

The Effects of Acetone on the Oxygen Production Rates of Plants

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Abstract

Acetone is an organic solvent that is present in a plethora of household products with no regulations as to its care or disposal (in the United States). This permits acetone to easily enter the ecosystem and affect plants and other living organisms. The purpose of this study was to measure the effects of acetone on the oxygen production rates of plants in order to demonstrate the chemical's health hazard; the results expected were that acetone would hinder the photosynthetic process of plants and therefore decrease the amount of oxygen produced. The plants *impatiens*, upon which solutions of acetone were tested, agreed with this very notion. As the concentration of acetone in the solution increased, the experimental plant displayed lower oxygen production rates.