Southern Pulse Agronomy	V	-	-	-	-
Sowing time, crop topping, disease management, HRZ Southern (Westmere), Victoria	2012	Southern Pulse Agronomy	V	V	-	-	V
Sowing time, H-MRZ Wagga Wagga, NSW	2012	Southern Pulse Agronomy	V	-	-	-	-
Sowing time, LRZ Southern Mallee (Curyo), Victoria	2012	Southern Pulse Agronomy	V	-	_	-	-
Sowing time, LRZ Southern Mallee (Curyo), Victoria	2012	Southern Pulse Agronomy	V	-	-	-	-

Sowing time, LRZ Southern Mallee (Curyo), Victoria	2012	Southern Pulse Agronomy	V	$\sqrt{}$	-	V	$\sqrt{}$
Sowing time, LRZ Yenda, NSW	2012	Southern Pulse Agronomy	V	V	-	-	V
Sowing time, MRZ Wimmera (Rupanyup), Victoria	2012	Southern Pulse Agronomy	V	V	-	-	V
Timing is everything: barley and canola time of sowing	2012	Birchip Cropping Group	V	V	V	-	V
UNFS time of sowing trial	2012	Upper North Farming Systems	V	_	_	_	_
War on brome: does crop-topping brome grass in cereals work?	2012	Birchip Cropping Group	V	V	V	-	V
Wheat varieties: managing yield and grain quality risk through sowing time and seeding rate at Mullewa	2012	North East Farming Futures	V	-	-	-	_
Barley a gronomy: time of sowing	2011	Birchip Cropping Group	V	V	V	-	V
District canola variety trial at Witera and time of sowing trials at Minnipa	2011	SARDI Minnipa Agricultural Centre	V	V	-	-	V

Optimising returns, reducing risk - a Yield Prophet demonstration	2011	Birchip Cropping Group	V	V	-	-	$\sqrt{}$
Sowing date × disease management, Yorke Peninsula (Arthurton), South Australia	2011	Southern Pulse Agronomy	V	-	-	-	-
Sowing date × plant density, HRZ South East (Moyhall), South Australia	2011	Southern Pulse Agronomy	V	_	_	-	_
Sowing date × plant population, LRZ (Yenda), NSW	2011	Southern Pulse Agronomy	V	-	_	-	-
Sowing date × row spacing, HRZ Mid North (Tarlee), South Australia	2011	Southern Pulse Agronomy	V	V	-	-	V
Sowing date × row spacing, MRZ Lower Eyre Peninsula (Wanilla), South Australia	2011	Southern Pulse Agronomy	V	V	-	-	V
Sowing date × stubble management, LRZ Upper Eyre Peninsula (Minnipa), South Australia	2011	Southern Pulse Agronomy	V	V	-	-	V
Sowing date, HRZ South East (Conmurra), South Australia	2011	Southern Pulse Agronomy	V	_	-	_	-

Sowing date, MRZ Mid North (Hart), South Australia	2011	Southern Pulse Agronomy	√	_	_	_	_
Sowing time × disease management, MRZ Wimmera (Rupanyup), Victoria	2011	Southern Pulse Agronomy	٧	V	-	-	V
Sowing time × disease management, MRZ Yorke Peninsula (Paskeville), South Australia	2011	Southern Pulse Agronomy	٧	_	_	-	_
Sowing time × impact dressed fertiliser, H-MRZ (Wagga Wagga), NSW	2011	Southern Pulse Agronomy	٧	-	-	-	-
Sowing time × seed dressing, LRZ (Yenda), NSW	2011	Southern Pulse Agronomy	V	_	_	-	_
Sowing time × stubble management, MRZ Mid North (Mallala), South Australia	2011	Southern Pulse Agronomy	V	V	-	-	V
Sowing time, crop topping, disease management, stubble HRZ Southern (Lake Bolac), Victoria	2011	Southern Pulse Agronomy	٧	V	-	-	V
Sowing time, H-MRZ Wagga Wagga, NSW	2011	Southern Pulse Agronomy	√	-	-	-	_
Sowing time, LRZ Southern Mallee (Curyo), Victoria	2011	Southern Pulse Agronomy	٧	_	-	-	-

