

sample number	crucible identification	days since planting	grassy is very slightly lighter than name
		-	grassy
		-	shaded

0 c1  
0 c2  
0 c3  
0 c4  
0 c5

March 16

1	20-K	14	control pmix bottom
2	47-M	14	control mix middle
3	32-L	14	control mix top
4	-	14	clover mix b
5	-	14	clover mix m
6	-	14	clover mix t
7	8-L	14	grass mix b
8	23-J	14	grass mix m
9	30-O	14	grass mix t
10	-	0	loam 1 in 4
11	-	0	loam 2 5 top
12	-	0	loam 3 5 b
13	-	0	loam mix 1 l
14	-	0	loam mix 2 m
15	-	0	loam mix 3 r

March 24

16	8-L brown rim bottom	14	pot mix grass trimmed bottom
17	30-O green inside yellow outside	14	pot mix grass trimmed middle
18	30-O clean	14	pot mix grass trimmed top
19	8-L green inside	14	loam mix grass trimmed bottom
20	10-H	14	loam mix grass trimmed middle
21	13-H very green inside	14	loam mix grass trimmed top
22	13-H dark inner bottom	14	loam mix clover bottom
23	23-J green inside	14	loam mix clover middle
24	30-O green inside no yellow	14	loam mix clover top
25	23-J cleanish	14	loam mix control bottom
26	champion	14	loam mix control middle-ish
27	no number red inside	14	loam mix control top-ish
28	no dark text	11	loam mix grass bottom
29	8-L super clean bottom	11	loam mix grass middle
30	13-H hint of green inside	11	loam mix grass top

March 31

31	23-J	29	pot grass bot
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32 10-H	29 pot grass mid
33 8-L	29 pot grass top
34 champion	29 pot control bot
35 7-M	29 pot control mid
36 20-K	29 pot control top
37 47-M	29 pot clover bot
38 30-O	29 pot clover mid
39 32-L	29 pot clover top

April 7

40 champion	28
41 50J	28
42 10H	28
43 13H green inside	28
44 8L green inside	28
45 32L	28
46 23J cleanish inside	28
47 23J very green/gray inside	28
48 no dark text	28
49 30O super clean	28
50 8L cleanish	28
51 3L	28
52 no number pink inside	25
53 30O chipped top dirty bottom	25
54 13H cleanish inside	25

April 13

55 7M	42
56 champion	42
57 20K	42
58 8L	42
59 47M	42
60 10H	42
61 23J	42
62 30O	42
63 32L	42

10h and 32L may have been mixed up

April 19

64 champion	40
65 50J	40
66 10H	40
67 13H green inside	40
68 8L green inside	40
69 32L	40
70 23J cleanish inside	40
71 23J very green/gray inside	40
72 no dark text	40
73 30O super clean	40
74 8L cleanish	40
75 3L	40
76 no number pink inside	37
77 30O chipped top dirty bottom	37
78 13H cleanish inside	37



an shaded	pos uncert:	0.0021	0.0021	0.0011
plant (ignore if soil type	neg uncert:	-0.0046	-0.0031	-0.0021
trimmed? (ign zone (b, m, t)	crucible (g)	total before ove	total before mu	
- grassy outdoor di	-	53.8649	55.3721	55.3577
- non-grassy shade	-	43.5094	45.0258	44.9942

???

- potting mix	-	-	19.292	30.787	30.787
- potting mix	-	-	19.211	23.502	23.2203
- potting mix	-	-	19.098	22.835	22.5742
- potting mix	-	-	19.093	23.931	23.6727
- potting mix	-	-	17.514		

