

2018 University of Delaware Spring and Fall Beet Trials

Gordon Johnson and Emmalea Ernest
University of Delaware Research and Education Center
16483 County Seat Highway
Georgetown, DE 19947
(302) 856-7303 gcjohn@udel.edu

Spring and Fall beet variety trials were conducted in 2018 at the University of Delaware research farm near Georgetown, DE.

Varieties evaluated and sources:

Variety	Source	Type
3x5	D&D Seed Co. Inc	Red Globe F1
3x11	D&D Seed Co. Inc	Red Globe F1
Avalanche	Bejo Seeds Inc	White Globe OP
Bohan	Bejo Seeds Inc	Red Globe F1
Boldor	Bejo Seeds Inc	Yellow Globe OP
Boro	Bejo Seeds Inc	Red Globe F1
Bresko	Bejo Seeds Inc	Red Globe F1
Falcon	Sakata	Red Globe F1
Kestrel	Sakata	Red Globe F1
Manolo	Bejo Seeds Inc	Red Globe F1
Merlin	Sakata	Red Globe F1
Moneta	Bejo Seeds Inc	Red Globe OP
Pablo	Bejo Seeds Inc	Red Globe F1
Red Ace	Sakata	Red Globe F1
Red Atlas	D&D Seed Co. Inc	Red Globe F1
Red Cloud	Bejo Seeds Inc	Red Globe F1
Red Kite	Sakata	Red Globe F1
Red Titan	D&D Seed Co. Inc	Red Globe F1
Soldier	Bejo Seeds Inc	Red Globe OP, Red Foliage
Tanus	Bejo Seeds Inc	Red Elongated F1

Materials and Methods

There were 20 beet varieties entered and planted in both a spring and a fall trial in 2018. Seeds of each variety were direct seeded at a ½” depth with a plate type push planter to achieve 12 seeds per foot. The spring trial was planted on April 23 and the fall trial was planted on August 10. The soil was a Hammonton loamy sand. In the spring trial Plots were 2 rows, 15’ long with 30” between rows. In the fall trial plots were 1 row 40’ long with 30” between rows. Narrow rows were not used due to the need to mechanically cultivate with available equipment. The experimental design was a randomized complete block with 6 replications in the spring and 4 replications in the fall. Herbicides applied were: Ro-Neet 2 qt./a preplant incorporated and Spin-

Aid 2 pints/a postemergence. Fertilizer applied preplant included 50 lbs. N and 140 lbs. K20 per acre with 3 lbs. of B. Additional N was applied at a rate of 50 lbs. N per acre 6 weeks after planting. Five weekly applications of Dipel insecticide were made from week 3 in each trial. Fungicide was applied two times and consisted of azoxystrobin (Quadris) plus copper. Irrigation was provided by overhead sprinklers (linear system). Plots were cultivated twice and were also hand weeded in the row.

Plots were harvested starting July 5 in the spring trial and November 19 in the fall trial. Taunus, Boldor, and Soldier were not harvested in the fall trial due to lack of size (did not reach harvest maturity). A 10' section of row was harvested in both rows in the spring trial and a 20' section of row was harvested in the fall trial. Beets were pulled by hand, tops removed and weighed and then roots counted and graded into small (1-2" diameter), medium (2-3" diameter) and large (>3" diameter) grades. Each grade was then weighed. Selected beets from each replication were cut, juice extracted, and then measured for soluble solids using a refractometer. Roots were also evaluated for uniformity of size (1-10 with 10 being all the same size), uniformity of shape (1-10 with 10 being all the same shape), exterior appearance (1-10 with 10 being excellent appearance) and interior color (1-10 with 10 being excellent color appropriate for the variety). Tops were evaluated for leaf disease in the spring planting (1-10 with 10 being disease free).

Results

Yield results are presented in Tables 1 and 2. The spring planting received 2.5 inches of rainfall one day after planting and emergence was delayed and stand reduced due to surface compaction which reduced yields. Kestrel had the highest yield (15.2 tons/a). Other varieties with yields above 11 tons per acres were 3x5, 3x11, Red Ace, Red Kite, Bohan, Pablo, Avalanche (white), Red Cloud, Red Atlas, and Bresko. This group ranged from 11.1 to 13.8 tons/a. Low yielding varieties under 7 tons/a were Soldier (red leaf type) and Boldor (yellow root type). In the fall trial, stands were thicker than desired (not thinned) so roots were smaller; however, yields were good. Those varieties in the fall trial with yield greater or equal to 20 tons per acre included Falcon, Red Ace, 3x11, Red Atlas, Boro, 3x5, and Merlin (range from 22.3 to 20.0 tons per acre). Those varieties yielding under 20 tons/a were Bresko, Bohan, Manolo, Pablo, and Moneta (14.2, 14.0, 13.8, 12.7, and 12.6 tons/a respectively).

Size grades by number and weight and top weights are given in Tables 3 and 4. In the spring planted trial, Red Ace had the highest number of harvested beets per plot (42) followed by Kestrel (34), 3x11 (32), and 3x11 (31). The varieties 3x5, 3x11, Bohan, Boro, Falcon, and Red Atlas had over 2000 g/plot in the large size grade; 3x5, 3x11, Falcon, Kestrel, and Red Kite had over 2000 g/plot in the medium size grade, and 3x5, 3x11, and Kestrel had over 1700 g/plot in the small size grade. The most vigorous tops by weight were 3x5, 3x11, Bohan, Falcon, Kestrel, Red Kite, and Soldier (all over 2000 g/plot). In the fall trial, Red Atlas had the highest number of harvested beets per plot (94) followed by Red Ace (91), Red Titan (89), 3x11 (83), Merlin (83), Pablo (82) and Falcon (80). Falcon had the highest weight of large beets (1086 g/plot), Red Titan had the highest weight of medium beets (2050 g/plot), and Red Atlas had the highest weight of small beets (4245 g/plot). Falcon and Kestrel had the most vigorous tops by weight (6014 and 5030 g/plot respectively).

Quality ratings and measurements are given in Tables 5 and 6. In the spring planted trial, Avalanche, Pablo, Red Ace, and Red Titan had the most uniform root sizes and shapes (above 5 rating for both). 3x5, 3x11, Red Atlas, and Red Cloud had the least foliar disease (rating above 6). Moneta had the best exterior root appearance (rating of 6.5) and Bresko, Moneta, and Pablo had a rating of over 8 for interior root appearance. Varieties in the spring trial with a brix % over 6 were Boro, Bresko, Falcon, Kestrel, Red Atlas, and Soldier. In the fall trial, 3x11, Moneta, and Red Titan had the most uniform root size and shape ratings (above 6). The varieties 3x5, Manolo, Red Ace, Red Atlas, and Red Titan had the best exterior root appearance (all above 6). Avalanche, Kestrel, Moneta, and Red Cloud had the best interior root appearance (all above 6). The varieties with the highest brix % were Merlin (7.2), Falcon (6.5), Manolo (6.5), Red Atlas (6.5), Kestrel (6.3) and Pablo (6.3).

