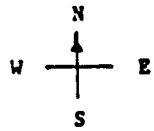
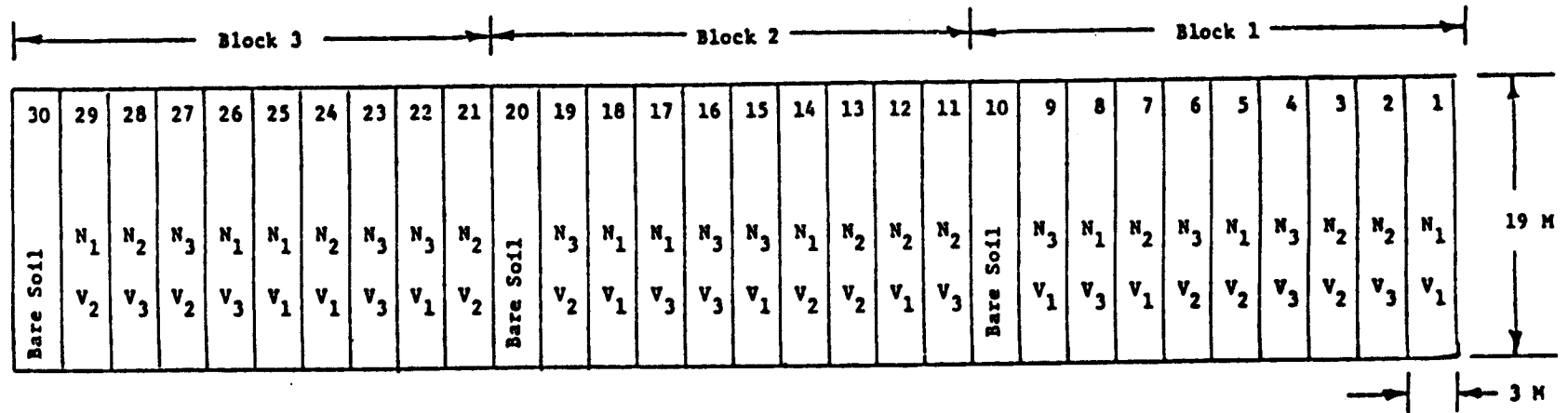


79100806, 79105806



Nitrogen

- N₁ = 0 Kg N/ha
- N₂ = 60 Kg N/ha
- N₃ = 120 Kg N/ha

Winter Wheat Variety

- V₁ = Monon (susceptible, treated with fungicide)
- V₂ = Monon (susceptible)
- V₃ = Sullivan (resistant)

Planting date = October 5, 1978
 Fertilizer = 32 Kg P/ha and 61 Kg K/ha

Figure 95.1 Design and treatment descriptions of the 1979 Purdue Agronomy Farm Winter Wheat nitrogen fertilization and disease experiment.

LARSPEC Identification Record Codes:

1. Level of Factors

Factor		Level	
<u>Code</u>	<u>Description</u>	<u>Code</u>	<u>Description</u>
1:	Nitrogen fertilization	1:	0 kg/ha
		2:	60 kg/ha
		3:	120 kg/ha
2:	Variety	1:	Monon (susceptible, treated with fungicide)
		2:	Monon (susceptible)
		3:	Sullivan (resistant)
3:	Block or replication	1:	First block
		2:	Second block
		3:	Third block

2. Experimenters Parameters

Experimenter parameter 01: Measurements of leaf chlorophyll concentration in micrograms per square centimeter.

Experimenter parameter 02: Measurements of leaf nitrogen concentration in percent (grams of nitrogen per grams of leaf dry weight).

Experimenter parameter 09: Air temperature as measured by a probe attached to the boom supporting the multiband radiometer in degrees Celsius.

Experimenter parameter 10: Radiant temperature as measured by a precision radiation thermometer (PRT-5) obliquely viewing the top surface of the canopy in degrees Celsius.

Illumination Conditions for Spectral Data Collection (Exotech 100)

Date	Day of Year	Time Period (GMT)		Solar Zenith	Solar Azimuth	Cloud
		Start	Stop	Angle Range (degrees) max-min-max	Angle Range (degrees)	Cover (%)
5/16	136	17:43	18:45	22 - 25	179-216	10-15
5/29	149	17:53	18:06	19 - 19	186-195	?
6/4	155	17:29	17:41	18 - 18	167-176	?
6/11	162	17:12	17:52	19 - 17	154-184	20
6/15	166	17:00	17:28	20 - 18	146-165	0
6/21	172	17:29	17:43	18 - 17	164-175	10
6/26	177	17:32	17:45	18 - 17	166-176	10
7/2	183	17:12	17:33	19 - 18	151-166	5