control	potting mix	-	b	17.846	18.828	18.7394
control	potting mix	-	m	18.2333	19.533	19.4149
control	potting mix	-	t	18.4141	19.608	19.5029
clover	potting mix	-	b	18.822	19.98	19.8082
clover	potting mix	-	m	17.803	19.482	19.3393
clover	potting mix	-	t	18.34	19.525	19.4288
grass	potting mix	n	b	16.649	17.564	17.4921
grass	potting mix	n	m	18.057	19.108	19.0183
grass	potting mix	n	t	17.401	18.509	18.4182
-	loam	-	-	17.592	20.572	20.3996
-	loam	-	-	16.891	19.688	19.5193
-	loam	-	-	15.948	18.56	18.4046
-	2:1 loam pot mix	-	-	18.76	20.771	20.6501
-	2:1 loam pot mix	-	-	16.885	18.835	18.7171
-	2:1 loam pot mix	-	-	18.182	forgot to measu	19.8573

error - scale gai

grass	potting mix	y	b	16.4413	17.7545	17.6597
grass	potting mix	y	m	16.8464	18.3117	18.2134
grass	potting mix	y	t	16.8308	18.7485	18.6145
grass	2:1 loam pot mix	y	b	17.9402	19.9007	19.7775
grass	2:1 loam pot mix	y	m	16.3678	18.3324	18.2035
grass	2:1 loam pot mix	y	t	17.6062	18.927	18.8389
clover	2:1 loam pot mix	-	b	17.0935	18.92	18.8078
clover	2:1 loam pot mix	-	m	17.4278	20.0958	19.9196
clover	2:1 loam pot mix	-	t	15.8106	18.6402	18.4728
control	2:1 loam pot mix	-	b	17.8385	20.3563	20.1857
control	2:1 loam pot mix	-	m-ish	14.6371	16.8653	16.7092
control	2:1 loam pot mix	-	t-ish	14.3278	16.6132	16.4464
grass	2:1 loam pot mix	n	b	18.2052	19.648	19.5676
grass	2:1 loam pot mix	n	m	18.0111	20.492	20.3493
grass	2:1 loam pot mix	n	t	17.0711	19.4474	19.3007

grass	potting mix	n	b	18.0445	19.6658	19.5145
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grass	potting mix	n	m	16.7556	18.1766	18.0482
grass	potting mix	n	t	16.621	17.7235	17.6238
control	potting mix	-	b	15.87	18.2726	18.0249
control	potting mix	-	m	17.4913	20.3235	20.0291
control	potting mix	-	t	17.8172	20.0518	19.8247
clover	potting mix	-	b	17.7402	20.9281	20.605
clover	potting mix	-	m	16.8745	19.6003	19.324
clover	potting mix	-	t	18.3428	20.8869	20.6359

grass	potting mix	y	b	14.6206	16.963	16.7935
grass	potting mix	y	m	19.1862	21.6003	21.4308
grass	potting mix	y	t	16.3558	19.0285	18.786
grass	2:1 loam pot mix	y	b	17.6034	20.9422	20.7532
grass	2:1 loam pot mix	y	m	17.9301	21.3476	21.1534
grass	2:1 loam pot mix	y	t	19.0774	22.2916	22.0781
control	2:1 loam pot mix	-	b	17.8423	21.6455	21.4405
control	2:1 loam pot mix	-	m	17.3697	22.181	21.7017
control	2:1 loam pot mix	-	t	18.1965	22.3829	22.0169
clover	2:1 loam pot mix	-	b	16.8278	21.3727	20.9982
clover	2:1 loam pot mix	-	m	16.44	19.773	19.5184
clover	2:1 loam pot mix	-	t	19.0825	22.898	22.6345
grass	2:1 loam pot mix	n	b	14.3206	18.1732	17.9553
grass	2:1 loam pot mix	n	m	16.8367	21.1578	20.7647
grass	2:1 loam pot mix	n	t	17.0681	20.4606	20.2792

grass	potting mix	n	b	17.4908	20.272	20.0126
grass		n	m	15.8704	18.3328	18.1321
grass		n	t	17.8168	20.2988	20.0888
clover			b	16.6225	19.6887	19.3422
clover			m	17.7443	20.1423	19.9422
clover			t	16.7562	18.9857	18.8073
control			b	18.0447	20.4846	20.2622
control			m	16.8738	19.9159	19.583
control			t	18.344	20.878	20.6625