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Table 1. Yields of beets in the spring planted trial, Georgetown, Delaware 2018

Variety	Est. Tons/Acre	
Kestrel	15.2	a ¹
3x5	13.8	ab
3x11	13.6	ab
Red Ace	13.3	abc
Red Kite	12.6	abcd
Bohan	12.1	abcd
Pablo	11.5	abcd
Avalanche	11.5	abcd
Red Cloud	11.3	abcd
Red Atlas	11.1	abcd
Bresko	11.1	bcd
Taurus	10.9	bcd
Falcon	10.7	bcde
Manolo	10.5	bcde
Merlin	10.3	bcde
Titan	10.0	bcde
Boro	9.2	bcde
Moneta	9.0	bcde
Boldor	6.8	de
Soldier	6.5	e
p 0.05 = 0.0132	LSD 4.3	

¹Means followed by the same letter are not statistically different at the 0.05 level.

Table 2. Yields of beets in the fall trial, Georgetown, Delaware 2018

Variety	Est. Tons/Acre	
Falcon	22.3	a ¹
Red Ace	21.9	a
3x11	21.4	a
Red Atlas	21.4	ab
Boro	21.2	ab
Red Titan	20.9	abc
3x5	20.4	abcd
Merlin	20.0	abcde
Red Kite	17.1	abcdef
Red Cloud	15.6	bcdef
Avalanche	15.0	cdef
Kestrel	15.0	cdef
Bresko	14.2	def
Bohan	14.0	ef
Manolo	13.8	f
Pablo	12.7	f
Moneta	12.6	f
p 0.05 = 0.0015	LSD 5.8	
¹ Means followed by the same letter are not statistically different at the 0.05 level.		

Table 3. Numbers and weights of beets per plot in the spring planted trial, Georgetown, Delaware 2018

Variety	Large	Med.	Small	Total	Large	Med.	Small	Tops
	#	#	#	#	g	g	g	g
3x5	5	8	18	31	2209	2260	1878	2755
3x11	4	9	19	32	2018	2286	1710	2176
Avalanche	4	7	11	22	1535	1208	802	1578
Bohan	4	5	13	22	2453	1349	1142	2277
Boldor	1	3	8	12	253	751	523	763
Boro	4	4	12	20	2551	1347	986	1594
Bresko	1	6	11	18	440	1286	846	1316
Falcon	4	8	13	25	2263	2012	1182	2054
Kestrel	4	11	19	34	1876	2717	1705	2257
Manolo	2	6	13	21	928	955	874	1372
Merlin	3	6	17	26	1249	1408	1651	1779
Moneta	2	5	9	16	915	990	695	1100
Pablo	3	7	16	26	1708	1988	1596	1864
Red Ace	4	7	32	42	1908	1383	887	1601
Red Atlas	3	5	13	21	2849	1256	1056	1811
Red Cloud	3	5	12	20	1849	1328	925	1401
Red Kite	3	7	14	24	1974	2160	1488	2027
Red Titan	3	5	11	19	1143	1279	1224	1591
Soldier	2	7	19	27	624	1335	1190	2105
Taunus	5	9	15	29	1513	1694	1227	1713

Table 4. Numbers and weights of beets per plot in the fall trial, Georgetown, Delaware 2018

Variety	Large	Med.	Small	Total	Large	Med.	Small	Tops
	#	#	#	#	g	g	g	g
3x5	5	13	54	72	890	1535	3100	3850
3x11	5	18	60	83	860	1867	3070	4440
Avalanche	2	15	42	59	517	1570	1987	4340
Bohan	1	10	47	58	180	1033	2573	4040
Boro	5	16	51	72	913	1993	2833	3827
Bresko	1	10	42	54	300	1207	2350	3930
Falcon	6	18	56	80	1086	1868	2992	6014
Kestrel	2	7	59	68	447	827	2777	5030
Manolo	2	12	50	65	377	1257	2103	4837
Merlin	2	14	66	83	423	1647	3337	3043
Moneta	1	7	50	58	230	793	2393	2383
Pablo	0	10	72	82	47	820	2564	2523
Red Ace	3	17	71	91	507	1750	3670	3710
Red Atlas	3	10	81	94	670	1080	4245	4180
Red Cloud	1	9	63	73	223	920	3077	3440
Red Kite	2	12	64	78	437	1203	2997	4170
Red Titan	3	22	65	89	397	2050	3210	3553

Table 5. Quality ratings and measurements for the spring beet trial, Georgetown, DE 2018

Variety	Uniformity of Size 1-10	Uniformity of Shape 1-10	Disease Rating 1-10	Exterior Appearance 1-10	Interior Appearance 1-10	Brix %
3x5	4.9	5.2	6.8	5.0	7.3	5.9
3x11	4.1	4.4	6.4	4.2	7.2	5.0
Avalanche	5.5	6.1	3.5	5.0	6.9	5.5
Bohan	4.3	5.6	4.3	5.5	7.0	5.8
Boldor	3.3	3.0	3.3	3.1	6.5	4.6
Boro	4.2	5.3	5.3	4.2	7.3	6.3
Bresko	5.1	4.8	5.1	5.7	8.6	6.6
Falcon	4.4	4.9	5.4	5.2	7.4	6.1
Kestrel	4.5	5.1	5.3	5.7	7.7	6.7
Manolo	4.9	5.3	5.3	5.6	7.9	5.7
Merlin	4.6	4.8	5.8	5.1	7.1	5.9
Moneta	4.8	5.0	5.0	6.5	8.5	4.8
Pablo	5.7	5.8	5.4	5.6	8.0	5.5
Red Ace	5.5	5.5	5.8	5.6	7.7	5.9
Red Atlas	4.9	5.5	6.2	5.4	6.5	6.2
Red Cloud	4.3	4.3	6.3	4.6	7.1	5.7
Red Kite	5.4	5.0	4.9	5.1	6.9	5.5
Red Titan	5.1	5.8	5.8	5.2	7.4	5.3
Soldier	4.4	4.6	5.3	5.2	6.5	6.3
Taunus	5.0	5.1	5.8	5.7	7.4	5.4

Table 6. Quality ratings and measurements for the fall beet trial, Georgetown, DE 2018