Dates Spectral Data Collected (Exotech 20C):

Plot Number	Number of Observations Collected										
	5/1	5/7	5/16	5/28	6/4	6/11	6/12	6/15	6/21	6/25	7/2
1	1	1	1	1	2	2	-	1	2	1	1
2	1	2	1	1	1	1	-	2	1	1	1
3	1	1	2	2	1	1	1	1	1	1	2
4	1	2	1	1	2	1	2	2	2	2	1
5	1	1	1	1	1	2	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1	1	1
7	2	1	2	2	1	1	1	1	1	1	2
8	1	2	1	1	2	2	2	2	2	2	1
9	2	1	2	2	1	1	1	1	1	1	1
10	2	1	1	1	1	1	2	1	1	1	1
11	2	1	1	1	1	-	1	1	1	1	2
12	3	2	2	2	2	-	2	2	2	2	1
13	1	1	1	1	1	-	1	1	1	1	1
14	1	1	1	1	1	-	1	1	1	1	2
15	1	1	1	1	1	-	1	1	1	1	1
16	2	2	2	2	2	-	2	2	2	2	1
17	1	1	1	1	1	-	1	1	1	1	1
18	1	1	1	1	1	-	1	1	1	1	2
19	1	1	1	1	1	-	1	1	1	1	1
20	1	1	1	1	1	-	1	1	1	1	1
21	1	2	2	2	2	-	2	2	2	2	2
22	1	1	1	1	1	-	1	1	1	1	1
23	1	1	1	1	1	-	1	1	1	1	1
24	2	2	2	2	2	-	2	2	2	2	1
25	1	1	1	1	1	-	1	1	1	1	2
26	1	1	1	1	1	-	1	1	1	1	1
27	1	1	1	1	1	-	1	1	1	1	1
28	2	2	2	2	2	-	2	2	2	2	2
29	1	1	1	1	1	-	1	1	1	1	1
30	1	1	1	1	1	-	1	1	1	1	1

Illumination Conditions for Spectral Data Collection (Exotech 20C)

Date	Day of Year	Time Period (GMT)		Solar Zenith Angle Range (degrees)	Solar Azimuth Angle Range (degrees)	Cloud Cover (%)
		Start	Stop	max-min-max		
5/1	121	16:13	19:16	33 - 26 - 32	135-224	5-15
5/7	127	15:43	17:48	35 - 24	123-186	0
5/16	136	15:54	19:05	32 - 22 - 28	124-225	0-15
5/28	148	16:11	18:44	28 - 20 - 23	127-218	0
6/4	155	15:25	17:23	35 - 19	111-163	?
6/11	162	17:11	18:08	19 - 17 - 18	154-196	20-30
6/12	163	15:07	17:06	38 - 19	105-150	1-30
6/15	166	15:19	17:17	36 - 18	107-157	0
6/21	172	15:13	17:16	37 - 18	105-155	0-10
6/25	176	15:19	17:28	36 - 18	107-163	0-15
7/2	183	16:56	20:11	21 - 18 - 34	142-250	5-15

Dates Spectral Data Collected (Exotech 100)

Plot Number	Number of Observations Collected							
	5/16	5/29	6/4	6/11	6/15	6/21	6/26	7/2
1	2	2	2	2	2	2	2	2
2	2	2	2	2	2	2	2	2
3	2	2	2	2	2	2	2	2
4	2	2	2	2	2	2	2	2
5	2	2	2	2	2	2	2	2
6	2	2	2	2	2	2	2	2
7	2	2	2	2	2	2	2	2
8	2	2	2	2	2	2	2	2
9	2	2	2	2	2	2	2	2
10	2	2	2	2	2	2	2	2
11	2	2	2	2	2	2	2	2
12	2	2	2	2	2	2	2	2
13	2	2	2	2	2	2	2	2
14	2	2	2	2	2	2	2	2
15	2	2	2	2	2	2	2	2
16	2	2	2	2	2	2	2	2
17	2	2	2	2	2	2	2	2
18	2	2	2	2	2	2	2	2
19	2	2	2	2	2	2	2	2
20	4	2	2	2	2	2	2	2
21	4	-	2	2	2	2	2	2
22	4	-	2	2	2	2	2	2
23	4	-	2	2	2	2	2	2
24	4	-	2	2	2	2	2	2
25	4	-	2	2	2	2	2	2
26	4	-	2	2	2	2	2	2
27	4	-	2	2	2	2	2	2
28	4	-	2	2	2	2	2	2
29	4	-	2	2	2	2	2	2
30	4	-	2	2	2	2	2	2