grass	potting mix	y	b	14.6204	17.1794	16.1231
grass	potting mix	y	m	19.1889	22.1305	20.83
grass	potting mix	y	t	16.3565	19.2317	18.0095
grass	2:1 loam pot mix	y	b	17.6027	22.9006	20.7597
grass	2:1 loam pot mix	y	m	17.9302	22.7519	21.338
grass	2:1 loam pot mix	y	t	19.0866	24.2947	22.0122
control	2:1 loam pot mix	-	b	17.8322	23.2595	21.6875
control	2:1 loam pot mix	-	m	17.3593	22.264	20.6057
control	2:1 loam pot mix	-	t	18.1969	22.8944	21.1946
clover	2:1 loam pot mix	-	b	16.8308	23.9603	21.0446
clover	2:1 loam pot mix	-	m	16.445	22.6019	20.1535
clover	2:1 loam pot mix	-	t	19.0778	24.1256	22.2015
grass	2:1 loam pot mix	n	b	14.3218	20.7161	18.2999
grass	2:1 loam pot mix	n	m	16.8371	22.2101	20.4034
grass	2:1 loam pot mix	n	t	17.0672	22.0648	20.6042

		container g	with soil g	net soil g	percent diff %
potting soil	compacted	10.4944	113.32	102.8256	80.19904378
	uncompacted	10.57	138.783	128.213	124.689766
loam mix	compacted	10.5487	101.448	90.8993	75.21905961
	uncompacted	10.6269	131.473	120.8461	132.9450282



		17.2966	17.2954	1.421	0.1284	0.7516
		17.04	17.0352	1.1025	0.0997	0.5838
		16.847	16.8381	2.4026	0.2477	1.1779
		18.6555	18.657	2.8322	0.2944	1.3736
		18.6727	18.6655	2.2346	0.2271	1.152
		18.901	18.8914	3.1879	0.3231	1.704
		17.8919	17.8825	2.7258	0.2763	1.4321
		19.3075	19.2996	2.5441	0.251	1.3284
		15.5768		2.3424	0.1695	1.2167
		20.1251		2.4141	0.1695	1.3057
		17.402		2.6727	0.2425	1.384
		19.3905		3.3388	0.189	1.3627
		19.7812		3.4175	0.1942	1.3722
		20.8116		3.2142	0.2135	1.2665
		20.1593		3.8032	0.205	1.2812
		19.8728		4.8113	0.4793	1.8289
		20.3655		4.1864	0.366	1.6514
		19.2093		4.5449	0.3745	1.7889
		18.2177		3.333	0.2546	1.3007
		21.1072		3.8155	0.2635	1.5273
		16.6491		3.8526	0.2179	1.3062
	sample got tipp -			4.3211	0.3931 -	
		19.0806		3.3925	0.1814	1.1986
5		18.5716		2.7812	0.2594	1.441
5		16.8986		2.4624	0.2007	1.2335
5		18.7725		2.482	0.21	1.3163
4	19.2162	17.7207	-	-		1.4955
5		18.6875		2.398	0.2001	1.2547
5		17.6403		2.2295	0.1784	1.167
4	19.7542	18.7661	-	-		0.9881
4	sample flipped -			3.0421	0.3329 -	
4	20.1737	19.2292	-	-		0.9445
		15.2989		2.559	1.0563	0.8242
		19.9694		2.9416	1.3005	0.8606
		17.1135		2.8752	1.2222	0.896
		19.3793		5.2979	2.1409	1.3804
		19.9034		4.8217	1.4139	1.4346
		20.6997		5.2081	2.2825	1.3125
		20.1403		5.4273	1.572	1.5472
		19.1958		4.9047	1.6583	1.4099
		19.8252		4.6975	1.6998	1.3694
		19.3105		7.1295	2.9157	1.7341
		18.5363		6.1569	2.4484	1.6172
		20.87		5.0478	1.9241	1.3315
		16.7946		6.3943	2.4162	1.5053
		19.0802		5.373	1.8067	1.3232
		19.2108		4.9976	1.4606	1.3934





