APPENDICES

APPENDIX 1
DATA FOR HRAP RUN – CELL COUNT (x 10^5) cell ml^{-1}

DAY	TIME	BATCH 1		BATCH 2		BATCH 3		BATCH 4		BATCH 5	
		CONTROL	CO_2	CONTROL	CO_2	CONTROL	CO_2	MOLASSES	CO_2	CONTROL	MOLL + CO_2
0	M	3.830	4.400	4.200	5.950	2.100	2.930	9.900	10.700	2.500	3.070
	A	3.770	4.330	4.930	6.500	2.120	2.400	9.800	10.900	2.510	2.540
	E	2.440	4.770	11.670	10.330	2.300	2.510	11.600	12.600	2.540	3.050
1	M	7.520	13.200	10.200	13.000	4.860	3.470	10.450	10.400	3.570	4.500
	A	14.530	22.870	24.600	24.600	4.750	5.310	15.270	19.470	4.700	5.200
	E	17.130	27.070	20.400	41.200	3.850	6.800	16.800	20.360	6.800	8.670
2	M	19.700	25.600	24.750	37.100	7.060	7.530	32.500	29.900	6.550	15.200
	A	26.600	32.270	13.300	27.600	7.600	7.200	45.750	46.650	9.670	20.800
	E	21.730	48.400	14.200	28.700	7.580	7.600	95.400	133.670	9.450	20.700
3	M	7.600	37.400	10.500	15.300	12.930	13.600	94.670	95.000	29.850	47.250
	A	9.500	45.700	8.700	16.400			182.670	192.000	24.500	60.000
	E	7.700	40.800	8.070	15.400	14.400	15.700	131.330	156.670	44.300	114.000
4	M	6.500	23.500	8.050	14.300	18.000	21.630	176.000	134.000	50.000	113.670
	A					73.200	78.130	216.670	204.170	57.000	206.670
	E	6.450	24.700			100.000	99.000	236.750	265.500	56.630	196.000
5	M	6.400	22.300			88.320	105.000	381.300	246.670	58.250	265.300
	A					91.670	102.300	462.670	262.000	63.250	254.670
	E					90.000	114.330	300.000	296.000	121.000	278.670
6	M					98.670	103.250	335.000	163.500	130.000	279.330
	A					89.670	118.300			130.350	334.000
	E					104.000	107.670			133.500	356.000
7	M					73.000	106.500			138.500	297.330
	A					79.500	93.000				
	E					97.000	107.670				
8	M					113.330	194.670				
	A					101.600	158.670				
	E					91.330	200.000				
9	M					82.400	195.200				

APPENDIX 2
DATA FOR HRAP BATCHES – CHLL–A (X 10^3 mgL^{-1})

		BATCH 1		BATCH 2		BATCH 3		BATCH 4		BATCH 5	
DAY	TIME	CONTROL	CO_2	CONTROL	CO_2	CONTROL	CO_2	MOLASSES	CO_2	CONTROL	MOLL + CO_2
0	M	0.120	0.140	0.120	0.110	0.133	0.148	0.324	0.309	0.161	0.134
	A	0.130	0.200	0.160	0.210	0.132	0.135	0.297	0.284		
	E	0.230	0.230	0.400	0.400	0.121	0.149	0.839	0.995	0.091	0.289
1	M	0.200	0.190	0.600	0.740	0.094	0.149	0.786	0.861	0.083	0.135
	A	0.260	0.580	1.634	1.721	0.081	0.139	0.699	1.002	0.112	0.362
	E	0.790	1.080	5.370	7.584	0.084	0.121	1.412	1.187	0.280	0.675
2	M	0.820	0.890	5.619	6.732	0.103	0.070	1.714	2.307	0.300	0.320
	A	1.000	0.920	4.128	7.094	0.104	0.131	1.210	2.002	0.257	0.783
	E	1.270	2.270	5.236	6.479	0.112	0.211	3.010	2.656	1.919	3.539
3	M	1.180	1.990	3.170	6.671	0.608	0.703	5.001	2.997	1.300	1.629
	A	0.980	1.930	3.250	6.539	0.653		9.329	7.641	1.033	2.058
	E	0.900	1.640	2.800	7.304	0.697	0.813	7.023	7.020	1.321	3.599
4	M	0.810	1.620	2.675	7.211	0.932	1.082	8.846	7.338	1.710	2.366
	A					1.043	1.258	9.081	8.796	1.940	2.000
	E					1.229	1.465	9.476	8.470	2.360	2.610
5	M					1.914	2.361	9.870	7.460	1.845	3.619
	A					1.603	3.057	9.290	8.712	2.379	4.208
	E					3.769	5.410	10.530	8.720	2.900	4.381
6	M					3.740	5.088	10.190	5.210	2.890	5.430
	A					4.745	5.518			3.715	6.396
	E					5.276	6.176			3.474	8.090
7	M					5.758	6.010			3.180	7.740
	A					5.991	6.739				
	E					5.846	6.571				
8	M					7.371	8.075				
	A					7.577	11.100				
	E					7.259	8.456				
9	M					6.927	8.938				