Variety	Uniformity of Size 1-10	Uniformity of Shape 1-10	Disease Rating 1-10	Exterior Appearance 1-10	Interior Appearance 1-10	Brix %
3x5	6.0	5.5	n/a	6.0	5.0	4.5
3x11	7.3	7.0	n/a	5.3	4.5	4.0
Avalanche	5.0	4.7	n/a	3.7	6.0	3.8
Bohan	5.7	5.3	n/a	5.0	4.7	5.2
Boro	5.3	4.0	n/a	5.7	4.7	4.5
Bresko	6.0	4.3	n/a	3.0	5.3	5.7
Falcon	4.6	4.2	n/a	5.0	5.2	6.5
Kestrel	4.7	5.3	n/a	5.3	6.7	6.3
Manolo	5.0	4.3	n/a	7.0	5.8	6.5
Merlin	5.3	5.0	n/a	5.3	5.7	7.2
Moneta	6.3	6.3	n/a	5.7	6.3	4.8
Pablo	5.0	4.3	n/a	3.7	5.5	6.3
Red Ace	5.0	4.3	n/a	6.0	3.2	5.0
Red Atlas	5.0	3.5	n/a	6.5	4.0	6.5
Red Cloud	4.0	4.7	n/a	4.0	6.0	4.2
Red Kite	5.7	6.3	n/a	5.0	5.0	4.7
Red Titan	7.0	6.3	n/a	6.7	3.7	5.3

Figures 1-5. Photos of Selected Beets

Figure 1. Red Titan, Falcon, Soldier (Bulls Blood), Taunus (long), Boldor (yellow), and Avalanche (white) Beets from Left to Right



Figures 2-5. Red Ace, 3x11, Boro, and Red Atlas Beets



APPENDIX A:
Weather Summary for the 2018 Beet Variety Trials: April – November

Appendix A1. Weather data for the Georgetown REC site April 2018.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
1	53.2	65.2	40.8	3	58.2	85.8	40.7	14.5	7.7	0	0.13	50.8	53.6	48.4	
2	42.4	49.7	36.7	0	83.2	92.7	73.7	7.4	7.8	0.06	0.05	49.5	51.6	48.3	
3	47.3	57.8	38.7	0	86.3	94.1	75.5	7.3	5.2	0.03	0.06	48.9	51.1	47.3	
4	59.7	74.4	42.7	8.5	65.1	98.2	25.6	11.7	17.4	0.2	0.23	52.7	55.9	50.1	
5	40.9	49.7	32	0	47.8	83.2	32.1	23.8	9.8	0	0.13	48.8	51.5	46.1	
6	52.2	67.5	32.5	0	58.8	87.9	29.9	16.4	11.8	0	0.18	48.5	51.7	45.8	
7	46	62.7	38.3	0.5	63.8	93.9	41	4.5	7.9	0.14	0.1	49.3	50.6	47.4	
8	39.8	47.3	30.8	0	48.4	82.1	29.4	23.8	10	0	0.12	47.5	50.6	44.8	
9	38.4	45.6	29.6	0	67.6	85.1	50.1	11.7	4.2	0	0.07	46.5	48.5	44.5	
10	43.9	52.3	33.6	0	66.8	96.3	36.6	21.8	6.6	0.08	0.11	48.5	52.1	46.2	
11	42.7	55.1	27.6	0	58.5	93.9	31	21.6	4.2	0	0.11	48.3	52.2	44.3	
12	57.4	71.1	40.5	5.8	53.4	84.2	32.7	22.6	13.3	0	0.22	50.4	54.6	46.7	
13	68.7	79.7	58.1	18.9	45.9	57.9	35.5	23.9	15.2	0	0.3	54.9	59	51.6	
14	70.3	81.1	62.5	21.8	64.1	82.4	45.2	23.7	14.7	0	0.25	58.5	62	55.8	
15	52.1	64.3	45.8	5	93.1	98.4	79.6	4.7	8.5	0.54	0.05	56.5	59.5	53.8	
16	57.8	68	48.4	8.2	78.5	99.1	55.5	11.8	13.7	1.12	0.13	56.8	58.7	53.7	
17	44.2	48.4	39.7	0	55.3	86.2	45.9	14.8	11.7	0.01	0.1	52.9	55.6	51.1	
18	47.3	59.2	35	0	56.4	84.3	41.8	25.2	7.1	0	0.14	51.9	56	48.2	
19	48.5	56.8	39.5	0	70.8	93.2	43.9	9.5	9.6	0.06	0.1	52.4	53.8	50.7	
20	44.3	55.3	34.8	0	53.7	84.8	34.9	26.2	9	0	0.15	50.6	54.3	47.6	
21	46	58.9	30.2	0	58.1	90.7	27.2	24.9	4.5	0	0.14	51.4	56	47.3	
22	51.5	63	41.4	2.2	62.1	94.9	32.4	22.3	3.9	0	0.14	53.6	58	50.1	
23	53.7	66.4	38.2	2.3	53.5	96.1	23.8	24.8	5.1	0	0.17	54.6	58.2	51.3	
24	54.3	62.7	42.4	2.6	75.5	96.6	60.4	12.1	9.1	0.24	0.1	53.9	55.6	52	
25	62.5	72.9	55.7	14.3	89.9	98.3	70.2	15.8	6.1	2.5	0.12	57.9	62.1	54.6	
26	59.4	68.1	51.3	9.7	65.1	95.7	31.4	26.7	8.2	0	0.19	60.5	63.6	57.8	
27	58.5	68.1	51.6	9.8	80.5	96	63.6	18.9	6.4	0.34	0.13	60	62.9	57.6	
28	62.5	74.6	47.9	11.2	72.5	98.6	43.6	23.3	6.8	0	0.18	60.7	63.7	57.5	
29	51.1	57.8	46.4	2.1	61	92.3	44.7	21.8	12.5	0.06	0.14	59.3	61.4	56.9	
30	54.1	67.8	41.5	4.6	41.6	73.7	19.2	24.9	10.3	0	0.22	56.2	58.8	53.9	
A	Day														
B	Avg Temp			(°F)			I			Avg Solar			(MJ.m ² .day ⁻¹)		
C	Max Temp			(°F)			J			Avg Wind Speed			(mph)		
D	Min Temp			(°F)			K			Rainfall			(in)		
E	GDD			(base 50 °F)			L			Ref ET			(in day ⁻¹)		
F	Avg RH			(%)			M			Avg Soil Temp			(°F)		
G	Max RH			(%)			N			Max Soil Temp			(°F)		
H	Min RH			(%)			O			Min Soil Temp			(°F)		

