

79105803

## Light Soil (Fincastle silt loam)

Plot No.	65	64	63	62	61	60	59	58	57	56
Treatment Code	D <sub>1</sub> P <sub>3</sub>	D <sub>3</sub> P <sub>2</sub>	D <sub>2</sub> P <sub>1</sub>	Bare	D <sub>3</sub> P <sub>1</sub>	D <sub>2</sub> P <sub>3</sub>	D <sub>1</sub> P <sub>1</sub>	D <sub>3</sub> P <sub>3</sub>	D <sub>2</sub> P <sub>2</sub>	D <sub>1</sub> P <sub>2</sub>
Plot No.	66	67	68	69	70	71	72	73	74	75
Treatment Code	D <sub>1</sub> P <sub>1</sub>	D <sub>3</sub> P <sub>2</sub>	D <sub>2</sub> P <sub>1</sub>	D <sub>1</sub> P <sub>2</sub>	D <sub>3</sub> P <sub>3</sub>	D <sub>2</sub> P <sub>2</sub>	Bare	D <sub>3</sub> P <sub>1</sub>	D <sub>2</sub> P <sub>3</sub>	D <sub>1</sub> P <sub>3</sub>

## Dark Soil (Chalmers silty clay loam)

50	49	48	47	46	45	44	43	42	41
D <sub>3</sub> P <sub>3</sub>	D <sub>2</sub> P <sub>3</sub>	D <sub>1</sub> P <sub>1</sub>	D <sub>1</sub> P <sub>2</sub>	D <sub>3</sub> P <sub>2</sub>	Bare	D <sub>1</sub> P <sub>3</sub>	D <sub>2</sub> P <sub>1</sub>	D <sub>3</sub> P <sub>1</sub>	D <sub>2</sub> P <sub>2</sub>
81	82	83	84	85	86	87	88	89	90
D <sub>3</sub> P <sub>2</sub>	D <sub>2</sub> P <sub>2</sub>	D <sub>1</sub> P <sub>3</sub>	Bare	D <sub>3</sub> P <sub>3</sub>	D <sub>1</sub> P <sub>1</sub>	D <sub>1</sub> P <sub>2</sub>	D <sub>2</sub> P <sub>3</sub>	D <sub>3</sub> P <sub>1</sub>	D <sub>2</sub> P <sub>1</sub>

10 m  
10 m  
4.6 m

NORTH

Treatment DescriptionsPlanting Dates

D<sub>1</sub> = May 2, 1979  
 D<sub>2</sub> = May 16, 1979  
 D<sub>3</sub> = May 30, 1979

Plant Populations

P<sub>1</sub> = 25,000 plants/ha  
 P<sub>2</sub> = 50,000 plants/ha  
 P<sub>3</sub> = 75,000 plants/ha

Notes

1. Hybrid: Beck 65X
2. Row width: 76 cm
3. Location: Purdue Agronomy Farm, Field 31-1B

Figure 102.1 Design and treatment descriptions of the 1979 Purdue Agronomy Farm corn cultural practices experiment.

## LARSPEC Identification Record Codes

### 1. Level of Factor Codes

Factor		Level	
<u>Code</u>	<u>Description</u>	<u>Code</u>	<u>Description</u>
1:	Planting date	1:	May 2, 1979
		2:	May 16, 1979
		3:	May 30, 1979
2:	Plant population	1:	25,000 plants/ha
		2:	50,000 plants/ha
		3:	75,000 plants/ha
3:	Soil	1:	Chalmers silty clay loam - "darker soil"
		2:	Fincastle silt loam - "lighter soil"
4:	Block or replication	1:	First block
		2:	Second block

### 2. Experimenters Parameters

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

Date	Day of Year	Time Period (GMT)		Solar Zenith Angle Range (degrees)	Solar Azimuth Angle Range (degrees)	Cloud Cover (%)
		Start	Stop	max-min-max		
5/16	136	17:13	19:21	23 - 22 - 30	160-231	0-15
5/29	149	15:32	16:10	34 - 28	114-126	?
6/4	155	15:36	16:26	33 - 25	114-131	?
6/11	162	15:09	15:56	38 - 29	106-118	0
6/14	165	15:40	16:20	32 - 25	113-126	?
6/15	166	15:19	15:53	36 - 30	107-117	0
6/21	172	15:13	16:05	37 - 28	105-120	0-5
6/25	176	15:18	15:51	36 - 30	106-115	0-1
6/26	177	15:39	16:17	32 - 26	112-124	10
7/2	183	15:11	15:48	38 - 31	105-114	5
7/10	191	15:13	16:05	38 - 29	106-120	15
7/16	197	15:13	15:45	39 - 33	107-115	5
7/18	199	15:15	15:52	39 - 32	108-118	0
8/4	216	16:03	17:20	33 - 24	126-160	25
8/8	220	19:26	20:11	31 - 38	226-241	?
8/12	224	17:24	17:37	26 - 25	164-171	0
8/30	242	15:13	15:26	46 - 44	121-125	?
9/4	247	15:41	16:18	43 - 39	131-143	5
9/9	252	15:51	16:33	43 - 38	136-150	0
9/17	260	18:50	19:44	41 - 47	206-224	?
9/24	267	16:02	16:47	46 - 42	145-160	?
10/29	302	16:45	17:00	55 - 54	166-170	0