APPENDIX 3
DATA FOR HRAP RUN – pH

		BATCH 1		BATCH 2		BATCH 3		BATCH 4		BATCH 5	
DAY	TIME	CONTROL	CO_2	CONTROL	CO_2	CONTROL	CO_2	MOLASSES	CO_2	CONTROL	MOLL + CO_2
0	M	6.8	6.9	7.18	7.16			7.86	8		
	A	7.31	7.43	7.25	7.21	7.97	7.99	8.03	7.99	7.75	7.8
	E	7.5	7.53	7.42	7.4	8.12	8.13	8.28	8.27	7.78	7.81
1	M	7.49	7.59	7.35	7.33	8.15	8.15	9.01	8.11	7.88	7.94
	A	7.8	7.82	7.96	8	8.1	8.06	8.27	8.34	8.03	7.74
	E	7.78	7.65	7.47	7.49	8.2	8.16	8.15	7.62	8.02	7.73
2	M	7.34	7.2	7.44	7.39	8.13	8.12	7.7	7.65	7.88	7.8
	A	7.32	7.32	8.1	8.07	8.03	8.02	8.74	8.53	7.79	7.66
	E	7.42	7.4	8.25	8			8.76	8.48	7.86	7.9
3	M	7.17	7.18	7.366	7.67	7.7	7.7	7.42	8.36	7.88	7.52
	A	7.64	7.61	8.02	8.01	7.81	7.71	8.15	8.4	8.1	7.7
	E	7.42	7.42	8.1	8.11	7.85	7.72	8.18	8.5	8.2	7.8
4	M	6.94	6.92	7.58	7.54	8.24	8.23	7.86	8.39	7.58	7.27
	A	6.86				8.23	8.13	8.37	8.66	7.86	7.43
	E					8.02	7.88	8.17	8.63	8.01	7.73
5	M	7	7.2			7.83	7.87	7.57	8.4	7.81	7.36
	A					8.4	8.3	8.06	8.52	7.85	7.66
	E					7.73	7.73	7.68	8.16	7.56	7.99
6	M					8.01	8.08	7.79	7.57	8.23	7.87
	A					7.75	8.19			8.55	7.85
	E					7.96	8.02			8.1	7.75
7	M					8.03	8.09			8.21	7.54
	A					8.16	8.4				
	E					8.21	8.12				
8	M					8	7.99				
	A					8.1	7.75				
	E					8.13	8.16				
9	M					8.15	8.12				

APPENDIX 4
DATA FOR HRAP BATCHES – DISSOLVED OXYGEN (mgL^{-1})

