

Visualise xylem

Xylella is a devastating bacterial infection which can cause serious death and damage to a number of plant species. At the moment it is not present in the UK, but it is spreading across Europe and poses a real risk to crops and could have a big effect on farmer and gardeners. The bacteria kill plants by blocking the flow of water through them. Plants carry water from their roots to their leaves through tiny tubes called xylem.

Aim: To see the xylem of a common plant

Apparatus:

- Tumbler
- Water
- Food colouring
- Celery with leaves

Method:

Cut a piece of celery with leaves and place in a tumbler of water. Add a few drops of food colouring. Leave for the water to be drawn through the plant. Leave the stalk in the liquid in a safe place overnight.

Cut along the length of the stalk. Can you see the passage of the coloured liquid into the leaves as transpiration occurs