

Cross Site ARS #143, Nitrogen and Water Application Information – Revised April 2006

Experimental Design/Set-up

Eight plots, some have more than one treatment in them.-Set up in 1996 or 95

Treatments

C-Control

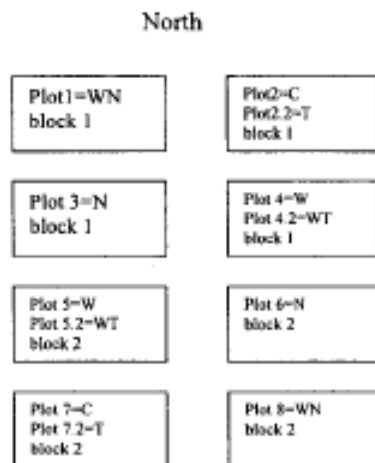
N-Nitrogen added

T-Temperature increased (heating cones)

W-Water added

WN-added water+added N

WT-added water+increased temp



Plots are 30m x 40m=1200m²

Details about treatments:

Water was added to mimic the levels at Hays, Kansas by a sprinkler system.

Nitrogen Application

The Nitrogen addition is 3 g/m²/year. We should be applying 12.86 kg (or 28.3 lbs) of the ammonium sulfate fertilizer to each plot (1 plot = 1200 m²) to achieve a level of 3 g N/m²

Water Application

Please see next page.

Assume 4 mm/hour

Irrigation Schedule for Cross-site/Water and Nitrogen Experiment

Day	Amount (mm)	10	11	23	0	3	0
		11	0	24	0	4	0
May		12	0	25	0	5	0
1	0	13	0	26	0	6	0
2	10	14	0	27	0	7	0
3	0	15	12 3.00	28	0	8	0
4	0	16	0	29	0	9	0
5	0	17	0	30	0	10	0
6	0	18	0	31	0	11	0 1.5 sat day
7	0	19	0	Aug		12	0
8	11	20	0	1	0	13	0
9	0	21	0	2	0	14	0
10	0	22	8 2.00	3	0	15	0 2.25
11	0	23	0	4	12 3.00	16	0
12	0	24	0	5	0	17	0
13	0	25	6 1.5	6	0	18	0
14	0	26	0	7	0	19	0
15	0	27	0	8	0	20	0
16	0	28	0	9	0	21	0
17	8	29	0	10	0	22	0 1.5
18	0	30	0	11	12 3.00	23	0
19	0	July		12	0	24	0
20	0	1	14 3.5	13	0	25	0
21	0	2	0	14	0	26	0
22	14 - 3.50 hrs	3	0	15	11 2.75	27	0
23	0	4	3	16	0	28	0
24	0	5	0	17	0	29	0
25	0	6	0	18	0	30	0
26	0	7	0	19	0		
27	0	8	0	20	0		
28	0	9	11 2.75	21	0		
29	0	0	0	22	0		
30	0	1	0	23	0		
31	0	12	0	24	10 2.50		
June		13	0	25	0		
1	10 2.50 hrs	14	0	26	0		
2	0	15	0	27	0		
3	0	16	16 4.00	28	0		
4	0	17	0	29	0		
5	0	18	0	30	0		
6	0	19	0	31	0		
7	0	20	0	Sept			
8	0	21	0	1	0		
9	5 1.25 hrs	22	16 4.00	2	5 1.25		