Appendix A2. Weather data for the Georgetown REC site May 2018.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
1	62.8	78	40.8	9.4	40.9	87.8	16.8	27.2	6.3	0	0.24	57.2	61.3	53.3	
2	71.7	88.6	54.3	21.5	42.4	72	16.5	26.6	6.2	0	0.28	59.5	63.8	55.4	
3	77	87.3	64.7	26	49.3	67.8	33.9	26.1	10.6	0	0.31	62.6	65.8	59.7	
4	77.5	86.9	67.3	27.1	53.8	69.9	41.7	24.5	10.9	0	0.29	64.8	67.6	62.4	
5	68.2	76.3	58.3	17.3	55.4	75.7	31.2	14.7	5.6	0.01	0.17	64.9	66.5	63.6	
6	61.3	67.7	56.7	12.2	89.4	97.4	65.5	6.2	3.7	0.01	0.07	62.8	63.9	61.9	
7	61.7	71.6	53.6	12.6	75.6	96.7	45.5	20.6	5.5	0	0.16	63.5	65.9	61.9	
8	58.2	68.9	48.2	8.6	78.1	98.5	50.9	27	6.5	0	0.17	62.7	65.9	59.8	
9	59.8	72.3	49.4	10.9	70.3	99.2	29.3	26.9	5.1	0	0.19	63.8	67.3	61.2	
10	65.7	83	45.7	14.3	72.7	97.7	44.5	24.1	8.8	0	0.22	62.7	65.8	59.5	
11	70.6	82.2	60.1	21.2	65.3	97.2	36.3	26.1	7.5	0	0.24	65.2	68.2	62.6	
12	74.2	89.8	58.8	24.3	66.2	97.6	37.8	25	6.6	1.41	0.25	66.2	69.6	63.4	
13	59.1	63.7	56	9.9	94.7	99	84.3	8.3	5.9	0.69	0.06	65.9	66.9	65	
14	64.8	79	55.6	17.3	89.4	98.8	68.9	16.6	4	1.41	0.13	63.2	66.2	60.8	
15	75	84.6	65.2	24.9	78.2	96.5	62.4	23.7	11.1	0.26	0.21	66.8	69.3	64.7	
16	66.5	74.2	62	18.1	92.6	98.3	73.5	9.5	4	0.4	0.09	67.9	68.8	66.9	
17	64.2	69.9	59.6	14.8	96.4	99	89	6.3	3.4	0.11	0.05	67.4	68	66.8	
18	59.3	65.6	54.1	9.8	97.1	98.6	94.5	2.6	7	2.96	0.03	65.2	67.1	63.7	
19	66	78.1	55.4	16.7	94.3	98.7	83.2	9.9	7	1.19	0.08	64.3	66.4	62.6	
20	76.1	83.5	70.1	26.8	81.3	95.4	64	20.9	10.3	0.01	0.19	68.1	70.5	66.3	
21	69	75	60	17.5	71.5	97.2	52.6	26.9	5.9	0	0.19	70.1	72.9	68	
22	69.1	79.6	59.6	19.6	81.9	95.5	60	17.9	5.4	0.48	0.15	69.5	71.1	67.9	
23	73.1	81.3	65.8	23.6	76.6	98.3	50.7	22.1	7.5	0	0.2	70.5	72.4	68.9	
24	70.4	82.2	60.4	21.3	64.5	93	30.4	28.5	4.7	0	0.23	70.4	73.3	67.7	
25	72.1	82.6	57.8	20.2	70.7	95	46	27.6	8.1	0	0.23	69.8	71.7	67.4	
26	79	88.1	69.2	28.6	73.7	90.6	54.6	25.9	9.1	0	0.25	71.5	74	69.5	
27	72.8	85	58.8	21.9	88.3	97.9	68.3	15.1	6.7	1.16	0.14	72.7	74.3	71.7	
28	61.4	65.7	57.3	11.5	93.4	97.7	85.6	8.5	4.4	0.1	0.07	70.4	71.9	69.8	
29	70.9	79.8	62.2	21	89.3	99.2	72.7	15	2.6	0	0.12	70.6	72.3	69.2	
30	68.9	75.1	65	20	95	99.1	81.8	10.5	4.8	0.02	0.09	71.6	72.5	70.8	
31	74.2	83.2	65.1	24.2	89.7	99.3	73.8	16.8	5	0.01	0.14	72.1	73.9	70.6	
A	Day														
B	Avg Temp			(°F)			I			Avg Solar			(MJ.m ² .day ⁻¹)		
C	Max Temp			(°F)			J			Avg Wind Speed			(mph)		
D	Min Temp			(°F)			K			Rainfall			(in)		
E	GDD			(base 50 °F)			L			Ref ET			(in day ⁻¹)		
F	Avg RH			(%)			M			Avg Soil Temp			(°F)		
G	Max RH			(%)			N			Max Soil Temp			(°F)		
H	Min RH			(%)			O			Min Soil Temp			(°F)		

