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Project Report
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COLLEGE OF
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Vegetable Crops Entomology Field Research
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Acknowledgments

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2004
Temperature and Rainfall
Hancock, WI

April Day	Air temperature		Rainfall (inches)	May Day	Air temperature		Rainfall (inches)
	Min.	Max.			Min.	Max.	
1	53.2	19.7	0	1	34.8	57.7	0.0
2	60.8	19.4	0	2	24.3	50.3	0.0
3	48.5	23.6	0	3	18.1	55.7	0.0
4	47.6	17.1	0	4	39.9	71.8	0.0
5	56.2	23.3	T	5	27.9	68.8	0.01
6	71.7	42.7	0	6	50.4	81.7	T
7	63.7	27.7	0	7	36.4	58.7	0.83
8	48.8	30.3	0	8	36.6	59.1	0.23
9	52.6	23.7	0	9	45.7	78.6	0.047
10	39.8	24.5	T	10	48.1	77.1	0.0
11	37.0	23.7	0.03	11	47.5	70.8	0.0
12	39.6	17.9	T	12	61.5	85.7	0.82
13	55.4	14.5	0	13	46.1	68.3	0.65
14	65.3	32.6	0	14	32.2	46.8	0.2
15	72.3	35.6	0	15	27.8	63.0	0.0
16	49.0	79.0	0.18	16	41.6	71.7	0.0
17	74.3	48.0	0.1	17	56.3	74.2	T
18	79.3	45.7	T	18	44.9	69.8	0.0
19	58.3	36.4	0.29	19	37.0	74.3	0.42
20	49.8	32.7	0	20	55.9	82.4	0.23
21	48.5	39.0	0.44	21	42.3	57.4	1.06
22	55.9	30.5	T	22	46.0	56.6	0.59
23	63.6	27.5	0	23	42.8	56.3	0.17
24	51.4	33.1	T	24	43.6	67.2	0.0
25	48.1	36.2	0.18	25	41.1	68.4	0.0
26	47.5	29.1	0.06	26	48.5	72.9	0.02
27	49.6	20.6	0	27	35.5	68.1	0.03
28	84.1	42.2	0	28	43.2	52.8	0.1
29	75.3	44.1	0	29	50.9	62.9	0.4
30	44.3	39.9	0	30	54.5	70.8	0.83
			0.2	31	34.8	57.7	0.12
Total			1.48	Total			7.18

2004
Temperature and Rainfall
Hancock, WI

June Day	Air temperature		Rainfall (inches)	July Day	Air temperature		Rainfall (inches)
	Min.	Max.			Min.	Max.	
1	65.6	53.0	0.06	1	61.7	87.2	0.0
2	75.5	52.0	0.0	2	56.8	84.5	0.0
3	74.9	41.2	0.0	3	59.8	81.6	1.12
4	77.4	45.3	0.0	4	60.9	78.6	0.06
5	73.7	49.9	0.15	5	55.7	69.9	0.59
6	82.4	59.9	0.0	6	54.5	63.6	0.13
7	90.2	65.9	0.0	7	50.9	59.5	0.0
8	89.4	72.2	0.48	8	50.2	71.4	0.0
9	77.8	52.2	1.25	9	53.4	68.2	0.20
10	57.8	48.8	3.25	10	56.9	84.5	0.0
11	59.1	52.4	0.32	11	62.2	83.8	0.0
12	87.5	54.4	0.0	12	64.5	84.9	T
13	81.7	61.6	0.74	13	65.0	90.0	0.03
14	79.7	56.1	0.0	14	57.9	83.1	0.0
15	83.2	53.0	0.0	15	52.2	85.8	0.0
16	87.3	58.2	0.9	16	60.5	83.0	0.21
17	76.2	59.9	0.01	17	57.1	80.5	0.0
18	74.1	50.4	0.0	18	51.3	81.4	0.0
19	69.6	39.4	0.0	19	60.9	86.4	0.0
20	74.3	44.0	0.0	20	64.6	91.6	0.02
21	74.6	55.4	0.06	21	73.0	86.6	T
22	71.4	48.2	0.0	22	62.5	83.6	0.0
23	76.2	51.3	0.33	23	53.7	76.5	0.0
24	63.0	42.9	0.02	24	50.4	76.7	0.0
25	70.3	39.9	0.0	25	53.6	81.1	0.0
26	72.1	42.1	0.0	26	48.0	85.3	0.0
27	74.2	42.7	0.12	27	53.0	86.3	0.0
28	76.4	49.4	0.0	28	56.0	84.3	0.0
29	85.1	54.0	0.0	29	64.0	78.4	0.29
30	85.8	57.4	0.0	30	56.5	83.7	0.04
				31	61.0	82.7	1.01
		Total	7.69			Total	3.70

