

Ultraviolet (uv) light research paper examples

[Environment](#), [Water](#)



Effect of Light Intensity on the Rate of Photosynthesis

Purpose

The purpose of this experiment was to determine how light intensity affects rate of photosynthesis using seaweed.

Introduction

In the process of photosynthesis there is combination of water and CO₂ from the environment to form oxygen and sugar, mainly glucose (Emeritus, 2010). These products are then used by the plant through the process of respiration producing water and carbon dioxide (Seeley, Stephens, & Tate, 2004).

Hypothesis

It was hypothesized that the rate of photosynthesis as measured by the number of bubbles produced increased as light intensity increased.

Methods

Results

The amount of bubbles that appeared during the experiment per hour was recorded in Table 1 below.

Discussion and Analysis

The rate of bubble production which indicated the rate photosynthesis increased as watts were increased. The values were highest at 100 watts (12 bubbles) and lowest at 0 watts (2 bubbles). The light helps initiate the photosynthesis process by ionizing chlorophyll molecules (Lehninger, Nelson, & Cox, 2008). The data supported the hypothesis that rate of photosynthesis

as measured by the number of bubbles produced increased as light intensity increased.

References

Emeritus. (2010). THE PHOTOSYNTHETIC PROCESS. Retrieved October 16, 2014, from <http://www.life.illinois.edu/govindjee/paper/gov.html>

Lehninger, A. L., Nelson, D. L., & Cox, M. M. (2008). *Lehninger principles of biochemistry* (4th ed.). New York: WH Freeman.

Seeley, R., Stephens, T. D., & Tate, P. (2004). *Anatomy and Physiology* (6th ed.). New York: The McGraw Hill Companies.