Appendix A3. Weather data for the Georgetown REC site June 2018.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	77.2	85.7	70	27.9	84.6	97.8	54.4	18.6	4.2	0.09	0.17	73.3	74.8	72
2	75.3	81.9	70.2	26.1	86.9	98.5	71.8	12.3	3.3	0	0.11	73.4	74.5	72.3
3	62.8	70.9	58.2	14.5	94.8	98.9	84.2	4.1	9.3	0.96	0.05	71.3	73.6	69.1
4	64.2	74.4	55.2	14.8	83.5	97.9	60.1	25.5	8.2	0.04	0.18	69.3	71.1	67.9
5	70.2	80.3	55.9	18.1	65.3	98.1	39.9	27.2	7.1	0	0.23	69.1	70.7	67.3
6	64.9	70.7	59.8	15.3	70.7	91.4	52.1	26.2	5	0	0.18	69.8	72.3	67.7
7	66	75	58.2	16.6	74.3	95.1	53.2	23	4.2	0	0.17	69.8	71.8	68.1
8	70.7	82.1	56.7	19.4	75.1	98.5	53.2	22.5	5.3	0	0.19	69.1	70.9	67
9	70.7	82.9	65.4	24.1	90.6	98.2	71.4	10.1	4.7	4.2	0.1	69.9	71.4	68.9
10	69.9	76.9	65.6	21.2	91.7	98.6	76.4	15.5	4.7	0.79	0.12	71.1	72.9	69.9
11	61.3	65.7	56.3	11	89.7	98.2	75.4	9.3	6.8	0.16	0.08	70.6	71.8	69.5
12	64.7	73	54.2	13.6	75	97.6	49.7	26.9	5.1	0	0.18	69.2	71.6	66.8
13	73.2	82.2	62.5	22.3	84.6	98.8	68.7	22.7	7	0.03	0.18	70.9	72.8	69.4
14	77.3	83.7	69.3	26.5	59.5	95.7	32.7	28	8.7	0	0.27	72.5	73.5	71.8
15	72	80.4	62.8	21.6	53.4	85.7	33.3	28.2	6.4	0	0.25	71.1	72.7	69.4
16	72.1	84.3	55.9	20.1	63.4	96.7	36	27.6	3.7	0	0.22	69.9	72	67.6
17	76.5	88.4	63	25.7	66.5	94	37.6	27.3	4.4	0	0.24	71.3	74	68.7
18	79.2	90.8	68.7	29.7	73.4	99	45	26.7	5	0	0.24	73.4	75.4	71.9
19	82.4	90.8	76	33.4	75.8	95.1	55.6	18.6	6.5	0	0.2	74.7	76.1	73.5
20	77.9	88.7	70.4	29.5	84.1	98.8	46.8	17.1	4.5	0	0.18	74.9	76.3	73.6
21	76	82.7	69.1	25.9	84.3	95.7	68.5	18.4	5.4	0	0.16	75.1	76.2	74.2
22	68.5	71.3	66.2	18.8	90.9	96.7	78.7	6.8	6.2	0.52	0.07	72.8	74.6	72.1
23	74.9	84.8	67.5	26.1	87.5	98.9	68.5	16.2	4.1	0.02	0.14	73	74.6	71.8
24	79.4	91	70.8	30.9	78.1	99	43.7	22.2	5.5	0.01	0.22	74.1	75.6	72.8
25	75.3	83.4	67.5	25.4	73.4	97.1	47	25.6	6.2	0	0.22	74.2	75.4	73.1
26	71.5	79.3	62.7	21	69	97.9	37	28.2	5.8	0	0.23	72.8	74.6	70.9
27	73.4	81.6	64.7	23.1	75	90.5	56.3	16.8	9	0	0.18	71.9	72.9	71
28	80.5	90.3	73	31.6	73.8	95.1	46.2	21.8	7	0	0.23	73.4	75.1	72.1
29	80.3	90.7	70.9	30.8	68.7	92.8	41.8	27.4	4.1	0	0.25	74.1	76.1	72.3
30	80.9	93.4	67.4	30.4	70.5	96.8	44.5	26.1	3.1	0	0.23	74.1	76.1	71.9
A	Day													
B	Avg Temp			(°F)				I	Avg Solar				(MJ.m ² .day ⁻¹)	
C	Max Temp			(°F)				J	Avg Wind Speed				(mph)	
D	Min Temp			(°F)				K	Rainfall				(in)	
E	GDD			(base 50 °F)				L	Ref ET				(in day ⁻¹)	
F	Avg RH			(%)				M	Avg Soil Temp				(°F)	
G	Max RH			(%)				N	Max Soil Temp				(°F)	
H	Min RH			(%)				O	Min Soil Temp				(°F)	

Appendix A4. Weather data for the Georgetown REC site July 2018.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	82	95.1	69.1	32.1	71.9	97.9	43.4	27.1	4	0	0.25	74.6	77	72.2
2	84.2	96.9	72.9	34.9	76.3	98.2	45.9	26.1	3.8	0	0.25	75.9	78.2	73.6
3	83.3	93.9	75.6	34.7	78.5	98.9	54	23.3	3.1	0	0.21	77.3	79.5	75.5
4	80.1	88.1	71.5	29.8	81.6	98.3	55.9	26.1	N/A	0	N/A	77.3	79.6	75.1
5	80.2	89.1	72.7	30.9	84.5	98.5	62.2	21.5	N/A	0	N/A	77.2	78.7	75.5
6	78.9	85.4	75.3	30.4	90.5	97	70.4	10.9	4.1	0	0.11	77	77.8	76.3
7	69.7	75.4	60	17.7	66.9	93.5	52.1	22.3	9.2	0	0.19	75.2	76.9	73.7
8	67	77.6	55.1	16.4	68.8	95.1	35.3	30.2	5.7	0	0.23	72.3	75.3	69.2
9	69	84.6	52	18.3	64.9	97.3	28.5	29.6	3.9	0	0.23	71.1	74.4	67.7
10	76.7	91.6	59.3	25.4	65.1	92.7	33.6	28.4	3.5	0	0.24	71.7	75	68.3
11	79.9	90.7	70.7	30.7	68.3	95.9	37.4	24.8	4.5	0	0.24	74.2	76.9	71.8
12	74	81.1	67.1	24.1	80.1	98	52.8	23.8	4.6	0	0.19	74.7	77.1	72.5
13	72.7	82.3	62.4	22.3	71	98.5	37.1	27.8	4.3	0	0.22	73.9	76.7	71.3
14	73	86.6	57.2	21.9	66.4	97.9	34	28.1	4.5	0	0.24	72.5	75.5	69.5
15	77.9	88.3	67.9	28.1	72.8	95	49.6	22.1	5.9	0	0.21	73.7	76	71.7
16	81.6	91.7	73.2	32.4	75.4	94.2	53.1	24.6	6.7	0	0.24	75.4	78.2	73.3
17	80.1	92.4	72.2	32.3	80.3	97.9	42.7	21.7	8.3	0	0.25	76.6	78.8	75.1
18	77.2	86.1	70.7	28.4	72.8	98.6	37.9	25.5	5.7	0.02	0.24	77	80	74.9
19	75.3	85.5	66.4	26	64.9	96.7	34.6	28.3	4.4	0	0.24	76.5	80.2	73.1
20	72.4	82.7	60.2	21.5	73.3	97.6	38.5	25.2	4.2	0	0.21	75	78.5	71.2
21	72	75.1	65.1	20.1	93	97.9	84.9	5	6.6	1.89	0.06	73.3	74.9	72.4
22	77.6	86	69.1	27.5	85.4	97.5	67.3	21.8	10.8	0.03	0.19	75.1	77.9	72.9
23	80	84.8	76.4	30.6	84.5	94.9	71.9	16.8	12.2	0.05	0.17	76.9	78.3	75.8
24	78.8	83.7	74.1	28.9	85.4	94.8	72.4	15.6	11.2	0.37	0.15	76.8	77.6	75.9
25	76.3	81.3	72.4	26.8	91.1	98.1	81.5	13.1	6.7	0.88	0.11	76.5	77.8	75.3
26	78.2	86.7	71.9	29.3	84.2	98.4	62.7	22	5	0.02	0.19	77.6	80.4	75.5
27	79	90.4	71.2	30.8	84.3	97.8	55.8	20	4.2	0	0.19	78.1	81	75.7
28	78.2	86.1	70.2	28.1	82.7	98.7	59	20.4	3	0.01	0.17	78.3	80.5	76.4
29	75.2	84.8	68	26.4	75.4	97.1	49.6	22.5	3.3	0	0.19	77.2	79.6	75
30	70.5	73.1	67.3	20.2	94	97.7	87.3	5.8	3.7	0.43	0.06	74.9	76.8	74.4
31	75.4	82.1	68.7	25.4	91.6	98.2	75.6	12.7	3.9	0.04	0.11	75.4	77.2	73.9
A	Day													
B	Avg Temp			(°F)				I	Avg Solar			(MJ.m ⁻² .day ⁻¹)		
C	Max Temp			(°F)				J	Avg Wind Speed			(mph)		
D	Min Temp			(°F)				K	Rainfall			(in)		
E	GDD			(base 50 °F)				L	Ref ET			(in day ⁻¹)		
F	Avg RH			(%)				M	Avg Soil Temp			(°F)		
G	Max RH			(%)				N	Max Soil Temp			(°F)		
H	Min RH			(%)				O	Min Soil Temp			(°F)		

