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Algae Growth In River Water IN Relation To 18-6-6 Fertilizer

The purpose of this project is to attempt to establish a trend in green algae growth in relation to 18-6- fertilizer. The idea was to be able to determine the consequences of adding fertilizer to river water through its affect on algal growth. Moderate success in growing algae allowed for the taking of various measurements, which would in turn form the basis of the experiment. The algae was initially massed equally and put into ten beakers, each with river water containing increasing increments of fertilizer (with the exception of the de-ionized water constant). This mass was later compared to the end mass, at which point it was found that mass increased with algae to a point, but fell sharply at about the middle increment. Temperature, pH, and dissolved oxygen were also tested. It was found the pH and temperature were fairly consistent throughout, but that the dissolved oxygen exhibited a similar trend to that of the mass, peaking at the middle increment. Essentially, the results mean that algae growth was fostered by the fertilizer up to a point, though eventually the algae will no longer be able to take such an amount of fertilizer. One could then use these results to say that not only is the fertilizer harmful to the river because of aglal growth, but also that by the time the fertilizer no longer affects the growth, there will have been enough fertilizer added to the water to overwhelm other organisms in the water as well.