

Sunflower response to Headline fungicide, Carrington, 2006. Gregory J. Endres. The trial had a randomized complete block design with three replicates. The trial was conducted under conventional-till with lupin as the previous crop on a loam soil with 6.8 pH and 3.1% organic matter at the NDSU Carrington Research Extension Center. Mycogen NuSun '8N429CL', treated with Maxim + Apron XL LS, was planted in 30-inch rows on May 31 and hand-thinned to 20,000 plants/A on July 7. Fungicide treatments were applied to 10 by 30 ft plots with a CO<sub>2</sub> pressurized hand-held plot sprayer at 17 gal/A and 35 psi through TJ-60 8002 nozzles. R2 treatments were applied on July 21 with 69 F, 73% RH, clear sky, and 8 mph wind and the R3 treatment on July 28 with 74 F, 75% RH, clear sky, and 12 mph wind. The trial was hand harvested and seed threshed with a plot combine on October 16.

Sunflower rust was not detected in trial until September 14, with % severity at 0.1 across treatments (data not shown). Sunflower development, and seed yield and quality were similar among treatments (Table).

Table.										
Treatment										
No.	Name	Rate	Unit	Stage	First flower	Maturity	Seed yield	Test weight	Oil	
					Jday	Jday	lb/A	lb/bu	%	
1	Headline	3	fl oz/a	R2	217	259	1183	26.2	38.2	
	NIS <sup>1</sup>	0.25	%v/v							
2	Headline	6	fl oz/a	R2	217	259	1320	25.9	38.3	
	NIS	0.25	%v/v							
3	Headline	6	fl oz/a	R3	217	259	1361	25.6	37.4	
	NIS	0.25	%v/v							
4	Untreated check	x	x	x	217	258	1353	26.2	38.1	
Mean					217	259	1304	26.0	38.0	
CV (%)					0.4	0.2	13.3	4.0	2.0	
LSD (P=.05)					NS	NS	NS	NS	NS	
<sup>1</sup> NIS=Induce.										