

Study Name: Valor residue trial in sunflower (IR-4)

Study Number: 9928

Objectives: Conduct IR-4 residue study for Valor in sunflower (residue and processing)

Results: We planted the sunflower May 21 and applied Valor preemergence on May 25. Valor caused severe stand reduction in the treated areas. Valor caused a 46% stand reduction in the residue trial and 27% stand reduction in the processing trial. Due to the crop injury at Minot and other study sites, IR-4 terminated the project.

Although the IR-4 project was terminated we allowed the sunflower to mature. Valor caused an 18% yield reduction in the residue trial and a 7% yield reduction in the processing trial compared to the untreated yields. It appeared that the sunflower in the treated plots did recover somewhat from the Valor injury.

Table. Sunflower stand counts following preemergence Valor application (9928)

Residue trial			Processing trial		
Treated	Untreated		Treated	Untreated	
Plant count in 2 rows 50' long	Plant count in 1 row 50' long	Plant count in 1 row 50' long	Plant count in 2 rows 50' long	Plant count in 1 row 50' long	Plant count in 1 row 50' long
31	60	42	58	42	49
24	61	40	61	50	53
41	52	52	68	46	48
47	46	37	69	43	37
65	46	51	64	45	43
65	52	55	83	50	50
44	56	45	50	44	52
61	54	40	66	42	50
67	53	42	72	36	37
57	54	38	73	47	47
58	51	46	70	51	45
61	39	40	67	47	42
Total over 24 rows 621	Total over 24 rows 1152		Total over 24 rows 801	Total over 24 rows 1096	
Stand reduction in Residue trial 46%			Stand reduction in Residue trial 27%		

Table. Sunflower yield following preemergence Valor application (9928)

IR-4 VALOR	(each line represents 2 passes)			
	Plot wt	Test wt.	Test wt	Yield
	(lb/A)	(lb/bu)	(lb/bu)	(lb/A)

EAST TRT.	1230	32.2		
Residue trial	1164	31.8		
Treated	1133	31.5	31.9	1176
EAST UNT.	1504	31.8		
Residue trial	1358	32.4		
Untreated	1401	31.8	32.0	1421
WEST TRT.	1118	31.8		
Processing trial	1215	31.2		
Treated	864	32.0	31.6	1066
WEST UNT.	1029	31.7		
Processing trial	1151	32.8		
Untreated	1247	30.4	31.6	1143