DAY	TIME	BATCH 1		BATCH 2		BATCH 3		BATCH 4		BATCH 5	
		CONTROL	CO_2	CONTROL	CO_2	CONTROL	CO_2	MOLASSES	CO_2	CONTROL	MOLL + CO_2
0	M	0.600	0.400	0.500	0.400			0.32	0.300	0.100	0.000
	A	0.500	0.400	0.300	0.300	0.030	0.030	0.500	0.500	0.200	0.300
	E	0.200	0.300	0.300	0.300	0.600	0.500	0.500	0.570	0.100	0.100
1	M	0.500	0.500	2.100	2.000	0.500	0.500	4.020	4.000	0.200	0.100
	A	5.300	4.800	7.000	8.100	0.300	0.400	4.500	6.000	0.300	0.200
	E	3.400	1.700	2.300	4.000	0.400	0.300	3.200	4.300	0.200	0.200
2	M	4.200	2.200	5.000	4.100	0.500	0.500	1.500	3.400	1.500	0.100
	A	7.400	9.800	12.400	14.200	0.300	0.400	12.000	11.800	0.970	1.300
	E	6.600	6.600	6.400	7.200	0.300	0.300	4.300	4.600	1.100	0.400
3	M	0.500	0.500	6.000	5.500	0.300	0.300	0.400	3.600	2.800	0.300
	A	11.000	14.000	9.000	13.200	0.700	0.900	0.600	13.300	8.100	1.200
	E	4.500	4.400	6.600	6.500	0.400	0.300	2.800	4.300	5.500	0.200
4	M	4.700	4.800	6.200	6.300	2.000	2.000	0.100	5.000	1.600	0.400
	A	6.000	6.400	6.500	13.000	2.500	3.000	0.400	15.200	13.500	1.500
	E	4.000	4.000			1.300	1.400	0.140	9.200	5.500	0.400
5	M					1.000	0.800	0.500	5.600	7.200	0.100
	A	6.200	4.900			8.300	9.400	0.100	19.400	30.200	4.900
	E					0.000	0.100	0.300	5.400	6.400	5.700
6	M					0.300	4.500	0.200	2.900	11.500	10.700
	A					10.500	18.000	7.100	10.300	19.200	17.600
	E					1.900	8.000	0.900	2.700	10.200	10.200
7	M					0.100	0.200				
	A					2.500	10.200			8.100	10.100
	E					0.300	0.300				
8	M					0.300	0.300				
	A					3.500	4.000				
	E					0.300	0.700				
9	M										

APPENDIX 5
DATA FOR HRAP BATCHES – TEMPERATURE (°C)

DAY	TIME	BATCH 1		BATCH 2		BATCH 3		BATCH 4		BATCH 5	
		CONTROL	CO_2	CONTROL	CO_2	CONTROL	CO_2	MOLASSES	CO_2	CONTROL	MOLS + CO_2
0	M	27.0	27.0	26.0	26.0			26.6	26.3	25.0	25.0
	A	28.0	28.0	25.0	25.0	30.0	30.0	28.4	28.8	27.0	26.8
	E	27.0	27.0	26.0	26.0	27.0	27.0	28.8	27.8	27.4	27.3
1	M	26.0	26.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
	A	27.0	27.0	25.0	25.0	27.0	27.0	28.0	28.9	28.0	28.3
	E	27.0	27.0	25.0	25.0	29.0	29.0	27.3	27.1	29.0	27.0
2	M	25.0	25.0	25.0	25.0	26.0	26.0	26.0	25.0	24.7	24.7
	A	28.0	27.0	31.0	31.0	28.0	28.0	31.0	29.0	30.1	30.4
	E	25.0	25.0	30.0	30.0	26.0	26.0	30.0	30.0	29.0	29.0
3	M	25.0	25.0	26.0	26.0	25.0	25.0	26.0	26.1	24.5	24.6
	A	25.0	25.0	27.5	27.5	30.0	30.0	30.1	30.0	29.2	29.2
	E	25.0	25.0	27.0	27.0	28.0	28.0	28.9	29.1	29.4	29.5
4	M	25.0	25.0	25.0	25.0	25.0	25.0	25.5	25.0	25.2	25.0
	A	25.0	25.0	27.0	27.0	31.0	31.0	29.9	29.4	30.9	31.2
	E	25.0	25.0			27.0	27.0	29.0	29.0	30.3	30.4
5	M					25.0	25.0	25.7	25.3	25.2	25.2
	A	24.0	24.0			30.0	30.0	29.2	28.6	30.2	30.6
	E					28.0	28.0	27.4	27.2	31.0	30.1
6	M					25.0	25.0	25.1	25.0	25.0	25.0
	A					32.0	32.0	29.4	28.9	28.5	28.5
	E					28.0	28.0	29.2	29.5	30.0	30.0
7	M					25.0	25.0				
	A					32.0	32.0			25.0	25.0
	E					28.0	28.0				
8	M					23.0	23.0				
	A					27.0	27.0				
	E					25.0	25.0				
9	M										

APPENDIX 6
DATA FOR HRAP BATCHES – LIGHT ($uE m^{-2} s^{-1}$)

