

Experiment 6: Plant Vascular System in a Celery Stick

Food and water are carried through tubes in plants, similar to blood vessel in animal. This is called vascular system.

Materials:

- Celery stalk with leaves
- Jug of water
- Food colouring
- Plastic bottle
- Cup
- Scissors

Instructions

An adult should help to make the plastic jar, as this could be dangerous.

Step 1

Cut off the top of the plastic bottle to make a plastic jar.

Step 2

Take a stalk of celery and cut off a small slice at the bottom to remove any hardened tissue.

Step 3

Fill the plastic jar 1/3 full of water and enough food colouring to make a food colouring to make a strong concentration.

Step 4

Place the celery into the a container of solution

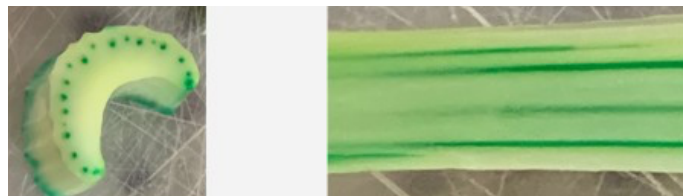
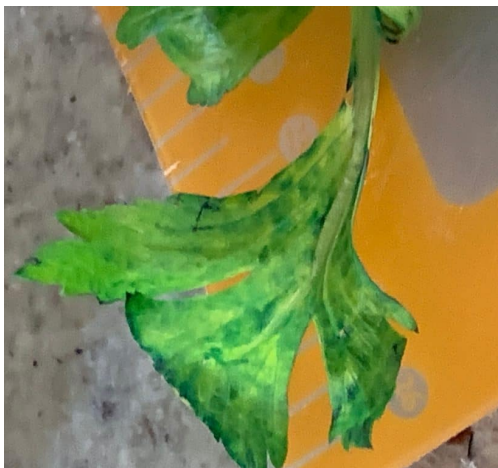
Step 5

After a few hours, remove the celery from the water.

Step 6

Cut off the bottom of the celery and examine the slice.

If you make a thin cut lengthwise along the celery stalk, you may be able to get another view of the vascular bundles.



Food colouring travels up the celery stalk and colours the celery leaf.

Within an hour or so, you may notice that the celery leaves have started to change colour as the coloured water makes its way up the stalk. It's easy to see the vascular bundles in the celery after the stalk has been placed in coloured water for a few hours.