2004
Temperature and Rainfall
Hancock, WI

August			September				
Day	Air temperature		Rainfall (inches)	Day	Air temperature		Rainfall (inches)
	Min.	Max.			Min.	Max.	
1	62.3	88.3	0.0	1	69.9	85.5	0.0
2	65.9	88.4	0.13	2	66.4	87.1	0.0
3	63.2	82.6	0.18	3	64.4	86.5	0.0
4	57.9	80.3	0.0	4	61.4	84.9	0.0
5	46.0	76.2	0.0	5	66.5	84.9	0.01
6	47.1	81.4	0.0	6	59.0	75.7	0.0
7	50.5	68.5	0.03	7	48.5	71.3	0.0
8	61.1	81.6	0.0	8	48.8	73.3	0.0
9	60.2	81.9	0.07	9	46.0	71.5	0.0
10	52.1	61.5	0.02	10	54.4	82.1	0.0
11	45.6	57.3	0.0	11	61.1	86.1	0.0
12	44.8	70.5	0.0	12	58.6	87.0	0.0
13	43.4	71.4	0.09	13	61.5	84.0	0.0
14	42.6	76.6	0.0	14	65.4	81.7	T
15	43.7	77.2	0.0	15	60.7	77.8	0.35
16	52.2	67.9	0.22	16	46.0	70.1	0.0
17	55.5	76.9	0.0	17	42.6	73.5	0.0
18	50.8	80.6	0.0	18	55.2	78.4	0.0
19	36.6	69.2	0.0	19	56.6	80.8	0.0
20	38.3	71.0	0.0	20	55.9	79.5	0.0
21	32.6	71.0	0.0	21	53.6	84.5	0.0
22	52.2	83.4	0.0	22	53.7	83.0	0.0
23	57.7	67.7	0.0	23	58.9	82.4	0.16
24	57.1	77.6	1.0	24	55.5	61.8	0.0
25	66.7	75.3	T	25	45.7	72.8	0.0
26	66.6	88.3	0.71	26	40.7	76.3	0.0
27	63.2	83.9	0.09	27	47.0	80.9	0.0
28	53.2	63.8	0.0	28	37.4	65.8	0.0
29	49.0	72.0	0.06	29	29.3	71.7	0.0
30	53.4	78.2	0.0	30	36.2	72.3	0.0
31	48.7	77.4	0.33				
Total			2.93	Total			0.52

2004
Temperature and Rainfall
Arlington, WI

April Day	Air temperature		Rainfall (inches)	May Max.	Air temperature		Rainfall (inches)
	Min.	Max.			Min.	Max.	
1	18.65	50.69	0.00	1	34.15	54.63	0.00
2	20.25	58.67	0.00	2	24.45	52.01	0.06
3	25.09	51.23	0.00	3	18.81	55.01	0.00
4	20.63	49.51	0.00	4	37.19	73.87	0.00
5	20.77	56.33	0.00	5	29.99	69.43	0.00
6	39.79	73.59	0.02	6	48.71	76.09	0.00
7	27.21	65.35	0.00	7	38.49	58.17	0.28
8	27.87	52.53	0.00	8	39.41	71.63	0.62
9	23.53	55.01	0.00	9	48.45	81.59	0.01
10	19.71	45.17	0.00	10	49.65	71.27	0.49
11	18.67	40.85	0.00	11	46.89	73.21	0.01
12	16.05	38.75	0.00	12	62.49	84.19	0.11
13	14.07	53.33	0.00	13	48.73	75.17	0.46
14	30.63	71.89	0.00	14	38.49	49.39	0.30
15	28.79	74.13	0.01	15	32.09	60.51	0.00
16	47.81	86.13	0.11	16	38.23	69.41	0.00
17	47.81	74.75	0.40	17	57.65	79.35	0.70
18	50.55	79.77	0.40	18	42.69	62.89	0.02
19	37.07	69.83	0.07	19	36.79	71.63	0.00
20	33.77	52.95	0.43	20	55.01	85.75	0.00
21	34.17	55.29	0.10	21	41.07	70.49	2.74
22	27.07	51.87	0.00	22	54.99	67.35	0.85
23	23.81	62.49	0.00	23	50.17	72.57	1.41
24	33.25	51.87	0.18	24	44.53	55.53	0.02
25	36.65	54.25	0.07	25	44.39	66.15	0.10
26	26.13	51.75	0.00	26	42.97	66.67	0.00
27	20.77	49.79	0.00	27	50.83	76.75	0.00
28	42.55	84.71	0.01	28	42.29	67.57	0.00
29	44.23	78.57	0.00	29	42.17	60.53	0.37
30	40.99	45.45	0.05	30	52.27	69.59	0.58
				31	54.99	70.47	0.23
Total			1.78	Total			8.78