DAY	TIME	BATCH 1		BATCH 2		BATCH 3		BATCH 4		BATCH 5	
		CONTROL	CO_2	CONTROL	CO_2	CONTROL	CO_2	MOLASSES	CO_2	CONTROL	MOLL + CO_2
0	M	960.0	700.0	540.0	680.0	0.0	0.0	340.0	380.0	720.0	720.0
	A	240.0	200.0	70.0	70.0	2100.0	2400.0	1180.0	1180.0	1640.0	1600.0
	E	120.0	100.0	60.0	60.0	200.0	230.0	200.0	200.0	120.0	80.0
1	M	40.0	40.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A	920.0	860.0	1040.0	900.0	900.0	940.0	2800.0	2400.0	1400.0	1400.0
	E	4.0	4.0	50.0	46.0	150.0	140.0	60.0	40.0	140.0	80.0
2	M	0.0	0.0	6.0	4.0	2.0	0.0	0.0	0.0	0.0	0.0
	A	480.0	400.0	2000.0	2100.0	1800.0	1800.0	2020.0	2200.0	1300.0	1400.0
	E	40.0	40.0	44.0	48.0	100.0	100.0	38.0	44.0	140.0	22.0
3	M	20.0	20.0	40.0	110.0	4.0	2.0	16.0	16.0	0.0	0.0
	A	750.0	580.0	400.0	264.0	2000.0	2000.0	340.0	400.0	840.0	680.0
	E	20.0	20.0	26.0	130.0	80.0	80.0	30.0	30.0	96.0	110.0
4	M	20.0	40.0			4.0	4.0	20.0	12.0	0.0	0.0
	A	1100.0	1050.0	124.0	126.0	2200.0	2000.0	2100.0	2000.0	1600.0	1600.0
	E	120.0	100.0			26.0	28.0	70.0	60.0	70.0	80.0
5	M	20.0	40.0			6.0	4.0	1.0	1.0	0.0	0.0
	A					1000.0	860.0	2300.0	2200.0	1400.0	1200.0
	E					14.0	16.0	28.0	40.0	200.0	160.0
6	M					4.0	4.0	6.0	6.0	0.0	0.0
	A					1500.0	1500.0	2010.0	2000.0	1600.0	1600.0
	E					58.0	34.0	34.0	34.0	90.0	90.0
7	M					4.0	4.0				
	A					2000.0	1800.0				
	E					70.0	70.0				
8	M					120.0	120.0				
	A					1000.0	1600.0				
	E					54.0	54.0				
9	M										

APPENDIX 7
DATA FOR HRAP BATCHES – Chemical Oxygen Demand (mgL^{-1})

	BATCH 1		BATCH 2		BATCH 3		BATCH 4		BATCH 5	
DAY	Control	CO_2	Control	CO_2	Control	CO_2	Molasses	CO_2	CONTROL	MOLL + CO_2
0	1943	1942	1270	1270	4195	4195	2443	2432	2610	2470
1	1192	1128	928	924	3480	6450	1765	1771	630	1190
2	752	784	480	640	2452	2328	940	1260	750	400
3	354	86	86	70	1952	1628	640	156	641	1021
4	23	16	84	70	943	950	554	121	540	1470
5	10	5			560	541	496	98	256	1400
6					450	430	472	52	166	1180
7					260	210			106	1092
8					240	142				
9					224	140				

APPENDIX 8
DATA FOR HRAP BATCHES – AMMONIACAL NITROGEN (mgL^{-1})

	BATCH 1		BATCH 2		BATCH 3		BATCH 4		BATCH 5	
DAY	CONTROL	CO_2	CONTROL	CO_2	CONTROL	CO_2	MOLASSES	CO_2	CONTROL	MOLL + CO_2
0	154.7	175.97	174.39	174.39	407.07	407.07	283.8	299.69	367.73	408
1	119.7	149.7	93.79	92.27	271.1	242.6	183.83	139.75	296.13	343.4
2	108.2	95.08	61.99	65.2	220.9	210.6	147.89	166.97	243.67	303.16
3	98.9	59.29	63.37	67.5	204.01	220.19	76.82	127.97	241.54	229.77
4	81.2	39.68	75.2	76.4	132.62	125.95	57.63	84.82	219.04	172.15
5	73.3	29.65			92.03	102.39	11.05	58.09	177.3	174.05
6					108.99	65.85	8.07	40.01	177.63	167.98
7					62.16	48.23			174.93	144.76
8					25	42.2				
9					21.7	40.8				

APPENDIX 9
DATA FOR HRAP BATCHES – DISSOLVED ORTHOPHOSPHATE (mgL^{-1})