Sowing time, LRZ Southern Mallee (Curyo), Victoria	2011	Southern Pulse Agronomy	√	_	_	_	-
Sowing time, LRZ Southern Mallee (Curyo), Victoria	2011	Southern Pulse Agronomy	V	V	_	-	V
Sowing time, LRZ Yenda, NSW	2011	Southern Pulse Agronomy	V	-	-	-	-
Sowing Time, MRZ Wimmera (Rupanyup), Victoria	2011	Southern Pulse Agronomy	V	-	-	-	_
Wheat variety trial	2011	Southern Farming Systems	V	V	V	-	V
Lupin sowing date × row spacing, Lower Eyre Peninsula (Wanilla), South Australia	2010	Southern Pulse Agronomy	V	-	-	-	_
Optimising the profitability of HRZ cropping in SW Victoria: wheat time of sowing trial	2010	Southern Farming Systems	V	V	V	-	V
Sowing date × plant density × row spacing, HRZ Mid North (Tarlee), South Australia	2010	Southern Pulse Agronomy	V	V	V	V	V
Sowing date × plant density, HRZ South East (Moyhall), South Australia	2010	Southern Pulse Agronomy	V	V	-	٧	V

Sowing date, HRZ South East (Conmurra), South Australia	2010	Southern Pulse Agronomy	√	√	-	-	V
Sowing date, LRZ Upper Eyre Peninsula (Minnipa), South Australia	2010	Southern Pulse Agronomy	V	-	I	ï	-
Sowing date, MRZ Mid North (Hart), South Australia	2010	Southern Pulse Agronomy	V	-	Ί	Ί	-
Sowing date, MRZ Mid North (Mallala), South Australia	2010	Southern Pulse Agronomy	V	_	-	_	-
Sowing date, MRZ Yorke Peninsula (Paskeville), South Australia	2010	Southern Pulse Agronomy	V	-	-	-	-
Sowing time × disease management, MRZ Yorke Peninsula (Paskeville), South Australia	2010	Southern Pulse Agronomy	V	-	-	-	-
Sowing time × row space, LRZ Southern Mallee (Curyo), Victoria	2010	Southern Pulse Agronomy	٧	٧	-	V	V
Sowing time × row space, LRZ Southern Mallee (Curyo), Victoria	2010	Southern Pulse Agronomy	V	V	_	V	V

Sowing time × row space, LRZ Southern Mallee (Curyo), Victoria	2010	Southern Pulse Agronomy	√	V	_	V	√
Sowing time × row space, MRZ Wimmera (Vectis), Victoria	2010	Southern Pulse Agronomy	٧	-	-	-	-
Sowing time × row space, MRZ Wimmera (Vectis), Victoria	2010	Southern Pulse Agronomy	٧	_	_	_	_
Sowing time × stubble management, MRZ Mid North (Mallala), South Australia	2010	Southern Pulse Agronomy	V	V	-	V	_
Sowing time × variety × plant population, H-MRZ (Wagga Wagga), New South Wales	2010	Southern Pulse Agronomy	٧	-	-	-	_
Sowing time × variety × plant population, LRZ (Yenda), New South Wales	2010	Southern Pulse Agronomy	٧	-	-	-	-
Sowing time × variety × seeding rate, LRZ (Yenda), New South Wales	2010	Southern Pulse Agronomy	٧	-	-	-	-
Sowing time, MRZ Wimmera (Vectis), Victoria	2010	Southern Pulse Agronomy	√	V	-	V	-
Sowing times × row spacing, MRZ Wimmera (Vectis), Victoria	2010	Southern Pulse Agronomy	V	V	-	V	_

