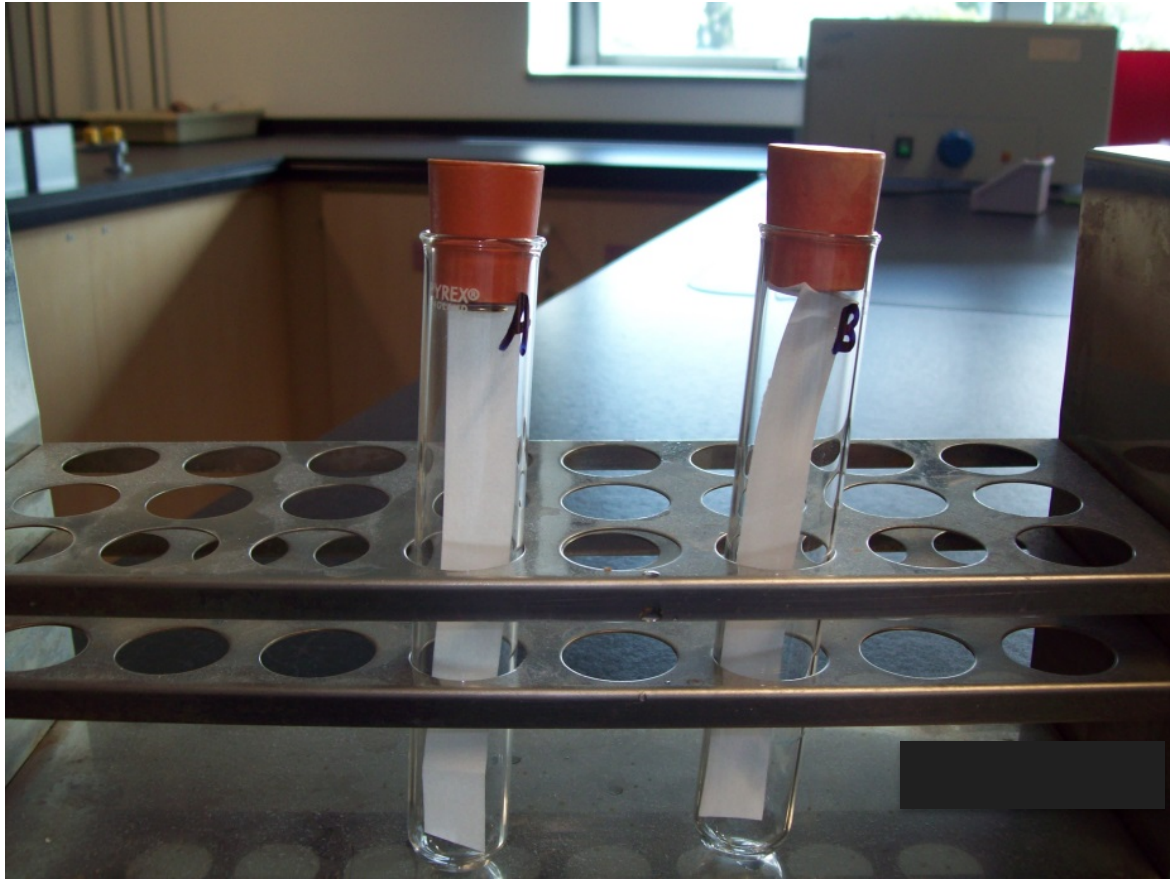


AS and A-level Biology practicals: Equipment set up

Practical 7: Use of chromatography to investigate the pigments isolated from leaves of different plants eg leaves from shade-tolerant and shade-intolerant plants or leaves of different colours

Tubes at the start



Tubes at the start

- The paper can be cut to size and fastened in the tubes with a drawing pin or similar onto a rubber bung.
- It is advised to cut the paper before the practical so strips are uniform in size and the tubes can be set up before the practical.
- Remove the paper strips and add the solvent to the tubes.
- Add a bung to the tube so the atmosphere in the tube becomes saturated with solvent.
- Put the chromatography paper attached to the original bung onto a white tile.

Leaf sample



Leaf sample

- Use a cork borer to cut a circle from a leaf, avoid the veins and midrib.
- Crush the leaf directly onto the chromatography paper.

Samples in solvent



Samples in solvent

- The solvent should be below the level of the pencil line and the crushed leaf.
- The spots of leaves need to be central on the paper and the paper must not touch the sides of the tube.

Finished chromatogram



Finished chromatogram

- Put the strips on paper towel to dry.
- Mark the solvent front in pencil and the circle individual spots that have appeared on the paper.
- Distances can be measured in mm with a ruler.