

**NDSU North Central Research Extension Center**  
**2017 Sulfur by Nitrogen Fertility in No-Till Spring Wheat at Minot**

Trt	Applied Fertilizer <sup>1</sup>		Days to Head	NDVI at Anthesis	Plant Height	Lodging	Test Weight	1000 KWT	Grain Protein	Grain Yield
	Nitrogen	Sulfur								
pounds per acre			DAP <sup>2</sup>	0-1	inches	0-9 <sup>3</sup>	lbs/bu	g	%	bu/A
1	0	0	51	0.41	23	0	61.3	31	12.7	36.7
2	0	10	51	0.46	25	0	61.5	29	12.7	43.1
3	0	20	51	0.44	25	0	61.5	31	13.0	41.9
4	50	0	51	0.47	24	0	61.4	30	13.0	46.3
5	50	10	51	0.49	26	0	61.1	31	13.1	45.5
6	50	20	51	0.47	25	0	60.7	31	13.5	41.1
7	100	0	51	0.45	24	0	61.0	30	13.8	41.8
8	100	10	52	0.50	26	0	61.0	31	13.7	44.1
9	100	20	51	0.46	25	0	60.9	31	13.9	45.8
10	150	0	52	0.48	26	0	61.1	30	14.1	42.4
11	150	10	51	0.50	25	0	60.8	31	14.2	48.0
12	150	20	51	0.47	26	0	60.8	32	14.1	45.7
13	200	0	51	0.48	26	0	61.0	31	14.1	46.6
14	200	10	51	0.48	26	0	60.8	31	14.3	48.3
15	200	20	51	0.51	25	0	61.0	30	14.3	46.4
16	46*	0	51	0.42	24	0	61.3	31	13.1	38.3
17	46**	0	51	0.46	25	0	61.2	30	13.3	40.9
18	100***	10	51	0.48	24	0	61.2	31	13.7	45.3
Trial Mean			51	0.47	25	0	61.1	31	13.6	43.8
C.V. %			0.7	6.9	5.1	0.0	0.6	3	3.1	9.4
LSD 0.05			NS	0.05	NS	NS	NS	NS	0.7	NS

<sup>1</sup> Pounds of N applied as Urea and S as AMS through a mid-row band at planting.

<sup>2</sup> Days after planting.

<sup>3</sup> Lodging: 0 = none, 9 = lying flat on the ground.

\*broadcast at tillering (June 8)

\*\*broadcast at anthesis (June 28)

\*\*\*100 lbs/A N + 10 lbs/A S + 100 lbs/A Potash applied in a mid-row band at planting.

ns = no statistical difference between treatments.

Planting Date: May 3

Variety = Barlow HRSW

Harvest Date: August 14

Seeding Rate: 1.25 million live seeds / acre

Previous Crop: Soybean

Tillage System: No-till

Soil Type: Williams loam

Soil Test: N = 45 lbs/A (0-24"), P = 14 ppm (0-6")