



Knowledge grows



Location:

Wheat Variety Adrianus; Planted 6-Oct-2023 - 1.8 m s/ac; Harvested 21-Jul-2024

Plot Size: 3m x 15m x 4 reps Harvested plot dimensions: 1.25m wide x 15m long

Trt #	Treatment	Rate	Timing	Rating Date Rating Type Rating Unit Collection Type Statistics	31-Jul Moisture % Sample LSD p=0.10	21-Jul Yield bu/ac Plot LSD p=0.10	31-Jul Protein % Sample LSD p=0.10	31-Jul Test Weight g/0.5L Sample LSD p=0.10	31-Jul Falling # Sample	Description
1	28% UAN	80 lbs N & 8 lbs S/ac	Green Up (BBCH 13-22)	B	14.2	111.1 c	10.7 e	366.9 bcd	403.0	Bare Bones, one shot only 80 N as liquid. Low Yield, Low Protein.
	ATS	combined	Green Up (BBCH 13-22)	B						
	Miravis Ace	0.4047 L/ac	Early Flowering (BBCH 61)	E						
2	28% UAN	160 lbs N & 19 lbs S/ac	Green Up (BBCH 13-22)	B	14.3	132.8 ab	12.6 d	371.7 abc	446.0	One Shot Early as liquid. Good Yield but Low Protein.
	ATS	combined	Green Up (BBCH 13-22)	B						
	Miravis Ace	0.4047 L/ac	Early Flowering (BBCH 61)	E						
3	28% UAN	80 lbs N & 8 lbs S/ac	Green Up (BBCH 13-22)	B	14.2	128.9 b	12.5 d	364.3 cd	433.0	Split App using Liquid. 2nd app at Z32. Will usually make strong yield, but not usually very strong protein.
	ATS	combined	Green Up (BBCH 13-22)	B						
	28% UAN	80 lbs N & 11 lbs S/ac	Early stem elongation (BBCH 31-32)	C						
	ATS	combined	Early stem elongation (BBCH 31-32)	C						
	Miravis Ace	0.4047 L/ac	Early Flowering (BBCH 61)	E						
4	MAP	100 lbs/ac	Extra Early Green Up	A	14.2	132.4 ab	12.7 cd	360.8 d	397.0	Same as TRT#3, but with Early MAP booster broadcast.
	28% UAN	80 lbs N & 8 lbs S/ac	Green Up (BBCH 13-22)	B						
	ATS	combined	Green Up (BBCH 13-22)	B						
	28% UAN	80 lbs N & 11 lbs S/ac	Early stem elongation (BBCH 31-32)	C						
	ATS	combined	Early stem elongation (BBCH 31-32)	C						
	Miravis Ace	0.4047 L/ac	Early Flowering (BBCH 61)	E						
5	28% UAN	80 lbs N & 8 lbs S/ac	Green Up (BBCH 13-22)	B	14.1	129.6 b	13.2 abc	373.4 ab	435.0	Split App using Liquid. 2nd app at FLAG. High Burn Risk. Will usually make strong yield, and decent protein.
	ATS	combined	Green Up (BBCH 13-22)	B						
	28% UAN	80 lbs N & 11 lbs S/ac	Flag leaf emergence (BBCH 41)	D						
	ATS	combined	Flag leaf emergence (BBCH 41)	D						
	Miravis Ace	0.4047 L/ac	Early Flowering (BBCH 61)	E						
6	MAP	100 lbs/ac	Extra Early Green Up	A	13.9	131.8 ab	13.0 bcd	368.1 bcd	434.0	Same as TRT#5, but with Early MAP booster broadcast.
	28% UAN	80 lbs N & 8 lbs S/ac	Green Up (BBCH 13-22)	B						
	ATS	combined	Green Up (BBCH 13-22)	B						
	28% UAN	80 lbs N & 11 lbs S/ac	Flag leaf emergence (BBCH 41)	D						
	ATS	combined	Flag leaf emergence (BBCH 41)	D						
	Miravis Ace	0.4047 L/ac	Early Flowering (BBCH 61)	E						
7	28% UAN	80 lbs N & 8 lbs S/ac	Green Up (BBCH 13-22)	B	13.9	138.6 a	13.6 a	372.1 abc	434.0	Split App. 2nd app using AMIDAS broadcast at Flag Leaf (heads cracking from boot). No Burn Risk. Usually TOP yields with BEST Protein.
	ATS	combined	Green Up (BBCH 13-22)	B						
	Amidas 200lb	80 lbs N & 11lbs S/ac	Flag leaf emergence (BBCH 41)	D						
	Miravis Ace	0.4047 L/ac	Early Flowering (BBCH 61)	E						
8	MAP	100 lbs/ac	Extra Early Green Up	A	14.0	139.4 a	13.3 ab	373.6 ab	469.0	Same as TRT#7, but with Early MAP booster broadcast.
	28% UAN	80 lbs N & 8 lbs S/ac	Green Up (BBCH 13-22)	B						
	ATS	combined	Green Up (BBCH 13-22)	B						
	Amidas 200lb	80 lbs N & 11lbs S/ac	Flag leaf emergence (BBCH 41)	D						
	Miravis Ace	0.4047 L/ac	Early Flowering (BBCH 61)	E						
9	28% UAN	80 lbs N & 8 lbs S/ac	Green Up (BBCH 13-22)	B	13.5	131.1 ab	12.7 cd	377.6 a	422.0	Split App 140N. 2nd app less AMIDAS broadcast at Flag Leaf (heads cracking from boot). No Burn Risk. Usually OK yields, OK Protein.
	ATS	combined	Green Up (BBCH 13-22)	B						
	Amidas 150lb	60 lbs N & 8lbs S/ac	Flag leaf emergence (BBCH 41)	D						
	Miravis Ace	0.4047 L/ac	Early Flowering (BBCH 61)	E						

Application Information:											
Date / Time	Wheat Timing / Stage (BBCH)	Appl. Code	Comment	Height (cm)	Leaves	Tillers	Air Temp - C	Humidity	Soil Temp - C	Soil Condition	
11-Apr / 11:30 am	Green Up (BBCH 24-26)	A	MAP App	5-8	3-4	2-6	10.2	72.2	8	Moist	
1-May / 8:00 pm	Early stem elongation (BBCH 30-31)	B	1st N + S App	15-20			19.3	58.1	17	Moist	
13-May / 4:20 pm	Late Flag leaf emergence (BBCH 32-33)	C	2nd N + S App	45-60			24.4	49.3	22	Wet	
25-May / 8:30 am	Boot Splitting (BBCH 49-55)	D	3rd N + S App	80-120			16.8	68.2	16	Wet	
10-Jun / 10:00 am	Early Flowering (BBCH 60-61)	E	Blanket Fungicide App	120			14.9	60.8	15	Moist	

So the soil test numbers are:  
 Phosphorus: 32 - 59  
 Potassium: 83 - 118  
 Magnesium: 191- 227  
 Calcium: 1620 - 2053  
 pH: 7.0 - 7.7  
 CEC: 11.8 - 14.2  
 OM: 3.1 - 3.6

NOTE: There was no adjustment made for the N in **MAP** applications. Therefore, treatments 4, 6, 8 had net total of 171 spring N. There was a consistent slight yield gain in each of the three comparisons. Only 1-2 bu/ac. Protein levels unaffected.

NOTE: There was no rain in forecast at flag leaf time, so decision was made to hold off granular Amidas app (TR 7,8,9) for a few days. The heads had started to split from the boot. Liquid app (TR 5, 6) was couple days sooner.