					0.0057	0.032
					-0.0042	0.032
extra LOI neg uncert	total neg unc	organic fraction:	carbon%:	dry soil	organic fraction of	dry so
		0.080679406	4.67940552			0.08
		0.101028752	5.859667634			0.10

		0.872301	50.59345803			0.87
		0.549568865	31.87499417			0.59
		0.585282312	33.9463741			0.63
		0.558639934	32.40111616			0.59

-0.01	-0.0152	0.52	30.14	0.890	0.57
-0.01	-0.0152	0.55	32.01	1.113	0.64
-0.01	-0.0152	0.52	30.20	1.044	0.60
-0.07	-0.0752	0.51	29.51	0.986	0.60
-0.07	-0.0752	0.55	31.81	1.536	0.60
-0.07	-0.0752	0.57	33.29	1.089	0.62
-0.01	-0.0152	0.52	30.41	0.831	0.58
-0.01	-0.0152	0.55	31.75	0.965	0.60
-0.01	-0.0152	0.54	31.45	1.014	0.59
		0.34	19.90	2.808	0.36
		0.35	20.26	2.628	0.37
		0.33	19.31	2.457	0.35
		0.34	19.61	1.890	0.36
		0.34	19.57	1.832	0.36
		-	-	1.675	0.41

-0.01	-0.0152	0.53	30.49	1.218	0.57
-0.01	-0.0152	0.57	33.16	1.367	0.61
-0.01	-0.0152	0.54	31.07	1.784	0.58
-0.01	-0.0152	0.43	24.86	1.837	0.46
-0.01	-0.0152	0.42	24.37	1.836	0.45
-0.01	-0.0152	0.44	25.79	1.233	0.48
-0.01	-0.0152	0.44	25.26	1.714	0.46
-0.01	-0.0152	0.44	25.73	2.492	0.47
-0.01	-0.0152	0.36	21.06	2.662	0.39
-0.01	-0.0152	0.42	24.50	2.347	0.45
-0.01	-0.0152	0.44	25.24	2.072	0.47
-0.01	-0.0152	0.45	25.93	2.119	0.48
-0.01	-0.0152	0.36	20.98	1.362	0.38
-0.01	-0.0152	0.36	21.17	2.338	0.39
-0.01	-0.0152	0.39	22.48	2.230	0.41

	-0.0052	0.53	30.97	1.470	0.59
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-0.0052	0.53	30.68	1.293	0.58
-0.0052	0.53	30.71	1.003	0.58
-0.0052	0.49	28.44	2.155	0.55
-0.0052	0.48	28.13	2.538	0.54
-0.0052	0.52	29.90	2.008	0.57
-0.0052	0.53	31.00	2.865	0.59
-0.0052	0.53	30.47	2.450	0.58
-0.0052	0.52	30.28	2.293	0.58

-0.0052	0.52	30.13	2.173	0.56
-0.0052	0.54	31.37	2.245	0.58
-0.0052	0.52	30.03	2.430	0.57
-0.0052	0.41	23.67	3.150	0.43
-0.0052	0.40	23.29	3.223	0.43
-0.0052	0.39	22.85	3.001	0.42
-0.0052	0.34	19.54	3.598	0.36
-0.0052	0.38	22.05	4.332	0.42
-0.0052	0.39	22.88	3.820	0.43
-0.0052	0.39	22.83	4.170	0.43
-0.0052	0.39	22.63	3.078	0.42
-0.0052	0.40	23.22	3.552	0.43
-0.0052	0.34	19.66	3.635	0.36
-0.0052 -	-	-	-	-
-0.0052	0.35	20.49	3.211	0.37

-0.0052	0.52	30.05	2.522	0.57
-0.0052	0.50	29.05	2.262	0.55
-0.0052	0.53	30.76	2.272	0.58
-0.0052 -	-	-	2.594	0.58
-0.0052	0.52	30.35	2.198	0.57
-0.0052	0.52	30.36	2.051	0.57
-0.0052 -	-	-	1.710	0.58
-0.0052 -	-	-	2.709 -	-
-0.0052 -	-	-	1.830	0.52