2004
Temperature and Rainfall
Arlington, WI

June Day	Air temperature		Rainfall (inches)	July Day	Air temperature		Rainfall (inches)
	Min.	Max.			Min.	Max.	
1	53.59	65.65	0.00	1	56.07	87.29	0.15
2	52.51	74.03	0.00	2	56.47	82.75	0.00
3	44.01	72.67	0.00	3	59.09	82.61	1.04
4	42.97	76.99	0.00	4	64.85	82.21	0.31
5	48.09	76.47	0.02	5	57.51	74.49	0.10
6	60.79	84.85	0.01	6	57.51	68.77	0.04
7	64.99	90.73	0.00	7	50.57	63.81	0.02
8	72.29	90.99	0.00	8	48.09	74.37	0.00
9	56.05	87.85	0.54	9	49.91	71.77	0.44
10	53.71	62.37	0.87	10	51.49	85.59	0.00
11	57.11	63.93	0.22	11	57.91	84.87	0.01
12	54.63	87.17	0.17	12	63.15	80.77	0.00
13	62.75	82.09	0.04	13	61.71	89.67	0.00
14	58.17	82.09	0.00	14	58.05	81.29	0.00
15	54.77	83.13	0.00	15	50.57	84.19	0.00
16	54.77	87.45	0.43	16	59.61	81.03	0.46
17	62.11	79.49	0.04	17	55.55	76.73	0.00
18	53.31	75.03	0.00	18	50.05	81.95	0.00
19	44.51	68.63	0.00	19	56.21	82.35	0.00
20	46.91	73.99	0.00	20	63.01	92.51	0.00
21	56.07	69.83	0.22	21	70.59	84.59	0.26
22	49.91	71.91	0.00	22	59.87	83.13	0.00
23	53.61	76.61	0.21	23	52.55	75.69	0.00
24	42.33	62.89	0.18	24	49.93	75.43	0.00
25	39.17	70.35	0.00	25	48.73	77.65	0.00
26	44.67	73.33	0.00	26	45.07	81.83	0.00
27	45.07	77.13	0.29	27	49.51	83.93	0.00
28	47.93	74.63	0.00	28	50.97	81.55	0.00
29	54.13	82.87	0.00	29	60.67	77.81	0.17
30	54.77	83.01	0.00	30	59.61	76.07	0.18
				31	60.39	81.29	0.00
		Total	3.24			Total	3.18

2004
Temperature and Rainfall
Arlington, WI

August			September				
Day	Air temperature		Rainfall (inches)	Day	Air temperature		Rainfall (inches)
	Min.	Max.			Min.	Max.	
1	60.15	88.09	0.15	1	55.05	83.27	0.05
2	62.61	85.51	0.13	2	58.95	85.63	0.00
3	63.55	88.35	1.01	3	54.53	84.85	0.00
4	56.59	78.31	0.00	4	53.47	84.85	0.00
5	47.81	72.81	0.00	5	60.67	84.97	0.00
6	43.89	79.71	0.00	6	54.53	75.73	0.08
7	45.99	66.95	0.01	7	45.73	70.47	0.00
8	53.85	80.91	0.00	8	43.09	70.73	0.00
9	62.23	81.95	0.01	9	42.43	70.47	0.00
10	53.59	65.25	0.00	10	42.97	80.93	0.00
11	48.59	57.25	0.01	11	57.51	85.51	0.00
12	46.65	68.27	0.00	12	52.29	86.29	0.00
13	37.85	69.43	0.00	13	52.55	85.51	0.00
14	38.51	74.63	0.00	14	65.39	85.37	0.00
15	39.43	76.61	0.00	15	60.93	77.57	0.49
16	45.73	74.93	0.07	16	43.11	69.03	0.00
17	51.63	78.29	0.00	17	39.83	73.85	0.00
18	48.35	80.37	0.10	18	46.13	77.65	0.00
19	37.99	67.33	0.01	19	48.99	81.07	0.00
20	40.47	73.59	0.00	20	46.91	78.57	0.00
21	33.41	69.95	0.00	21	42.19	82.09	0.00
22	44.97	81.55	0.00	22	38.77	81.31	0.00
23	56.21	69.67	0.00	23	45.87	82.09	0.01
24	56.07	77.29	0.23	24	46.91	70.07	0.00
25	59.75	77.17	0.01	25	40.35	70.59	0.00
26	66.83	85.51	0.51	26	34.71	75.55	0.00
27	65.91	83.53	0.04	27	34.59	78.83	0.00
28	46.75	66.17	0.08	28	32.21	63.55	0.00
29	44.93	69.27	0.00	29	27.89	72.83	0.00
30	51.37	77.27	0.01	30	26.31	72.57	0.00
31	44.27	80.13	0.00				
Total			2.38	Total			0.63

SOIL (Arlington, WI)

Soil Type: Plano silt loam
Sand 12%
Silt 70%
Clay 18%
Organic matter 30 tons
PH 6

SOIL (Hancock, WI)

Soil Type: Plainfield sand
Sand 89%
Silt 6%
Clay 5%
Organic matter 0.77%
PH 5.9-6.3

STATISTICAL ANALYSIS PROCEDURE

All data was subjected to two-way analysis of variance and insect count data was transformed using square root ($X+1$) prior to mean separation. Mean separation was by Least Significant Difference test at the 5% level of significance. Means are rounded for clarity, and in all tables, means in a column followed by the same letter are not significantly different.