

Aim

I am going to investigate the light to find the effects of light intensity in the rate of the photosynthesis.

Introduction

Light is one of the most important substance o photosynthesis. Photosynthesis increases depend on the intensity of light. We can recognise whether bubbles occur photosynthesis. Hence, I predict that as the light intensity is increases, the number of bubbles is going to increase.

Apparatus

- 1) One 1 litre of beaker
- 2) 800 ml of water
- 3) 5cm of one pondweed
- 4) One box to cover the beaker
- 5) One 100W lamp
- 6) One metre rule
- 7) One clip
- 8) One clock
- 9) One counter to measure the number of bubbles

Method

- 1) Put 800ml of water in the 1 litre of beaker.
- 2) Put 5cm of pondweed in the water.
- 3) Stick the clip to the side of the pondweed
- 4) Put a lamp 1m from the beaker.
- 5) Put a metre rule for measure the distance between lamp and beaker.
- 6) Cover the beaker by a box except a side which the light goes in.
- 7) Approach the lamp 5cm to the beaker every minute.
- 8) Measure the number of bubbles for every minute.

Result

Distance from the pondweed	Number of bubbles in the First experiment	Number of bubbles in the Second experiment	Average
100	12	3	7.5
95	12	4	8
90	13	6	9.5
85	14	8	11
80	14	8	11
75	17	9	13
70	20	12	16
65	24	15	19.5
60	26	18	22
55	32	19	25.5
50	39	25	32
45	42	32	37
40	50	41	45.5
35	62	48	55
30	74	60	67
25	96	78	87
20	121	94	107.5
15	161	102	131.5
10	187	122	154.5
5	245	203	224
0	278	246	262

Analysis

In the result, I could realize that as the distance of lamp from the pondweed is shorter, the number of bubbles is increases. In other words, when the light intensity is increases, the photosynthesis is increases.

Evaluation

I did my experiment very keenly to make accurate. First, I did my experiment because it can have different result with same environment. Hence, I calculated the average of two results and drew the graph of result. Also, I used counter, which was for count the number of bubbles to measure accurately. Therefore, I could get good result from my method. Through this experiment, I could improve my biological observational faculty and importance of photosynthesis in Biology.