

Study Name: Clearfield sunflower tolerance to KIH-485 applied preemergence (0723)

Objectives: Evaluate conventional till sunflower tolerance to different rates of KIH-485

Results:

KIH-485 caused very little sunflower injury at any rate. All treatments were similar in sunflower yield and test weight.

KIH-485 is a new soil-applied herbicide currently being developed by Kumiai for weed control in corn. We are investigating this herbicide for potential use in other crops such as sunflower and pulse crops.

Treatment	Rate	Timing	Sunflower				
			-----% injury-----			Yield lb/A	Test wt. lb/bu
			Jun 20	Jul 14	Aug 31		
KIH-485	0.15lb ai	PRE	0	0	0	1681	32.1
KIH-485	0.19lb ai	PRE	0	1	0	1648	32.4
KIH-485	0.3lb ai	PRE	0	3	0	1560	33.4
KIH-485	0.38lb ai	PRE	0	7	2	1442	32.9
KIH-485 ^a	0.15lb ai	PRE	0	1	0	1376	32.9
KIH-485 ^a	0.3lb ai	PRE	0	3	1	1727	32.0
Prowl H20 + Spartan	2.6pt + 3fl oz	PRE	0	0	0	1676	32.9
Handweeded check			0	0	0	1764	32.6
LSD (0.05)			NS	2.6	NS	NS	NS
CV			0	81.7	353.3	17.3	2

^a We intended to follow these two treatments with Beyond; however, few weeds emerged in the study area and the Beyond application was not warranted.