1987

Peas - broadleaf weed control

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PEAS - BROADLEAF WEED CONTROL

TRIAL NUMBER: 87C70/4515 EX

LOCATION: NORTH MULLEWA RESEARCH STATION

OFFICERS: GILBEY, RALPH

OBJECTIVE: To study the effect of several herbicides on peas and weeds

CROP VARIETY: Derrimut peas

SEEDING: 20.5.87 at 120 kg/ha with 27 kg/ha Plain Super

SITE PREPARATION: 18.5.87 sprayed with Sprayseed at 1 L/ha

SITE DESCRIPTION: Red sandy loam

SPRAYING DETAILS:
20.5.87 Treatments 2-10 sprayed IBS
26.6.87 Treatments 11-15 sprayed PE
Peas 3-4 node
Turnip 8 leaf
Doublegee Cotyledon to 10 leaf
Rye grass Z14.5
Medic 8 leaf

ASSESSMENTS:
Visual rating 18.8.87
Plant counts 28.7.87 - 3 x 1 m^2 quadrats
Harvest Not harvested

RATING SCALE (PEAS):
0 = no effect
1 = slight effect
2 = moderate effect
3 = severe effect

WEEDS PRESENT IN CROP: Turnip, doublegee, rye grass and medic

IBS = Immediately before seeding
IAS = Immediately after seeding
PE = Post-emergence

Figures in tables followed by the same letter do not differ significantly (P = 0.05) using Duncans Multiple Range Test.

Table 1. Effect of herbicide on peas and weeds

	Treatment/ha	Plants/m^2 D'gee	Turnip	Medic	Visual rating Peas	Peas/m^2
1.	Nil	4 ab	2 a	2	000	72
2.	Bladex 2 L IBS	0 b	0 b	1	000	76
3.	Metribuzin 400 gm IBS	0 b	0 b	1	220	77
4.	Trifluralin 1.5 L + Diuron 1.5 L IBS	0 b	0 b	2	000	77
5.	Trifluralin 1.5 L IBS + Diuron 1.5 L IAS	0 b	0 b	1	000	78
6.	Trifluralin 1.5 L IBS + Diuron 1.5 L IAS + Bladex 1 L PE	0 b	0 b	2	000	80
7.	Trifluralin 1.5 L IBS + Diuron 1.5 L IAS + Metribuzin 300 gm PE	0 b	0 b	2	000	76
8.	Trifluralin 1.5 L IBS + Diuron 1.5 L IAS + Tribunil 850 gm PE	0 b	0 b	2	000	82
9.	Trifluralin 1.5 L IBS + Diuron 1.5 L IAS + MCPA 1.4 L PE	0 b	0 b	0	112	80
10.	Trifluralin 1.5 L IBS + Diuron 1.5 L IAS + Brodal 200 ml PE	0 b	0 b	1	100	68
11.	Bladex 1 L PE	0 b	0 b	3	101	83
12.	Metribuzin 300 gm PE	1 b	0 b	1	111	72
13.	Tribunil 850 gm PE	1 b	0 b	4	000	70
14.	MCPA 1.4 L PE	3 b	0 b	0	02-	78
15.	Brodal 200 ml PE	7 a	0 b	1	011	85
				NS		NS

- = Plot not included.

COMMENTS: The peas did not grow well enough on this site to be harvested, because seasonal conditions were very dry.

All herbicides controlled turnip, and all herbicides controlled doublegee better than Brodal.

Very little crop damage was detected except on peas sprayed with Metribuzin and MCPA.

BROADLEAF WEED CONTROL

TRIAL NUMBER: 87KA81/4515 EX

LOCATION: R. KEAST, BADGEBUP

OFFICERS: GILBEY

OBJECTIVE: To study the effect of herbicides on peas and weeds

CROP VARIETY: Pennant

SITE PREPARATION:

SITE DESCRIPTION: Red loam

SPRAYING DETAILS: 30.6.87 Treatments 2-9
6.8.87 Treatments 5-13 were applied PE
peas 3-5 node, rye grass Z13/21 - Z13/23

ASSESSMENTS: Visual rating 2.9.87 & 3.10.87
Plant counts 2.9.87

RATING SCALE (WEEDS): 0 = no effect
1 = 0 - 25% control
2 = 25 - 50% control
3 = 50 - 75% control
4 = 75 - 98% control
5 = 98 - 100% control
6 = 100% control

RATING SCALE (PEAS): 0 = no effect
1 = slight effect
2 = moderate effect
3 = severe effect

WEEDS PRESENT IN CROP: Wireweed, rye grass, stonecrop and barley grass

IBS = Immediately before seeding
IAS = Immediately after seeding
PE = Post-emergence

Figures in tables followed by the same letter do not differ significantly (P = 0.05) using Duncans Multiple Range Test.

Table 1. Effect of herbicides on peas and weeds

Treatment/ha	Visual rating weeds 2.9.87	13.10.87*	Plants/m2 Rye grass	Wire weed	Visual rating Peas 2.9.87	13.10.87	Peas/m2
1. Nil	000	000	38 ab	70 a	000	222	21
2. Bladex 2 L IBS	404	320	13 c	19 bc	000	002	25
3. Metribuzin 400 gm IBS	465	243	12 c	7 bc	122	222	27
4. Trifluralin 1.5 L IBS + Diuron 2 L IAS	556	454	3 c	1 c	001	000	23
5. Trifluralin 1.5 L IBS + Bladex 1 L PE	555	334	7 c	2 c	110	000	23
6. Trifluralin 1.5 L IBS + Metribuzin 300 g PE	566	445	5 c	0 c	001	001	24
7. Trifluralin 1.5 L IBS + Tribunil 850 g PE	34-	243	11 c	4 c	11-	001	27
8. Trifluralin 1.5 L IBS + MCPA 1.4 L PE	555	333	6 c	2 c	333	221	23
9. Trifluralin 1.5 L IBS + Brodal 200 ml PE	445	234	14 c	3 c	111	200	26
10. Bladex 1 L PE	004	003	39 ab	23 b	000	112	26
11. Metribuzin 300 g PE	556	234	20 bc	1 c	111	222	23
12. Tribunil 850 g PE	045	010	33 ab	15 bc	101	322	24
13. MCPA 1.4 L PE	355	000	48 a	17 bc	333	333	24
14. Brodal 200 ml PE	343	000	39 ab	23 b	111	322	24
							NS

* Weed rating on ARG.

COMMENTS:

Peas were not harvested because of stock damage.

All pre-emergence applied herbicides controlled annual rye grass.

All herbicides controlled wire-weed and none were better than Diuron + Trifluralin.

Peas were moderately to severely retarded on plots sprayed with Metribuzin, MCPA, Tribunil and Brodal, either because of phytoxicity or poor weed control.