The Influence of Increased Gibberellic Acid on the Cell Growth and CO2 Sequestration by Cyclotella

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The purpose of this experiment was to test if the introduction of Gibberellic Acid will increase the cell count and CO2 sequestration in the Cyclotella cultures. Also if the Gibberellic Acid will offset the negative effects of the Benzoic Acid. It was hypothesized that the Cyclotella cultures introduced to the Gibberellic Acid will have a higher mean cell count and a lower atmospheric CO2 level than the Cyclotella cultures not introduced to the Gibberellic Acid. It was also hypothesized that the Cyclotella cultures introduced to the Gibberellic Acid in the presence of Benzoic Acid will have a higher mean cell count and a lower atmospheric CO2 level than the Cyclotella cultures not introduced to the Gibberellic Acid in the presence of Benzoic Acid.For this experiment there were two main groups, those that were just going to be introduced to the Gibberellic Acid and those that were going to be introduced to both the Gibberellic Acid and the Benzoic Acid. Each group was split up into 4 subgroups, a control, a low, a medium, and a high. For each level there were 4 test tubes. For each test tube 3 microscope slides and 3 microscopic fields were counted. In the CO2 portion of the project each test tube was flooded with 1000 ppm of CO2. In conclusion both of the cell count hypotheses were accepted because there was a statistical difference. Both of the CO2 absorption hypotheses were not accepted because there was no statistical difference between the levels.