	BATCH 1		BATCH 2		BATCH 3		BATCH 4		BATCH 5	
DAY	CONTROL	CO_2	CONTROL	CO_2	CONTROL	CO_2	MOLASSES	CO_2	CONTROL	MOLL + CO_2
0	12.042	13.707	15.12	15.12	55.23	62.29	32.7	34.99	25.68	30.25
1	10.063	12.537	10.18	11.31	45.07	53.2	29.24	32.53	22.1	27.93
2	9.101	12.062	8.22	9.54	40.21	56.98	28.35	31.37	20.22	26.76
3	9.157	8.004	7.81	8.74	41.89	51.22	25.2	30.07	20.55	19.73
4	7.77	5.264	8.06	7.82	41.07	47.89	18.01	27.05	19.761	16.5
5	7.81	6.51			38.42	40.89	20.06	24.02	18.76	13.99
6					36.63	47.55	18.57	20.22	19.95	19.05
7					35.27	45.24			20.47	22.09
8					32.71	46.28				
9					29.82	44.92				

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APPENDIX 10
DATA FOR IIRAP BATCHES – TOTAL SOLIDS (mgL^{-1})

DAY	TIME	BATCH 1		BATCH 2		BATCH 3		BATCH 4		BATCH 5	
		CONTROL	CO_2	CONTROL	CO_2	CONTROL	CO_2	MOLASSES	CO_2	CONTROL	MOLL + CO_2
0	M	2039	1865	1686	1646			1348	1336	2482	2124
	A	1853	1826			2306	2043	1450	1488		
	E	1870	2357	1624	1622	2428	2375	2026	1760		
1	M	1931	2290	1524	1562	2385	2316	1638	1555	2618	2704
	A	1854	2144					1590	1631		
	E	1510	1928	1648	1481	2226	2364	1456	1598	2510	2588
2	M	1508	1915	1487	1516	2489	2523	1434	1594	2506	2572
	A	1488	2224	1405	1223	2472	2498	1559	1546	2674	3048
	E	1389	2326	1410	1398	2473	2431	1599	1660	2654	2858
3	M	1390	1829	1475	1536	2561	2425	2309	1706	2552	3092
	A	1476	1880	1447	1594	2532	2416	2100	1689	2482	3163
	E	1802	1802	1545	1596	2498	2421	2088	1709	2678	3612
4	M					2470	2369	2730	1592	2651	3876
	A	1563	1870	1388	1442	2495	2471	2815	1728	2741	4035
	E					2492	2476	3280	1854	2324	4025
5	M	1469	1887			2591	2431	3736	1851	2380	3992
	A					2994	2424	2490	1888	2418	3715
	E					2540	2438	3392	1857	2416	3745
6	M					2481	2339			2428	3917
	A					2272	2451	3410	1823	2534	3827
	E					2372	2392			2260	3930
7	M					2273	2391			2427	3578
	A					2254	2423				
	E					2227	2505				
8	M					2385	2391				
	A					2485	2423				
	E					2444	2627				
9	M					2337	2432				

APPENDIX 11
DATA FOR HRAP RUN – Total Suspended Solids (mgL^{-1})

		BATCH 1		BATCH 2		BATCH 3		BATCH 4		BATCH 5	
DAY	TIME	CONTROL	CO_2	CONTROL	CO_2	CONTROL	CO_2	MOLASSES	CO_2	CONTROL	MOLL + CO_2
0	M	208	258					575	495		
	A	221.25	260	278	268	884	797.5	462.5	560	655	623.3
	E	202.5	247.5	317.9	283.3	884.3	798	557.5	584	654.6	622.7
1	M	212.5	267.5	351.7	355	850	760	453	440	788	705
	A	249	338.8	258.8	331.3	712.5	765	422.7			
	E	276.7	266.7	184	289	740	775	445	445	786	722.5
2	M	203.7	183	147	310	795	877.5	300	442.5	757	765
	A	143	303			784	879	530	425	805	705
	E	172	319	146	302	795	901	465	460	722	966
3	M	134	240	226	377.9	797.5	875	653	480	655	1115.8
	A	187	256			825	881	710	530	534.2	1195
	E	210	285	285	315.9	854	854	710	577.5	580	1298
4	M	198	278	224	277	987	831	1010	870	485	1453
	A					1036	880	953.3	732.5	460	1293
	E					1042	960	1053	735	465	1486.7
5	M	208	278			1095.8	1002.5	1230	545	387.5	820
	A					980	1036.7	1324	600	480	1495
	E					880	1140	1286.7	750	450	3040
6	M					723	913	963.3	663.3	725	2070
	A					715	875			495	1093
	E					815	875			540	1246.7
7	M					768	810			537.5	2733.3
	A					780	830				
	E					788	815				
8	M										
	A					733	833				
	E					756	840				
						786	865				
9	M										

