

HOW TO MEASURE AIR SPACE IN POTTING MEDIA

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A quick but effective method to determine the percentage of air space in a mix is as follows:

1. Get your test mix to average field capacity. If necessary add water to do this.

2. Use two 200 mm (8 in) pots. Put them together but separated by a thin plastic (0.002 in) film.

3. Fill the inner pot to normal height and density with the trial mix.

4. Add water by measure to the point where free water just shows above the mix (i.e. saturation point). A small depression in the mix will make it easier to determine when this point is reached.

5. Separate the two pots carefully and collect the drainage water in a bucket — this should take only 2 to 3 minutes until the pot is dripping slowly. The medium is then at field capacity.

6. Express the water added to the water drained as a percentage —

e.g. 2 litres (applied) = 100% of air space

1 litre (drained) = x

i.e. there would be 50% air space.

7. Parameters. For most plants, except ferns or water plants, the average mix should have not less than 25% to 35% air at the time of potting.

8. Use the same technique to monitor the loss of air space as the plant roots develop. If the air space gets down to less than 10%, it is likely that a more porous medium would be advantageous.