Dates Spectral Data Collected:

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Plot Number	Number of Observations										
	5/16	5/29	6/4	6/11	6/14	6/15	6/21	6/25	6/26	7/2	7/10
41	-	2	2	2	2	2	2	2	2	2	2
42	2	-	2	2	2	2	2	2	2	2	2
43	-	2	2	2	2	2	2	2	2	2	2
44	4	2	2	2	2	2	2	2	2	2	2
45	4	2	2	2	2	2	2	2	2	2	2
46	-	-	2	2	2	2	2	2	2	2	2
47	2	2	2	2	2	2	2	2	2	2	2
48	2	2	2	2	2	2	2	2	2	2	2
49	2	2	2	2	2	2	2	2	2	2	2
50	-	-	2	2	2	2	2	2	2	2	2
56	4	2	2	2	2	2	2	2	2	2	2
57	2	2	2	2	2	2	2	2	2	2	2
58	-	-	2	2	2	2	2	2	2	2	2
59	2	2	2	2	2	2	2	2	2	2	2
60	-	2	2	2	2	2	2	2	2	2	2
61	2	-	2	2	2	2	2	2	2	2	2
62	-	2	2	2	2	2	2	2	2	2	2
63	-	2	2	2	2	2	2	2	2	2	2
64	-	-	2	2	2	2	2	2	2	2	2
65	2	2	2	2	2	2	2	2	2	2	2
66	2	2	2	2	2	2	2	2	2	2	2
67	2	-	2	2	2	2	2	2	2	2	2
68	-	2	2	2	2	2	2	2	2	2	2
69	2	2	2	2	2	2	2	2	2	2	2
70	-	-	2	2	2	2	2	2	2	2	2
71	-	2	2	2	2	2	2	2	2	2	2
72	2	2	2	2	2	2	2	2	2	2	2
73	-	-	2	2	2	2	2	2	2	2	2
74	-	2	2	2	2	2	2	2	2	2	2
75	2	2	2	2	2	2	2	2	2	2	2
81	2	-	2	2	2	2	2	6	2	2	2
82	-	2	2	2	2	2	2	2	2	2	2
83	2	2	2	2	2	2	2	2	2	2	2
84	-	2	2	2	2	2	2	2	2	2	2
85	-	-	2	2	2	2	2	2	2	2	2
86	2	2	2	2	2	2	2	2	2	2	2
87	2	2	2	2	2	2	2	2	2	2	2
88	2	2	2	2	2	2	2	2	2	2	2
89	-	-	2	2	2	2	2	2	2	2	2
90	-	2	2	2	2	2	2	2	2	2	2

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Dates Spectral Data Collected (con't.)

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Plot Number	Number of Observations										
	7/16	7/18	8/4	8/8	8/12	8/30	9/4	9/9	9/17	9/24	10/29
41	2	2	2	2	2	-	2	2	2	2	2
42	2	2	2	2	2	-	2	2	2	2	2
43	2	2	2	2	2	-	2	2	2	2	2
44	2	2	2	2	2	-	2	2	2	2	2
45	2	2	2	2	2	-	2	2	2	2	2
46	2	2	2	2	2	-	2	2	2	2	2
47	2	2	2	2	2	-	2	2	2	2	2
48	2	2	2	2	2	-	2	2	2	2	2
49	2	2	2	2	2	-	2	2	2	2	2
50	2	2	-	2	2	-	2	2	2	2	2
56	2	2	-	2	2	-	2	2	2	2	2
57	2	2	-	2	2	-	2	2	2	2	2
58	2	2	-	2	2	-	2	2	2	2	2
59	2	2	-	2	2	-	2	2	2	2	2
60	2	2	-	2	2	-	2	2	2	2	2
61	2	2	-	2	2	-	2	2	2	2	2
62	2	2	-	2	2	-	2	2	2	2	2
63	2	2	-	2	2	-	2	2	2	2	2
64	2	2	-	2	2	-	2	2	2	2	2
65	2	2	-	2	2	-	2	2	2	2	2
66	2	2	2	2	-	2	2	2	2	2	-
67	2	2	2	2	-	2	2	2	2	2	-
68	2	2	2	2	-	2	2	2	2	2	-
69	2	2	2	2	-	2	2	2	2	2	-
70	2	2	2	2	-	2	2	2	2	2	-
71	2	2	2	2	-	2	2	2	2	2	-
72	2	2	2	2	-	2	2	2	2	2	-
73	2	2	2	2	-	2	2	2	2	2	-
74	2	2	2	2	-	2	2	2	2	2	-
75	2	2	2	2	-	2	2	2	2	2	-
81	2	2	2	2	-	2	2	2	2	2	-
82	2	2	2	2	-	2	2	2	2	2	-
83	2	2	2	2	-	2	2	2	2	2	-
84	2	2	2	2	-	2	2	2	2	2	-
85	2	2	2	2	-	2	2	2	2	2	-
86	2	2	2	2	-	2	2	2	2	2	-
87	2	2	2	2	-	2	2	2	2	2	-
88	2	2	2	2	-	2	2	2	2	2	-
89	2	2	2	2	-	2	2	2	2	2	-
90	2	2	2	2	-	2	2	2	2	2	-

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