-0.0052	0.32	18.68	1.503	0.55
-0.0052	0.29	16.97	1.641	0.52
-0.0052	0.31	18.07	1.653	0.54
-0.0052	0.26	15.11	3.157	0.44
-0.0052	0.30	17.26	3.408	0.42
-0.0052	0.25	14.62	2.926	0.45
-0.0052	0.29	16.53	3.855	0.40
-0.0052	0.29	16.67	3.246	0.43
-0.0052	0.29	16.91	2.998	0.46
-0.0052	0.24	14.11	4.214	0.41
-0.0052	0.26	15.23	3.709	0.44
-0.0052	0.26	15.30	3.124	0.43
-0.0052	0.24	13.65	3.978	0.38
-0.0052	0.25	14.28	3.566	0.37
-0.0052	0.28	16.17	3.537	0.39



<- percent  
<- percent  
neg uncert

pos uncert                      dry carbon%                      negative uncertainty                      positive uncertainty

4.72454448  
5.984375

50.59345803  
34.11458359  
36.49318221  
34.22857392

-0.039	0.025	33.25176946	-2.259786792	1.431205773
-0.037	0.026	37.38287357	-2.174870209	1.505269785
-0.037	0.025	34.52671902	-2.13200264	1.422751374
-0.098	0.025	34.64591361	-5.704981069	1.445851351
-0.070	0.023	34.76677732	-4.06958657	1.32898519
-0.092	0.025	36.2340191	-5.333206207	1.470924053
-0.041	0.025	33.50102348	-2.35468742	1.46693085
-0.038	0.025	34.58120012	-2.217986041	1.450973381
-0.037	0.025	34.3720655	-2.156817105	1.426731249

20.5250074  
20.96840719  
19.93282961  
20.27067081  
20.23162491  
22.9530263

-0.033	0.023	32.86539724	-1.924932451	1.318234195
-0.033	0.024	35.54250183	-1.927184682	1.383088344
-0.029	0.022	33.40113248	-1.667912161	1.251969005
-0.024	0.017	25.93384916	-1.409355014	1.010987917
-0.024	0.017	25.48935806	-1.394242324	0.995886447
-0.030	0.019	27.03721298	-1.723335044	1.129812118
-0.025	0.018	26.31824238	-1.463004677	1.035886989
-0.022	0.017	26.94927835	-1.297306287	1.00256403
-0.019	0.014	21.78531362	-1.094465439	0.821392801
-0.022	0.017	25.6809757	-1.279205146	0.967179628
-0.024	0.017	26.54685199	-1.367325064	1.013450832
-0.024	0.018	27.3801663	-1.385309564	1.038585934
-0.025	0.016	21.61808406	-1.447798139	0.916193622
-0.020	0.014	21.86286447	-1.149423666	0.838616519
-0.021	0.015	23.36260759	-1.222166966	0.895291593

