

Treatment Code	Nitrogen Applications
A	- Check plot, no nitrogen
B	- 67 Kg/ha N as anhydrous ammonia
C	- 134 " " " " "
D	- 202 " " " " "
E	- 67 Kg/ha of N as urea
F	- 134 " " " " "
G	- 202 " " " " "
H	- 269 Kg/ha of N as urea in alternate years
I	- 403 " " " " " " "
J	- 134 " " " " " " "
K	- 67 Kg/ha of N as urea in fall
L	- 134 Kg/ha " " " " " "



Plot No.	Treatment Code
701	B
* 702	E
* 703	F
704	H
705	L
706	C
* 707	D
* 708	A
* 709	J
710	G
711	I
712	K
713	L
714	K
715	B
716	I
717	D
718	J
* 719	G
* 720	A
* 721	E
* 722	F
723	H
724	C
725	H
726	I
727	F
728	B
729	J
730	C
* 731	A
* 732	E
* 733	L
* 734	G
735	D
736	K

Figure 82.2. Design and treatment descriptions of corn nitrogen fertilization experiment. Spectral measurements were made of plots marked with an asterik (\*).

LARSPEC Identification Record Codes

1. Level of Factor Codes

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Factor		Level	
Code	Description	Code	Description
1:	Nitrogen fertilization	1:	None
		2:	67 kg/ha
		3:	134 kg/ha
		4:	202 kg/ha
2:	Block or replication	1:	First block
		2:	Second block
		3:	Third block

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2. Experimenter parameters

Experimenter parameter 01: Grain yield in kilograms per hectare.

Illumination Conditions for Spectral Data Collection

Date	Day of Year	Time Period		Solar Zenith Angle Range		Solar Azimuth Angle Range	Cloud Cover
		Start	Stop	max	min	max	
		GMT		degrees		degrees	%
<sup>1</sup> 6/22	173	16:49	17:09	21	- 19	139-150	?
<sup>1</sup> 6/28	179	17:38	17:56	17	- 17	170-184	10-40
<sup>2</sup> 6/28	179	16:22	16:39	25	- 23	126-133	20
<sup>1</sup> 6/29	180	15:59	17:06	29	- 20	118-148	40-50
<sup>2</sup> 6/29	180	15:44	15:54	32	- 30	113-116	40
<sup>1</sup> 7/5	186	16:51	17:48	22	- 18	139-177	5
<sup>2</sup> 7/5	186	18:16	18:27		18 - 19	198-205	5-10
<sup>1</sup> 7/6	187	15:38	16:27	33	- 25	112-128	2
<sup>2</sup> 7/6	187	18:06	18:18		18 - 19	190-199	2
7/11	192	16:15	16:25	28	- 26	124-128	5
7/15	196	17:30	18:46	20	- 19 - 22	163-214	35-40
7/28	209	16:16	17:10	30	- 23	128-153	0
8/3	215	16:42	17:33	28	- 23	140-167	3-20
8/8	220	15:35	15:46	38	- 37	119-122	0
<sup>1</sup> 8/16	228	15:58	17:15	36	- 28	129-160	30-35
<sup>2</sup> 8/16	228	16:39	17:41	31	- 27	144-174	30-40
8/20	232	15:46	16:42	39	- 32	126-146	5-10
8/22	234	15:15	16:40	44	- 32	119-146	?
8/31	243	16:59	17:59	33	- 32	157-185	5-15
9/5	248	17:22	17:29	34	- 34	169-172	?
9/15	258	15:56	16:42	44	- 40	140-156	10-15
9/23	266	16:30	17:17	43	- 41	154-171	30-40

<sup>1</sup>78100802

<sup>2</sup>78105802

Dates Spectral Data Collected (Exotech 20C):

Plot Number	6/28	6/29	7/5	7/6	7/15	7/28	8/3	8/16	8/20	8/31	9/15	9/23
	Number of Observations Collected											
702	1	1	1	1	1	1	1	1	1	1	1	1
703	2	2	2	2	2	2	2	2	2	2	2	2
707	-	-	-	-	1	1	1	1	1	1	1	1
708	1	1	1	1	1	2	1	1	1	1	1	1
709	1	2	2	2	2	1	2	1	2	2	2	2
719	-	1	1	1	1	1	1	1	1	1	1	1
720	-	1	1	1	1	1	1	1	1	1	1	1
721	-	1	2	2	1	2	2	2	2	2	2	2
722	-	1	1	1	1	1	1	1	1	1	1	1
731	-	1	1	1	-	1	1	1	1	1	1	1
732	-	1	1	1	1	1	1	1	1	1	1	1
733	-	2	2	2	2	2	2	2	2	2	2	2
734	-	1	1	1	1	1	1	1	1	1	1	1

Dates Spectral Data Collected (Exotech 100):

Plot Number	6/22	6/28	6/29	7/5	7/6	7/11	8/8	8/16	8/22	9/5
	Number of Observations Collected									
702	2	2	2	2	2	2	2	2	4	2
703	2	2	2	2	2	2	2	2	4	2
707	2	-	-	-	-	2	2	2	4	2
708	2	2	2	2	2	2	2	2	4	2
709	-	2	2	2	2	2	2	2	4	2
719	2	2	2	2	2	2	2	2	4	2
720	2	2	2	2	2	2	2	2	4	2
721	2	2	2	2	2	2	2	2	4	2
722	2	2	2	2	2	2	2	2	4	2
731	2	2	2	2	2	2	2	2	4	2
732	2	2	2	2	2	2	2	-	4	2
733	2	2	2	2	2	2	2	-	4	2
734	2	2	2	2	2	2	2	-	4	2