DIY Soil Drainage Perk Test for Your Yard

Almost every garden instruction guide refers to the importance of "well-draining soil." If water drains (percolates) away from plant roots too quickly, the plants will parch even if they're getting regular water. And if water doesn't drain, many plants will drown and rot from the roots up. A percolation test – or perk test – is a great way to measure drainage in your lawn or garden soil. Here's how to conduct an easy, DIY soil perk test in your yard.



Step 1: Dig Hole ... dig a hole at least 12" in diameter by 12" deep, with straight sides. If you're testing your entire property, dig several holes scattered around your yard, since drainage can vary.



Step 2: Fill Hole with Water ... fill the hole with water, and let it sit overnight. This saturates the soil and helps give a more accurate test reading.



Step 3: Refill Hole with Water ... refill hole with water the next day.



Step 4: Measure Drainage Every Hour ... measure the water level by laying a stick, pipe, or other straight edge across the top of the hole, then use a tape measure or yardstick to determine the water level. Continue to measure the water level every hour until the hole is empty, noting the number of inches the water level drops per hour.

The ideal soil drainage is around 2" per hour, with readings between 1"- 3", which is generally ok for plants that have average drainage needs. If the rate is less than 1" per hour, your drainage is too slow and you'll need to improve drainage or choose plants tolerant of wet soil. If drainage is more than 4" per hour, it's too fast.

Drainage problems can be addressed by: (1) incorporate compost and/or organic matter into the soil OR as a top dressing (it helps heavy clay soil drain and coarse sandy soils to hold moisture); (2) choose plants suited to your soil drainage; (3) build raised beds for better control over the soil texture

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