-0.025	0.023	34.15687075	-1.429330878	1.317510829
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-0.025	0.023	33.72489556	-1.459564758	1.333189642
-0.027	0.024	33.7658556	-1.570408596	1.408382999
-0.021	0.020	31.70365214	-1.237746905	1.162726911
-0.021	0.019	31.39285996	-1.193499886	1.129867545
-0.023	0.021	33.28318804	-1.309108397	1.227488708
-0.022	0.021	34.49874337	-1.277533325	1.219493145
-0.022	0.021	33.90969586	-1.28667644	1.219253613
-0.022	0.021	33.59958135	-1.289697484	1.21792689
-0.022	0.020	32.47669014	-1.262662298	1.187731098
-0.022	0.021	33.73901809	-1.299135937	1.225740293
-0.022	0.021	33.03102625	-1.258099967	1.190682168
-0.016	0.015	24.49662731	-0.943868096	0.895469094
-0.016	0.015	24.09539117	-0.927112897	0.879993885
-0.016	0.015	23.88400468	-0.930090768	0.879609446
-0.013	0.013	20.0559315	-0.777210752	0.736635918
-0.015	0.015	23.89070743	-0.885279921	0.850222135
-0.016	0.015	24.47503733	-0.918448544	0.87849877
-0.016	0.015	24.28324624	-0.902312632	0.865764308
-0.016	0.015	23.91048191	-0.927290242	0.878060162
-0.016	0.015	24.34307027	-0.922778788	0.879886375
-0.013	0.013	20.24747587	-0.782473511	0.742225102
-0.014	0.013	21.0535782	-0.824904497	0.779013977
-0.022	0.021	33.14220002	-1.254619853	1.189561061
-0.021	0.020	31.63240041	-1.224773058	1.15330263
-0.022	0.021	33.60272887	-1.291793253	1.21936152
-0.022	0.021	33.44218684	-1.259509241	1.196065092
-0.022	0.021	33.1100596	-1.28203386	1.207519469
-0.022	0.021	32.99985374	-1.294083207	1.214380871
-0.023	0.022	33.52430535	-1.360026221	1.264182265
-0.021	0.019	29.93988085	-1.215381037	1.12863083
-0.023	0.021	31.81180542	-1.338136412	1.230997181
-0.022	0.020	30.41545305	-1.261713299	1.164720304
-0.022	0.021	31.43859649	-1.295900645	1.198685564
-0.016	0.016	24.76458215	-0.952604798	0.904189349
-0.016	0.015	23.82062374	-0.9104572	0.865990605
-0.017	0.016	25.42435353	-0.98613647	0.933589425
-0.015	0.014	22.68047466	-0.857323087	0.818424822
-0.016	0.015	24.59324418	-0.942943734	0.895929797
-0.017	0.016	25.89942979	-0.998555911	0.947027231
-0.015	0.014	23.27271961	-0.867518583	0.831701364
-0.016	0.015	24.69664809	-0.929380319	0.888144261
-0.016	0.015	24.12697474	-0.932541105	0.8839165
-0.014	0.013	21.35105988	-0.809412594	0.772204777
-0.014	0.013	20.92372025	-0.807403838	0.766106951
-0.015	0.014	22.25313114	-0.853066259	0.810871157



water%  
0.00955414  
0.020838829

0  
0.065649033  
0.0697886  
0.053389831

(possibly with some moisture gain)

	crucible	before tape removal	after tape removal	week 4
0.090	20-K	17.846	17.8427	17.8172
0.091	47-M	18.2333	18.1646	17.7402
0.088	32-L	18.4141	18.3695	18.3428
0.148	8-L	16.649	16.6364	16.621
0.085	23-J 1	18.057	18.0606	18.0445
0.081	30-O	17.401	17.3976	16.8745
0.079	23-J 2	-	17.4278	17.3697
0.085	23-J 3	-	17.8385	17.8423
0.082	10-H	-	16.3678	16.3558
0.058	no num red	-	14.3278	14.3206
0.060	no dark text	-	18.2052	18.1965
0.059	champion	-	14.6371	14.6206
0.060				
0.060				

-

0.072  
0.067  
0.070  
0.063  
0.066  
0.067  
0.061  
0.066  
0.059  
0.068  
0.070  
0.073  
0.056  
0.058  
0.062

0.093      0.0047      4 5 in back first, then 4 in back



0.090	0.0012	5
0.090	0.0048	5
0.103	0.0089	5
0.104	-0.0015	5
0.102	0.0072	5
0.101	0.0096	4
0.101	0.0094	4
0.099	0.0079	4

0.072  
0.070  
0.091  
0.057  
0.057  
0.066  
0.054  
0.100  
0.087  
0.082  
0.076  
0.069  
0.057  
0.091  
0.053

0.093  
0.082  
0.085  
#VALUE!  
0.083  
0.080  
#VALUE!  
0.109  
#VALUE!

0.413  
0.442  
0.425  
0.404  
0.293  
0.438  
0.290  
0.338  
0.362  
0.409  
0.398  
0.381  
0.378  
0.336  
0.292



week 6

17.8168

17.7443

18.344

16.6225

18.0447

16.8738

17.3593

17.8322

16.3565

14.3218

18.1969

14.6204