



Department of
Primary Industries and
Regional Development

Digital Library

Experimental Summaries - Plant Research

Agriculture

1987

Control of peas and lupins in wheat

J. R. Peirce

B. J. Rayner

Follow this and additional works at: <https://library.dpird.wa.gov.au/rqmsplant>

 Part of the [Agronomy and Crop Sciences Commons](#), [Soil Science Commons](#), and the [Weed Science Commons](#)

Recommended Citation

Peirce, J R, and Rayner, B J. (1987), *Control of peas and lupins in wheat*. Department of Primary Industries and Regional Development, Western Australia, Perth. Report.

This report is brought to you for free and open access by the Agriculture at Digital Library. It has been accepted for inclusion in Experimental Summaries - Plant Research by an authorized administrator of Digital Library. For more information, please contact library@dpird.wa.gov.au.

<u>Trial Title:</u>	Control of peas and lupins in wheat.	
<u>Trial Number:</u>	87A29	
<u>Location:</u>	Avondale Paddock 3A	
<u>Soil Type:</u>	Heavy Red-Brown Loam	
<u>Blanket Treatments:</u>	<p>Area worked once. Lupins (Yandee) and peas (Dundale) topdressed by cone seeder onto surface. Crop then sown with harrows behind seeder.</p> <p>Wild oats sprayed 2/7/87 with 2 L/ha Hoegrass and wetting agent.</p> <p>Pre-sowing treatments 1 and 2 applied immediately before seeding on 19/5.</p>	
<u>Application Record:</u>	Time 1 Treatments 1 & 2	Time 2 Treatments 3-12 inc.
<u>Sprayed:</u>	19/5	22/6
<u>Time:</u>	2.30-3.00	2.0-2.45
<u>Spray Vehicle:</u>	Toyota D/cab	Tractor
<u>Nozzle Type:</u>	110015 LP	8001 LP
<u>Pressure (kPa):</u>	190	190
<u>Volume of Application (L/ha):</u>	66	67
<u>Speed of Spraying (km/hr):</u>	12	9
<u>Wind Speed (km/hr):</u>	2-5 (SW)	5-15 (SW) gusting)
<u>Temp. Dry Bulb (°C):</u>	21.5	15.5
<u>Wet Bulb (°C):</u>	14.5	14.0
<u>Relative Humidity:</u>	46	
<u>Soil Surface:</u>	Dry	Damp
<u>At Depth:</u>	Dry	Damp
<u>Stage of Crop:</u>	-	
<u>Stage of Weeds:</u>	-	

Table 14. 87A29 Control of Volunteer Legumes (lupins and peas) in wheat

			Plant counts 10 m ² *	Volunteer legumes				Chemical cost of spray/ha	Wheat yield t/ha	Net† returns /ha
				Wt. of seed g/100 m ²	No. of seeds /100m	Lupins	Peas			
1	Glean	5 g Pre-sowing	16.3	2	11.2	1.93	79.8	12.4	3.784	\$412
2	Glean	10 g Pre-sowing	15.3	13.7	9.8	7.11	35.2	27.6	3.499	\$376
3	Glean + 2,4-D amine	5 g + 500 ml	0	30.7	-	5.49	-	35.9	3.643	\$394
4	Glean	5 g	1	23	-	3.25	-	17.1	3.920	\$427
5	Glean	10 g	0.3	27.7	-	0.94	-	4.69	3.904	\$420
6	Dicamba + MCPA	500 ml	3	17.3	11.0	94.5	4.69	509	3.451	\$375
7	Dicamba + MCPA	1000 ml	0	15	-	3.76	-	23.5	3.543	\$381
8	Ally	2.5 g	5	23	-	5.84	-	33.6	3.519	\$385
9	Ally	5.0 g	0.7	23.3	-	0	-	-	3.664	\$398
10	Diuron + 2,4-D amine	500 ml + 250 ml	0	14	-	95.92	-	47.4	3.848	\$419
11	Diuron + 2,4-D amine	250 ml + 500 ml	0.7	14	-	16.20	-	85	3.382	\$368
12	Tordon 242		0	0.7	-	-	-	-	3.221	\$347
13	Unsprayed		27.7	44	113	79.6	711	427	3.362	\$370

* Plant counts August 3, 1987.

† Assuming \$110/tonne.

No. of seeds permitted/3.000 tonne crop \approx 7 seeds/10 m² of crop assuming 1 L = 0.880 kg.No. of seeds permitted/4.000 tonne crop \approx 9 seeds/10 m² of crop.

Lupins were easier to kill than peas.

Glean applied pre-sowing gave very poor control of both peas and lupins.

Glean + 2,4-D amine appears to be antagonistic to crop. As with oat crop Glean + 2,4-D amine, yield was less than when Glean applied alone.

The treatment using higher rates of 2,4-D amine in the diuron mix also caused lower yields.

The Tordon 242 treatment appeared to cause some yield depression.

See Farmnote for further information.