

3 Seeds of the common stork's-bill, *Erodium cicutarium*, are shown in Fig. 3.1.

The awn is an extension on the *E. cicutarium* seed. The seed uses the awn to push the seed head into the soil to allow the seed to germinate. The awn changes shape when the humidity changes.

Humidity is the concentration of water vapour in the air. The higher the humidity, the higher the concentration of water vapour in the air.



Fig. 3.1

A student investigated the effect of humidity on the appearance of the awn.

The student set up the apparatus as shown in Fig. 3.2.

Water can be added to the filter paper to change the humidity in the beaker surrounding the seed. Increasing the volume of water added to the filter paper increases the humidity.

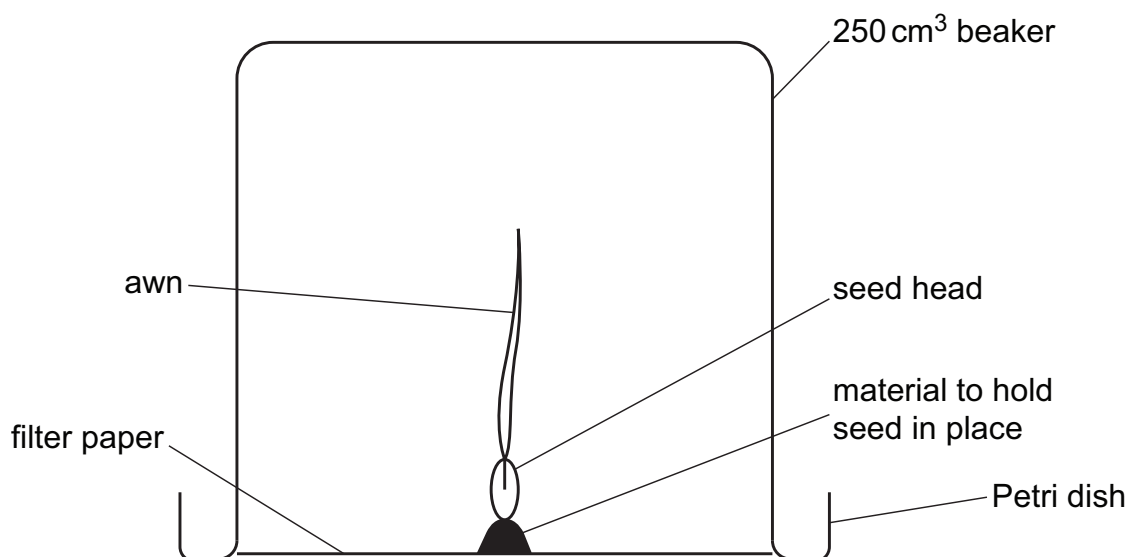


Fig. 3.2

(a) State **two** variables the student would need to standardise for the investigation using the apparatus shown in Fig. 3.2.

[2]

(b) Outline a method the student could use to measure the effect of different levels of humidity on the appearance of the awn, using the apparatus in Fig. 3.2.

Do **not** include standardised variables from (a) or a risk assessment.

[3]

[Total: 5]