Appendix A5. Weather data for the Georgetown REC site August 2018.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	80.4	86.7	74.6	30.6	84	98.2	68.4	20.9	8.4	0	0.18	77.2	79.2	75.6
2	80.5	88.9	75.1	32	82.9	97.5	61.8	23.4	8	0.1	0.21	78.3	80.6	76.5
3	78.3	85.5	73.4	29.4	85.9	98.2	63.7	19	7.7	0.03	0.18	78	79.4	76.8
4	78.3	85.9	72.9	29.4	83.2	96.8	61.3	21	6.7	0.14	0.19	78	79.7	76.6
5	80.1	92.2	69.2	30.7	79.1	99.1	43.9	25.9	2.4	0.01	0.22	77.9	80.7	75.3
6	78.3	92.4	69.5	31	85.4	99.1	53.1	18.4	2.9	0.03	0.17	77.8	79.9	75.7
7	80.8	91	71.3	31.1	84	98.6	56.4	23.1	5	0	0.21	78.2	80.7	75.9
8	81.8	91.4	72.8	32.1	79	98.6	52.3	24.1	3.5	0	0.21	79.1	81.2	77.1
9	80.4	88.9	73.6	31.2	78.4	95.9	53.3	23.7	4.6	0	0.21	79	80.8	77.4
10	79.8	90.7	69.1	29.9	77.9	98.7	44.3	23.5	2.2	0	0.19	78.1	80.3	75.8
11	77	87.7	69.8	28.8	88.3	97.8	68	14.2	3.8	0.29	0.13	77.6	79.1	76
12	76.4	88.1	68.4	28.2	86	98.6	57.6	19.8	3.2	0.14	0.17	77.6	79.7	75.7
13	77.7	86.2	71.8	29	84.5	98.6	60.4	19.9	4.3	0	0.17	78.1	79.8	76.5
14	75.6	84.5	67.6	26.1	79.4	98.1	52.9	23.7	6.8	0.02	0.2	77.2	78.9	75.5
15	77.7	87.9	69	28.4	77.7	96.8	50.1	23.3	5.3	0	0.21	77	79	75.1
16	78.4	90.3	68.1	29.2	79.4	99	48.6	20.6	3.3	0	0.18	76.3	78.7	73.8
17	81.5	92.5	71.4	31.9	78.8	98.6	49.6	20.6	5.4	0	0.21	76.7	79.1	74.4
18	82.3	90.4	76.7	33.5	79.1	94	54.9	18.6	6.5	0	0.2	78.3	80.2	76.7
19	76	84.1	71.6	27.8	88.3	98.8	68.8	14.5	5.2	0.02	0.13	77.8	78.9	76.4
20	73.9	78.2	71.3	24.8	87.2	95.6	77.3	8.9	5.2	0	0.09	76.3	77.2	75.7
21	75.8	82	69.2	25.6	89.3	98.5	74.2	11.8	5.7	0.61	0.11	75.7	76.9	74.4
22	77.6	84.8	72.4	28.6	85	98	59.2	15.9	7	0.01	0.16	76.7	78	75.8
23	70.3	78.3	60.5	19.4	71.7	95.3	42.4	23.3	6.8	0	0.19	75.2	76.6	73.4
24	69.8	84.8	56	20.4	72	98.6	35.9	24.5	2.2	0	0.18	72.4	75.1	69.4
25	69.7	82.6	55.9	19.2	77.5	97.9	48.3	19.8	2	0	0.15	71.6	74.1	68.9
26	74	86.8	59.7	23.2	78.8	98.9	49.7	22.5	4.5	0	0.19	72.5	75.4	69.5
27	79.7	91.1	69.3	30.2	81.2	98.9	54.1	21.3	3.1	0	0.18	74.8	77.7	72.1
28	83.4	94.8	73.5	34.1	78.3	98.9	49.2	20.7	4.9	0	0.21	76.3	79	73.8
29	84.6	95.5	77.1	36.3	77	96.2	50.7	22	6.7	0	0.23	78	80.6	75.9
30	83.3	92.1	75.2	33.6	74.6	95	46.6	22.3	5	0	0.21	78.7	81.1	76.8
31	76.9	86.9	71.2	29	88.5	98.2	67.3	14	4.9	0.66	0.13	77.8	79.4	76.4
A	Day													
B	Avg Temp			(°F)				I	Avg Solar			(MJ.m ² .day ⁻¹)		
C	Max Temp			(°F)				J	Avg Wind Speed			(mph)		
D	Min Temp			(°F)				K	Rainfall			(in)		
E	GDD			(base 50 °F)				L	Ref ET			(in day ⁻¹)		
F	Avg RH			(%)				M	Avg Soil Temp			(°F)		
G	Max RH			(%)				N	Max Soil Temp			(°F)		
H	Min RH			(%)				O	Min Soil Temp			(°F)		

