

TESTING POTTING MIXES

Measuring the air-filled porosity of a potting mix

The air-filled porosity of a mix is the percentage of its volume that is air just after it has stopped draining after being saturated with water. Here is a simple way that you can measure air-filled porosity (see Chapter 13 for interpretation).

Note: This method may look long and complicated, but it really is very simple. Once you get the hang of it, you will take no more than 10 minutes to measure the air-filled porosity of a mix, although that 10 minutes will be spread over a couple of hours.

You need the following:

- a cleaned, 600 mL milk carton
- an electric drill, sharp knife or hole punch of about 8 mm diameter, for making holes in the bottom of the carton
- a 9 L plastic bucket
- water (warmed in winter for your comfort)
- casserole dish or 4 L ice-cream container
- two pieces of wood or plastic, each of about 1.5 cm square section and about 8 cm long
- measuring jug of 250 mL capacity
- calculator.

Select a cleaned, undamaged 600 mL milk carton and carefully open out the top. Mark the inside of the carton at exactly 12 cm from the base. This will usually be just above the height at which the carton had been folded over. Make four holes in its base in positions such that you can close them with four fingers while holding the carton vertical with two hands. The holes should be about 8 mm diameter, or as big as your fingers will allow.

1. Fill moistened mix into the carton right to the top. Ideally, the mix should have been fairly moist, but not sloppy, for a few days before you do this test.



Drilling holes in the base of a milk carton.