The effect of grazing (cutting) and PGR application on grain yield of early sown wheat and comparison with May sowing	2010	Southern Farming Systems	V	_	_	_	-
The impact of grazing on grain yield of canola	2010	Southern Farming Systems	V	V	-	-	V
Time of sowing and seeding rate in wheat	2010	Hart Field Site Group	V	V	_	-	V
Time of sowing barley	2010	Birchip Cropping Group	V	V	_	V	_
Variety × plant density × nitrogen × time of sowing	2010	Society of Precision Agriculture Australia	V	V	-	V	_
Wheat variety trial - yield and quality response to sowing time	2010	West Midlands Group	V	٧	-	٧	-
Wheat variety trial-response to sowing time	2010	Liebe Group	√	√	-	-	√
Chickpea sowing time × row space × plant density, southern Mallee (Curyo), Victoria	2009	Southern Pulse Agronomy	٧	_	-	_	_
Chickpea sowing time × row space × plant density, Wimmera (Minyip), Victoria	2009	Southern Pulse Agronomy	٧	-	-	-	_
Disc seeding and time of sowing	2009	Birchip Cropping Group	V	_	_	-	_

Faba beantime of sowing × plant density × row spacing, Tarlee, Mid North, SA	2009	Southern Pulse Agronomy	V	_	_	_	-
Influence of sowing time on wheat varieties at Coorow in 2009	2009	Liebe Group	V	V	V	-	V
Influence of sowing time on wheat variety at Coorow in 2009	2009	West Midlands Group	V	V	V	-	V
Is time of sowing as important in a high decile season?	2009	SARDI Minnipa Agricultural Centre	V	٧	-	-	√
Lentil sowing time × row space × plant density, southern Mallee (Curyo), Victoria	2009	Southern Pulse Agronomy	V	V	-	-	V
Lentil sowing time × row space × plant density, Wimmera (Minyip), Victoria	2009	Southern Pulse Agronomy	V	٧	-	-	V
Response of wheat varieties to sowing time at Pithara in 2009	2009	Liebe Group	V	٧	V	-	V
Time of sowing and seeding rate in wheat	2009	Hart Field Site Group	V	V	-	-	√
What happened to very early sown cereals at Minnipa?	2009	SARDI Minnipa Agricultural Centre	V	V	_	_	√

Field peas - maximising grain yield through sowing times	2008	Hart Field Site Group	√	V	_	_	V
The effect of sowing date on yield and grain quality of wheat	2008	Southern Farming Systems	٧	V	V	-	V
Time of sowing - effect on yield of wheat at Marchagee	2008	Liebe Group	٧	V	V	-	V
Time of sowing in wheat	2008	Hart Field Site Group	V	V	-	_	V
An evaluation of pulse variety, time of sowing and fit for the HRZ cropping region of SW Victoria	2007	Southern Farming Systems	٧	V	٧	V	V
Chickpea sowing time × plant density, Wimmem (Dimboola), Victoria	2007	Southern Pulse Agronomy	V	T	-	ï	J
Evaluation of dual purpose cereal varieties	2007	Southern Farming Systems	V	V	V	V	_
Faba bean disease management × time of sowing, Tarlee, mid North, South Australia	2007	Southern Pulse Agronomy	V	-	-	-	_
Fa ba bean herbicide tolerance trial, Cockaleechie, Lower EP, South Australia	2007	Southern Pulse Agronomy	V	V	_	-	V