Appendix A6. Weather data for the Georgetown REC site September 2018.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	77.1	83.4	72.5	27.9	90.3	97.6	77.2	17.2	4.3	0.07	0.14	77.8	79.6	76.5
2	78.7	88.4	73.7	31	87.7	98.6	59.4	14.9	3.3	0	0.14	78.1	79.7	76.7
3	79.7	92.3	71.8	32.1	86.4	99	54.2	17.7	2.8	0	0.16	77.9	80.1	75.7
4	80.7	94.6	71.7	33.1	84.7	99.2	52.8	21.2	2.5	0	0.18	78.3	80.8	76
5	80.5	93.3	72.3	32.8	85	99.2	50.7	16.9	2.6	0	0.16	78.2	80.3	76.1
6	82.5	94.4	74.2	34.3	78.5	98.8	49.8	20.1	4.1	0	0.19	78.5	80.6	76.5
7	76.9	91.1	72.2	31.6	90.4	98.9	60.7	12.4	2.8	1.08	0.12	77.1	79	76.2
8	71.8	76.6	67.2	21.9	95.1	98.6	86.2	5.1	6.7	1.29	0.06	75.6	76.4	74.6
9	66.7	70.5	63.4	16.9	92.3	96.6	80.4	3.1	8	0.92	0.05	73.4	74.6	71.7
10	70.7	78.1	63.4	20.8	94.1	99	85.7	8.9	6.1	0.17	0.07	72.2	73.7	71.2
11	76.2	87.8	72	29.9	94.4	99.8	68.4	12	3.1	0.07	0.11	74.5	75.9	73.4
12	77.5	86.7	73.1	29.9	91.1	99.9	68.2	16.3	3.4	0.01	0.14	76	77.6	74.9
13	74.4	79.4	71.8	25.6	97	99.5	86.5	6.9	8	0.04	0.07	75.9	76.3	75.6
14	74.3	78.8	71.8	25.3	94.8	99.5	78.2	7.6	7.3	0.62	0.08	75.4	75.9	74.9
15	72.9	79.7	67.7	23.7	89.5	98.7	73.4	12	5.9	0.04	0.1	75.3	76.1	74.6
16	74.4	80.1	69.6	24.9	89.2	99.1	72	16.7	5	0	0.13	75.1	76.4	74.1
17	76.5	82.5	71.8	27.1	90.8	99.3	74.2	8	7.5	0.01	0.09	75.2	75.8	74.6
18	77.9	86.6	71.2	28.9	89.5	98.7	66.9	9.8	8.3	1.26	0.12	75.8	76.8	75.2
19	73.9	83.4	67.2	25.3	85.8	99.4	59.7	18.9	5.6	0	0.15	75.2	76.2	74.1
20	69.9	76.8	64.1	20.4	86.7	99.6	67.3	13.8	3.5	0	0.1	73.9	74.8	73.1
21	69.8	79.8	60.3	20.1	84.9	99.3	63.2	13.9	5.4	0	0.12	72.2	73.3	70.9
22	73	82	64.4	23.2	80.7	96.8	62.3	13.1	6.9	0	0.13	73.1	74.4	72.1
23	64.6	67.9	63	15.4	95.2	98.9	85.5	2.6	6	0.98	0.04	71.6	72.9	70.7
24	65.6	67.9	63.8	15.8	95.6	98.1	89.9	3	6.3	0.31	0.04	70.4	70.7	70.2
25	75.7	84.4	68	26.2	86.4	96.8	67.5	14	6.6	0.02	0.13	71.4	72.9	70.1
26	77.2	87	71.2	29.1	88	99.9	60.3	12.8	5.7	0.02	0.13	73.2	74.4	72.4
27	68.5	71.2	66.1	18.6	83.3	98.3	65	9.6	5.5	0.08	0.09	72.6	73.7	71.9
28	67.3	76	56.6	16.3	89	99.6	69.3	9.3	6.6	0.06	0.09	71.5	72	69.6
29	64.5	77.9	53.5	15.7	85.2	100	50.8	15.9	2.4	0.01	0.11	68.5	70.1	66.7
30	65.7	77.9	55.7	16.8	82	98.7	51	15.5	2.6	0	0.11	68	69.5	66.4
A	Day													
B	Avg Temp			(°F)				I	Avg Solar			(MJ.m ⁻² .day ⁻¹)		
C	Max Temp			(°F)				J	Avg Wind Speed			(mph)		
D	Min Temp			(°F)				K	Rainfall			(in)		
E	GDD			(base 50 °F)				L	Ref ET			(in day ⁻¹)		
F	Avg RH			(%)				M	Avg Soil Temp			(°F)		
G	Max RH			(%)				N	Max Soil Temp			(°F)		
H	Min RH			(%)				O	Min Soil Temp			(°F)		

Appendix A7. Weather data for the Georgetown REC site October 2018.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	69.2	81.8	58.7	20.2	81.9	99.5	57	16.3	5.1	0	0.13	67.8	69.6	66.1
2	72.5	83.2	62.2	22.7	81.9	99.6	58	15.8	7.6	0	0.14	69.2	70.8	67.5
3	73.6	84.1	63	23.6	83	99.2	53.7	15.4	4.4	0	0.13	70.9	72.9	69.5
4	74.9	88.9	62.1	25.5	82.7	99.7	49.1	15	3.7	0	0.13	70.7	73	68.5
5	69.6	75	65.5	20.3	92.1	98.9	77.6	3.8	6.1	0.01	0.06	71.6	72.4	70.4
6	70	75.7	66.2	20.9	92.9	99.5	79	7.6	3.7	0.02	0.06	71.4	73.5	69.7
7	74.5	86.4	66.5	26.4	86.8	99.7	61	13.1	3.7	0	0.11	72.9	76.5	70.1
8	73.4	84.6	65.5	25.1	89.4	100	65.2	11.5	2.9	0	0.1	73.6	76.8	70.9
9	74.4	84.5	68.2	26.3	89.6	99.9	63.2	9.7	3	0	0.09	73.9	76.8	71.5
10	75.6	85.6	69.2	27.4	86.2	99.9	54.7	12	5.4	0	0.12	74.1	76.7	72
11	76.9	84.4	68.3	26.3	92.8	99.2	72.7	7.7	7.5	0.53	0.09	74.9	76.9	73.1
12	61.1	70.7	49.5	10.1	74.1	98.8	47.7	17.2	12.4	1.47	0.14	70.2	75.4	66.2
13	52.1	59.8	44.3	2	78.1	96.5	51.4	10.8	5.6	0.2	0.08	64.5	66.2	62.1
14	53.6	62.8	42.9	2.8	79.2	98.7	51.2	7.3	2.3	0.05	0.06	61.8	64.4	59.3
15	67.5	76.1	59.3	17.7	83.4	98.4	70.9	7.4	8.9	0.01	0.08	65.1	67.8	62.8
16	58.7	73.7	52.8	13.2	69.9	92.4	54.2	7	6.7	0	0.1	65.2	67.6	63
17	58.1	66.3	50.1	8.2	66	95.9	27.3	15.6	6.8	0	0.13	63.3	65.5	61.4
18	48.2	56.1	39.2	0	63.5	97.5	39.6	16.5	6.1	0	0.09	59.7	62.5	57
19	50.4	63.7	35	0	74.9	99.4	43.2	16	5.5	0	0.09	57.9	61.8	54
20	59.4	64.2	53.4	8.8	85.9	98.5	68.3	4.7	7.8	0	0.06	60.3	62.1	59
21	47.9	53	36.1	0	65.9	92.1	44.3	13.7	11.8	0	0.09	57.3	59.9	54.3
22	43.9	56.2	31.5	0	76.4	99	42.2	15.7	4.1	0.08	0.07	54.2	58.2	50.5
23	54.7	69.5	41.8	5.7	70	97	35.9	14.8	5.2	0	0.11	56.3	60.7	52.5
24	48.6	55.8	38.2	0	60.5	88	40.6	14.8	8.9	0	0.1	55.4	57.8	53.2
25	43.4	53.6	34.9	0	73.7	95	46.2	12.8	5.2	0	0.07	53.2	56.4	50.1
26	47.1	56.2	36.6	0	86.1	98.6	65.4	4.6	4.5	1.04	0.04	52.7	53.9	50.8
27	56	62.7	46.3	4.5	95	98.7	86.1	3.9	10	0.7	0.04	56.5	59.1	53.9
28	52.9	58.7	48.3	3.5	84.9	99	59.8	8.3	6.4	0.11	0.06	56	58.3	54.6
29	53.9	60.6	43.8	2.2	71.1	89	52	10.2	10.2	0	0.09	55.3	57.1	53.5
30	48.5	60.3	38.5	0	77.8	97.8	46.6	14.5	5	0	0.08	53	56.4	49.7
31	54.5	68.1	39.2	3.7	77.3	99.5	46.9	12.1	7.2	0	0.1	53.4	56.9	50
A	Day													
B	Avg Temp			(°F)				I	Avg Solar			(MJ.m ² .day ⁻¹)		
C	Max Temp			(°F)				J	Avg Wind Speed			(mph)		
D	Min Temp			(°F)				K	Rainfall			(in)		
E	GDD			(base 50 °F)				L	Ref ET			(in day ⁻¹)		
F	Avg RH			(%)				M	Avg Soil Temp			(°F)		
G	Max RH			(%)				N	Max Soil Temp			(°F)		
H	Min RH			(%)				O	Min Soil Temp			(°F)		

