



Investigating growing media

Seeds need a steady supply of water to germinate and get a young plant off to a healthy start. Seeds are planted in a 'growing medium', for example, soil or compost. Some growing media hold water better than others.

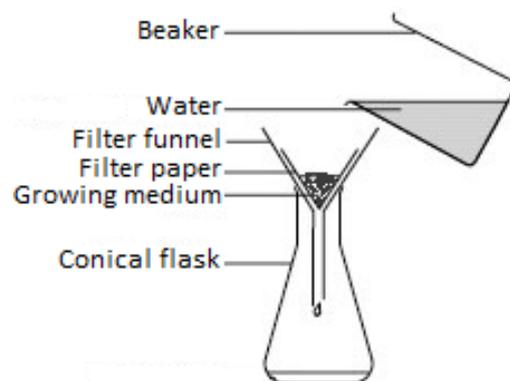
Problem

A nursery manager has asked: 'I'm trying to decide which growing medium to use to start seeds in my nursery. I read an article about the environmental consequences of using peat, but I've also heard peat is really good at holding water. What I want to know is: How much water does peat hold compared with other growing media?'

Read through the method described below.

Method

- 1 Weigh 5 g of a growing medium into a beaker.
- 2 Add about 100 cm³ of water to the beaker and swirl to mix with the growing medium. Leave for 3 minutes or longer.
- 3 Fold a piece of filter paper to make a cone and put it in a filter funnel above a conical flask.
- 4 Pour the water and growing medium into the funnel. Use a washbottle to rinse all the growing medium into the funnel.
- 5 Allow the water to drip through the filter funnel into the conical flask. Leave until 1 minute after the last drip.
- 6 Weigh the filter paper with the saturated growing medium on it.
- 7 Set up one funnel with no growing medium, and use a washbottle to soak the paper with about 100 cm³ of water. After 3 minutes weigh the filter paper to get an estimate of the mass of a piece of damp filter paper.



Make a results table to record your results, then carry out your investigation.