APPENDIX 12
Biochemical composition of algal biomass obtained from HRAP Batches

		Protein	Carbohydrate	Lipids	Carotenoids	Protein	Carbohydra	Lipids	Carotenoids
		Batch III – Control				Batch III – CO_2			
Day	Time								
6	E	52.5	9.7	13.8	0.6	29.9	7.8	8.5	0.6
7	M	60.5	15.61	9.7	0.5	52.9	16.28	9.9	0.7
	E	65	20.62	8.1	0.6	54.2	19.11	12.26	0.8
8	M	58.3	25.02	10.4	0.7	66.6	28.14	12.5	0.8
	E	49.9	17.7	9.25	0.8	60.1	25.89	8.2	0.9
9	M	60.9	20.71	8.4	0.8	59.2	28.64	8.1	0.8
	E	53.8	23.69	8.3	0.9	52.9	25.67	3.9	0.9
		Batch IV – Mollasses				Batch IV – CO_2			
Day	Time								
2	E	55.6	14.22	9.21	0.8	52.3	19.62	11.65	0.7
3	M	57.2	22.06	6.55	0.8	55.6	24.58	11.2	0.6
	E	59.2	20.56	10.15	0.9	59.3	16.1	14.12	0.8
4	M	59.4	17.62	9.63	1.2	62.1	12.5	12.5	0.8
	E	62.1	17.09	9.52	1.1	65.6	27.85	7.05	0.9
5	M	66.3	18.15	9.24	1.5	63.2	23.7	10.3	1.4
	E	67.2	22.03	9.3	1.6	62.8	26.63	9.6	1.4
6	M	65.1	29.05	9.5	1.8	60.5	26.89	9.2	1.5
		Batch V – Control				Batch V – Molasses + CO2			
Day	Time								
3	E	47.6	10.94	10.6	0.8	62.5	11.1	8.8	1.1
4	M	43.2	12.62	10.9	0.8	62.9	11.87	9.5	1.4
	E	42.8	15.56	11.2	0.7	65	12.06	9.8	1.3
5	M	43.7	15.69	10.4	0.9	63.4	17.32	9.9	1.7
	E	45.7	12.06	10.3	0.8	61.8	11.64	9.6	1.8
6	M	41.4	14.11	9.4	1.1	52.8	10.12	8.2	2
	E	45.3	12.18	8.3	1.1	60.8	14.18	8.4	1.9
7	M	44.3	12.24	8.4	1.2	58.5	11.86	8.5	2.1

APPENDIX 13
WEATHER DATA OBTAINED FROM MALAYSIAN METEREOLOGICAL SERVICES

Daily Rainfall Amount (mm)

DAY	BATCH 1	BATCH 2	BATCH 3	BATCH 4	BATCH 5
0	15.3	0	0	Trace	0
1	6.2	33.3	Trace	0.2	0
2	60.4	1.8	10.6	0	0
3	9.7	0	0	Trace	0
4	15.3	67.6	1.3	0	0
5	40.7		17.3	0.1	1
6			2	0	0
7			0		0
8			29.7		
9			8.5		

Daily Solar Radiation (MJ/M^{-2})

DAY	BATCH 1	BATCH 2	BATCH 3	BATCH 4	BATCH 5
0	9.16	10.48	21.21	15.64	19.41
1	10.25	10.62	14.56	21.61	15.43
2	12.2	21.72	14.25	19.11	17.82
3	9.57	9.86	23.42	12.82	15.06
4	13.4	13.28	16.79	18.41	19.26
5	9.95		14.46	11.04	15.4
6			14.87	17.47	19.37
7			20.29		20.57
8			15.69		
9			16.43		

Daily Sunshine Hours

DAY	BATCH 1	BATCH 2	BATCH 3	BATCH 4	BATCH 5
0	2.5	4.5	9	2.4	7.8
1	0.8	3.3	4.9	9.7	6.6
2	2.9	9.3	6.3	6.7	6.7
3	0	0.5	7.5	5.9	8.1
4	0	2.9	7.3	9.7	10.9
5	0		5.2	5.3	6.3
6			5.9	6.5	10.4
7			8.7		10.5
8			6.4		
9			7.7		