To study the effect of light on O_2 evolution

- Aim: to study the effect of light intensity on O_2 evolution.

Requirements

- Plant material: *Hydrilla*
- Chemicals: Sodium hydrogencarbonate & water
- Glasswares: beaker, funnel, test tube, glass rod.
- Miscellaneous: measuring tape (scale), source of light (table lamp), lux meter, stop watch.

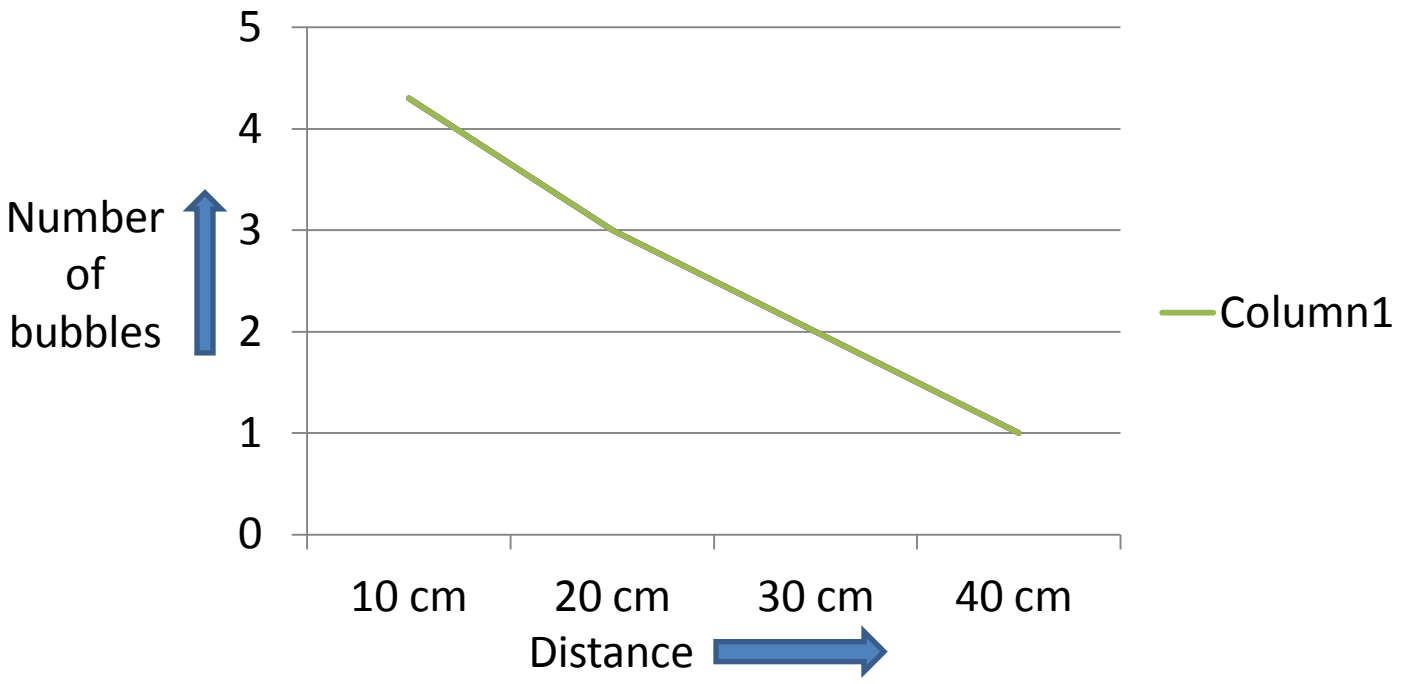
Procedure

- Set up a boiling tube containing sodium hydrogencarbonate solution (1%).
- Allow the tube to stand for a few minutes and shake to disperse any air bubbles that might form.
- Cut a piece of the pondweed (Hydrilla).
- Use forceps to place the pondweed in the boiling tube carefully. The pondweed should be cut end uppermost. Make sure that you don't damage the pondweed, or cause the liquid to overflow.
- Position the boiling tube so that the pondweed is 10 cm away from the light source.
- Allow the boiling tube to stand for five minutes. Count the number of bubbles emerging from the cut end of the stems in one minute. Repeat the count five times and record your results.
- Calculate the average number of bubbles produced per minute. Repeat the experiment at different distances away from the light source.

Observation

Numbers of bubbles	Distance from the light source
X	10 cm
Y	20 cm
Z	30 cm
M	40 cm

Result


5
4
3
2
1
0
Number of bubbles
10 cm
20 cm
30 cm
40 cm
Distance
Column1

- https://youtu.be/id0aO_OdFwA