

University of California, Davis Study

Physical properties of pozzolan (in 6" pots, 12 cm soil column height).

Total porosity (% volume)	75.4
Water-holding capacity (% volume)	55.7
Air-filled porosity (% volume)	19.7
Bulk density (g/cm ³)	0.65

Yields for chrysanthemum plants grown vegetatively for 6 weeks.

Medium	Fresh wt (g)	Dry wt (g)
Pozzolan	141.5	14.8
Peat:vermiculite	121.4	12.3
Peat:perlite	118.8	12.0
Fine sand:peat:redwood sawdust	118.3	12.1
Coarse sand sand:peat:redwood sawdust	116.4	12.0

”For potting media, the rule of thumb is that air-filled porosity should be greater than 10% and water-holding capacity should exceed 40%. The pozzolan had excellent properties for a container medium. That is reflected in plant growth, too. Both fresh weight and dry weight of plants grown in pozzolan exceeded that in the other potting media”.

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