1987

Peas - MCPA amine vs Na salt

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PEAS - MCPA AMINE vs NA SALT

TRIAL NUMBER:	87A39/4515 EX
LOCATION:	AVONDALE RESEARCH STATION
OFFICERS:	GILBEY
OBJECTIVE:	To study the effect of MCPA amine and Na salt on peas and weeds
CROP VARIETY:	Dunndale
SEEDING:	27.5.87 at 110 kg/ha with Plain Super at 80 kg/ha
SITE PREPARATION:	Diuron and trifluralin applied before seeding
SITE DESCRIPTION:	Red sandy loam
SPRAYING DETAILS:	2.7.87 Peas 6 node, doublegee cotyledon, capeweed 2-4 leaf, rye grass Z12.5-Z15
ASSESSMENTS:	Visual rating 4.8.87, 7.10.87 Plant counts Not counted Harvest 24.11.87
RATING SCALE (PEAS):	0 = no effect 1 = slight effect 2 = moderate effect 3 = severe effect
WEEDS PRESENT IN CROP:	Small rye grass, capeweed and doublegee present when sprayed. No weeds present when inspected one month later

IBS = Immediately before 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

Treatment/ha	Visual rating 4.8.87	Visual rating 7.10.87	Grain yield kg/ha
1. Nil	000	000	1667 a
2. MCPA Na salt 0.7 L PE	000	000	1542 abc
3. MCPA Na Salt 1.4 L PE	000	001	1542 abc
4. MCPA Na Salt 2.8 L PE	111	010	1286 abcd
5. MCPA Na Salt 5.6 L PE	212	100	1071 cd
6. MCPA Amine 0.35 L PE	000	001	1363 abc
7. MCPA Amine 0.7 L PE	100	110	1179 abcd
8. MCPA Amine 1.4 L PE	111	210	1345 abcd
9. MCPA Amine 2.8 L PE	222	221	881 d
10. Bladex 1 L PE	000	011	1577 ab

COMMENTS:

This was a weed free site and no peas sprayed with MCPA yielded higher than unsprayed peas.

No difference was detected between MCPA amine or MCPA sodium salt. Both formulations were phytotoxic at the highest equivalent level of application.

While the mean yield shown for 700 mls MCPA amine/ha is lower than that for unsprayed peas this can be explained by a particularly low yield in one replication of the sprayed plots. The reason for this one low yielding plot is unknown as nothing unusual was observed during the season.