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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | |  |  | |  | |  | | --- | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | | | |  |  | | --- | --- | |  |  | |  |  |  |  |  | | --- | --- | |  |  | |  | Data Tables  Run #1 (3-18-2001) 4:11pm Good weather   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | ***Cell*** | ***Test 1 mv*** | ***Test 1 ma*** | ***Test 1 mw*** | ***Test 2 mv*** | ***Test 2 ma*** | ***Test 2 mw*** |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | 1 Lemon | 480 | 0.3 | 0.144 | 201 | 0.118 | 0.024 |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | 2 Grass | 480 | 0.8 | 0.384 | 370 | 0.8 | 0.296 |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | 3 Raspberry | 405 | 0.9 | 0.365 | 396 | 1.2 | 0.475 |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | 4 Blackberry | 310 | 1.9 | 0.589 | 223 | 2 | 0.446 |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | 5 No Dye | 126 | 0 | 0 | 311 | 0.164 | 0.051 |   Test #2 (3-19-2001) 5pm Lack of proper sun, carbon problems   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | ***Cell*** | ***#1 mv*** | ***#1 ma*** | ***#1 mw*** | ***#2 mv*** | ***#2 ma*** | ***#2 mw*** |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | 1 No dye | 5 | 0.005 | 0.000025 | 8 | 0.10 | 0.0008 |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | 2 Lemon | 4 | 0.026 | 0.000104 | 1.5 | 0.020 | 0.00003 |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | 3 Grass | 145 | 0.066 | 0.00957 | 100 | 0.052 | 0.0052 |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | 4 Blackberry | 4 | 0.030 | 0.0012 | 2 | 0.017 | 0.000034 |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | 5 Raspberry | 115 | 0.122 | 0.01403 | 90 | 0.087 | 0.00783 |   Test #3 3-20-01 4:30pm Lack of proper sun and cell problems   |  |  |  |  | | --- | --- | --- | --- | | ***Cell*** | ***#1 mv*** | ***#1 ma*** | ***#1 mw*** |  |  |  |  |  | | --- | --- | --- | --- | | 1 Raspberry | 13 | 0.15 | 0.00195 |  |  |  |  |  | | --- | --- | --- | --- | | 2 No dye | 7 | 0.08 | 0.00056 |  |  |  |  |  | | --- | --- | --- | --- | | 3 Lemon | 13 | 0.21 | 0.00273 |  |  |  |  |  | | --- | --- | --- | --- | | 4 Grass | 1 | 0.005 | 0.000005 |  |  |  |  |  | | --- | --- | --- | --- | | 5 Blackberry | 15 | 0.21 | 0.00315 |   Test #4 1pm 3-24-01 Cloudy but sampled in between clouds.   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | ***Cell*** | ***#1 Ohms*** | ***#1 mv*** | ***#1 ma*** | ***#1 mw*** | ***#2 mv*** | ***#2 ma*** | ***#2 mw*** |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | 1 Chloro | 2.9K | 487 | 0.940 | 0.457 | 450 | 1 | 0.450 |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | 2 Chloro | 2.2K | 474 | 1.06 | 0.502 | 381 | 0.922 | 0.351 |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | 3 Antho | 20M | 450 | 1.518 | 0.683 | 250 | 1.2 | 0.3 |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | 4 Antho | 1.2K | 320 | 1.34 | 0.428 | 250 | 0.92 | 0.23 |   Test #5 2:30pm 3-25-01 Cloudy but sampled in between cloud.   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | ***Cell*** | ***#1 Ohms*** | ***#1 mv*** | ***#1 ma*** | ***#1 mw*** | ***#2 mv*** | ***#2 ma*** | ***#2 mw*** |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | 3 Chloro | 314 | 450 | 0.536 | 0.241 | 380 | 0.530 | 0.201 |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | 4 Chloro | 12K | 475 | 0.358 | 0.170 | 370 | 0.526 | 0.194 |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | 1 Antho | 2.3K | 430 | 0.750 | 0.322 | 420 | 1.14 | 0.478 |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | 2 Antho | 45 | 17 | 0.08 | 0.001 | 26 | 0.210 | 0.005 |   Test #6 4:00pm 3-26-01 Good weather, but a very slight high altitude haze   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | ***Cell*** | ***Ohms*** | ***#1 mv*** | ***#1 ma*** | ***#1 mw*** | ***#2 mv*** | ***#2 ma*** | ***#2 mw*** |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | 1 Chloro | 4K | 570 | 0.980 | 0.558 | 441 | 0.775 | 0.342 |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | 2 Chloro | 12K | 470 | 0.900 | 0.423 | 403 | 0.610 | 0.245 |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | 3 Antho | 3K | 485 | 1.300 | 0.631 | 460 | 1.142 | 0.525 |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | 4 Antho | 2K | 470 | 1.401 | 0.658 | 470 | 1.401 | 0.658 |   How to read a data table:    Cell: The # is the exact piece of glass plate coated with Ti02  The Antho or Chloro is short for Anthocyanin and Chlorophyll respectively.  Ohms measures the resistance of the cell from the Ti02 covered side to the carbon coated side, if the number is really low like 100 or below it indicates a major problem.  #1 or #2 represent the sample number #1 was taken first, following a couple minutes of sun, #2 was taken double checking data and watching cell degrading.  mv = millivolts or 1/1000 of a volt  570mv=0.570volts  ma = milliamps or 1/1000 of an amp  mw = milliwatts = volts x milliamps |  |  |  | | --- | --- | |  |  | |  | [[Electrifying The Sun](http://docs.google.com/index.html)] [[Introduction](http://docs.google.com/Introduction/introduction.html)] [[Hypothesis](http://docs.google.com/Hypothesis/hypothesis.html)] [[Experiment](http://docs.google.com/info/info.html)] [[Pictures](http://docs.google.com/Pictures/pictures.html)] [[Data](http://docs.google.com/data/data.html)] [[Conclusion](http://docs.google.com/Conclusion/conclusion.html)] [[Recommendations](http://docs.google.com/Recommendations/recommendations.html)] [[Bibliography](http://docs.google.com/Bibliography/bibliography.html)] [[Experiment Log](http://docs.google.com/Experiment_Log/experiment_log.html)] [[Acknowledgments](http://docs.google.com/Acknowledgments/acknowledgments.html)] | |