Interaction of time of sowing and weed management on lupin yield	2007	Liebe Group	√	V	V	_	V
Lentil disea se management × time of sowing, Maitland and Willamulka, mid North, South Australia	2007	Southern Pulse Agronomy	V	V	-	-	V
Lentil disea se management × time of sowing, southern Mallee (Beulah), Victoria	2007	Southern Pulse Agronomy	٧	٧	-	٧	-
Lentil disease management×time of sowing, Wimmera (Dimboola), Victoria	2007	Southern Pulse Agronomy	V	-	-	-	-
Lentil plant density × sowing date, Maitland and Willamulka, Yorke Peninsula, South Australia	2007	Southern Pulse Agronomy	V	_	_	_	-
Lentil plant density × sowing date, southern Mallee (Beulah), Victoria	2007	Southern Pulse Agronomy	V	_	_	_	-
Lentil plant density × sowing date, Wimmera (Dimboola), Victoria	2007	Southern Pulse Agronomy	V	V	-	-	V
Optimal plant density and the effect of grazing on grain yield of early sown wheat	2007	Southern Farming Systems	V	V	V	V	_

The effects of sowing time and radish density on lupin yield	2007	Liebe Group	√	V	√	_	V
Effect of plant density on wheat	2006	Southern Farming Systems	√	-	-	-	_
Field pea a gronomy for the HRZ	2006	Southern Farming Systems	√	V	√	-	V
Determining the optimum sowing time and sowing rate of pulses in the HRZ	2005	Southern Farming Systems	V	V	V	-	V
Lentil seeding date × plant density experiments Melton and Sandilands SA,	2005	Southern Pulse Agronomy	٧	V	-	-	√
Wheat phenology trial	2005	Southern Farming Systems	V	V	√	-	V
Wheat row spacing trial	2005	Southern Farming Systems	V	V	√	-	V
Chickpea sowing date × plant density	2004	Southern Pulse Agronomy	V	V	-	-	V
Effects of variety, planting time and seed rate on lupin yield and protein	2003	Liebe Group	V	٧	V	-	V
Lentil production for yield	2003	Birchip Cropping Group	V	V	-	-	V

Pulse a gronomy trial	2003	Southern Farming Systems	√	V	V	_	√
The effect of sowing date on cereal grain yield and quality	2003	Southern Farming Systems	٧	V	V	-	V
Variety specific management for pulses - sowing date and plant density	2003	Birchip Cropping Group	V	V	-	-	V
Pulse sowing dates and rates	2002	Birchip Cropping Group	V	_	_	V	_
The effect of sowing time and variety on yield and oil concentration of canola (Brassica napus)	2002 20 03	Central West Farming Systems	V	-	-	-	V
Field pea sowing dates and rates	2001	Birchip Cropping Group	V	_	_	_	V
High rainfall crop a gronomy - topping ten tonnes	2001	Southern Farming Systems	√	V	_	_	V
Lentil sowing dates and rates	2001	Birchip Cropping Group	V	-	-	_	-
Nyngan CWFS site - canola time of sowing trial	2001	Central West Farming Systems	V	V	-	V	_
Effect of sowing date on performance of canola varieties at Nyngan	1999	Central West Farming Systems	٧	V	V	-	√

Making the grade for malting barley	1999	Birchip Cropping Group	V	_	-	_	-
Chickpea sowing time demonstration	1998	Birchip Cropping Group	V	V	_	V	-
Noodle wheat trial	1998	Southern Farming Systems	√	V	V	_	V
Barley time of sowing and P requirements demonstration	1997	Birchip Cropping Group	V	$\sqrt{}$	V	-	V
Canola time of sowing	1997	Birchip Cropping Group	V	V	√	_	√
Lentil sowing rate and time of sowing	1997	Birchip Cropping Group	√	V	_	_	V
Canola time of sowing	1996	Birchip Cropping Group	√	V	V	_	V
Chickpea time of sowing	1996	Birchip Cropping Group	√	V	V	_	V
Lentil time of sowing	1996	Birchip Cropping Group	√	V	V	_	V
Chickpea a gronomy tria l	1995	Birchip Cropping Group	V	V	_	V	_

 $^{^{}A}Statistically\ significant, as\ reported\ by\ author\ of\ the\ paper.$