North Central Research Extension Center—Minot 2010 Wilbur Ellis Foliar Nitrogen Products on Sunflower

Jeremy Pederson, Area Extension Specialist/Cropping Systems

Trial information

- Design: RCB with three replicates
- Plot Size: 10' x 25' (4 rows on 30 inch spacing with inside 2 rows treated and harvested)
- Planting Date/Rate/Hybrid: May 18, 23 K seeds per acre, DeKalb DKF29-30 NS/DM
- (Note: Seedling emergence was reduced due to excessive seeding depth and soil crusting)
- Previous Crop/Tillage: Wheat/Spring tilled with chisel plow spikes
- Seeding System: Two-row plot planter on 30 inch rows
- Fertility: No fertilizer added
- Treatment Application Date: July 7
- Application Equipment: C0₂ pressurized hand boom with 8001 flat fans @ 40 psi and 10 GPA
- Weed Control: 3 pt/a Prowl H20 + 5 oz/a Spartan PRE, 8 oz/a clethodim POST
- Harvest Date: October 13

Test				
Treatment ¹ Timing	Rate	Weight	Oil	Yield
	gallon/acre	lb/bu	%	bu/A
		30.1	34.5	1397.1
V18	1.0	29.8	34.5	1358.8
V18	1 + 0.5	29.4	33.1	1380.5
V18	0.5	30.0	33.7	1344.7
		NS	NS	NS
		1.9	4.5	7.6
		29.8	33.9	1370.3
	 V18 V18 V18 	gallon/acre V18 1.0 V18 1 + 0.5 V18 0.5 	Timing Rate Weight gallon/acre lb/bu 30.1 V18 1.0 29.8 V18 1 + 0.5 29.4 V18 0.5 30.0 NS 1.9	Timing Rate Weight Oil gallon/acre lb/bu % 30.1 34.5 V18 1.0 29.8 34.5 V18 1 + 0.5 29.4 33.1 V18 0.5 30.0 33.7 NS NS 1.9 4.5

Spring soil test results (4/26/2010 sampling date): N=79 lb/a (0-24"), P=14ppm (0-6"), K=410 ppm (0-6"), S=719 lb/a (0-24"), OM = 3.0%

¹ NIS at 0.25% v/v added with all treatments