Appendix A8. Weather data for the Georgetown REC site November 2018.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	65.1	73.4	56.1	14.8	76.8	88.2	61.1	12.3	11.3	0	0.12	57.3	60.9	54.4
2	71	72.6	68.8	20.7	83.8	93.9	74.5	3.3	14.8	0.01	0.08	62.1	63.4	59.9
3	55.5	70.8	42.7	6.8	73.1	98.5	44.6	13.1	11.1	0.58	0.13	60.5	63.2	56.1
4	47	58.2	35.9	0	79.4	97.6	46	13.8	3.1	0	0.06	55	58.8	51.6
5	57.7	60.3	51	5.7	95.2	99.9	83.9	1.8	6.9	1.36	0.03	56.5	58.3	54.3
6	61	73	55.3	14.2	95.9	100	86.7	2.8	7.6	0.21	0.04	59.3	61.5	57.6
7	58.2	66.8	52.2	9.5	69.7	98.8	35.6	12.2	4.7	0	0.09	58.2	60.5	55.6
8	52	57	44.5	0.7	68.6	97	43.9	8.6	5.2	0	0.07	57	58.8	54.8
9	52.8	59.1	44.5	1.8	88.8	99.8	76.9	3.4	7.8	0.65	0.04	55	56.4	53.3
10	43.2	53.1	31.1	0	59.6	95	34.7	12.3	12	0	0.1	53	56.1	47.9
11	36.2	47.3	29.3	0	70	97.7	39.8	12.9	3.2	0	0.04	47.8	51.8	44.7
12	41.7	51.4	27.7	0	83.9	99.7	51.4	7	1.8	0.35	0.03	47.4	50.2	44.3
13	51.6	63.3	44.5	3.9	89.7	100	70.6	2.5	9.3	0.25	0.05	52.1	53.6	49.9
14	40.6	44.8	37.1	0	60	81.6	49.8	8.3	7.5	0	0.06	48.9	50.7	47.1
15	44.4	54.8	36.8	0	84.9	98.2	50.2	1.4	10.6	1.1	0.07	46.9	49.4	45.5
16	43.8	54.3	37.6	0	78.2	99.6	56.5	11.2	12.2	0.03	0.07	48.5	50.2	46.3
17	40.9	49	32.5	0	76.1	98.7	53.6	11.1	4.6	0	0.04	46.3	49.4	43.7
18	41.3	53.3	29.6	0	84.4	99.3	56.4	9.9	2.5	0	0.04	45.6	49.1	42.2
19	47.1	57.6	35.2	0	88.2	99.9	67.2	8.2	4.1	0	0.04	47.1	50.3	43.8
20	48	53.9	37.9	0	78.2	99.9	50.8	6.7	7.5	0	0.06	48.6	50.6	46.4
21	39.9	50.3	27.9	0	68.6	95.9	48.7	11.5	6.7	0	0.06	45.2	47.8	42.4
22	29.8	39.6	23.8	0	46	65.4	29.3	11.4	9.7	0	0.07	42.1	44.4	39.5
23	28.6	36.3	23.4	0	66.4	94.2	45.4	8.2	4.1	0	0.03	39.6	42.2	37.9
24	47.3	59.4	28.3	0	91.8	98.5	71.7	3.5	8.5	1.54	0.05	43.5	49	39
25	48.1	59	41.4	0.2	86.4	99.1	57.7	10.8	6.2	0	0.06	47.9	51	45.4
26	49.8	58.2	40.9	0	89.9	99.3	63.3	1.7	9.9	0.47	0.06	47.8	50	45.8
27	39.9	43.7	35	0	60.2	80	49.9	10.1	12.4	0	0.07	45	48.1	42.8
28	35.6	40	31.7	0	55.6	64.5	45.2	10.4	16.6	0	0.08	41.5	43	39.6
29	34.9	42.7	30.2	0	65.3	87.1	52	10.9	9.6	0	0.05	39.7	42.2	38
30	40.9	50.3	29.2	0	75.5	92.9	55.5	6.5	3.4	0	0.04	41.7	44.9	38.7
A	Day													
B	Avg Temp			(°F)				I		Avg Solar		(MJ.m ² .day ⁻¹)		
C	Max Temp			(°F)				J		Avg Wind Speed		(mph)		
D	Min Temp			(°F)				K		Rainfall		(in)		
E	GDD			(base 50 °F)				L		Ref ET		(in day ⁻¹)		
F	Avg RH			(%)				M		Avg Soil Temp		(°F)		
G	Max RH			(%)				N		Max Soil Temp		(°F)		
H	Min RH			(%)				O		Min Soil Temp		(°F)		