

Soil Testing

The purpose of a soil test is to supply the homeowner with enough information to make informed decisions about applying fertilizers and soil amendments.

Soil tests done at an [accredited soil testing lab in Ontario](#) can provide information on soil texture, pH, salt content, and nutrient levels (calcium, magnesium, phosphorus and potassium). Soil tests should be performed if such tests have never been done before. A soil test need not be performed more often than every 3 to 4 years.

Submit the sample the fall before planting or tilling so you can apply needed lime to change the pH over the winter. Fertilizers should be incorporated the next spring, except for turfgrass and trees.

The accuracy of the soil test reflects the sample taken. Be sure the sample is representative of the area to be treated. Sample the soil from 10 random areas of the garden to a depth of 15 to 20 cm. On established lawns, where fertilizer will be broadcast on the surface and not incorporated, sample to a depth of 5 to 8 cm at a minimum of 10 random sites on the lawn. Avoid sampling unusual areas such as those near gravel roads, manure or compost spots, brush piles, or under eaves. Place the samples in a clean pail or container, mix the soil thoroughly and allow it to air dry. Then transfer the required amount to a sample bag. Be sure to fill out the information sheets before mailing.

Remember, your soil is alive and constantly changing. By keeping it fertile and rich, you can lessen many gardening problems. Soil is the basis for plant growth, and much attention should be paid to getting and keeping it in the best condition.

13 WAYS TO CONSERVE NUTRIENTS, PREVENT POLLUTION AND PRESERVE SOIL

1. Use calcium magnesium acetate (CMA), potassium chloride (KCl), sodium chloride (NaCl) or calcium chloride (CaCl₂) to melt winter ice. Do not use urea, potassium nitrate or other chemical fertilizers containing nitrogen or phosphorous.
2. Keep bare soil covered with mulch or plant a cover crop or ground cover.
3. Fertilize according to soil test recommendations. Don't over apply fertilizers and do not exceed label directions.
4. Don't apply fertilizers to hard surfaces or allow them to wash onto streets and driveways.
5. Don't fertilize turf in the spring, unless it is a new stand or you did not fertilize in the fall.
6. Choose direct application methods (e.g., in planting hole or furrow) rather than broadcasting over a large area.
7. Leave grass clippings on your lawn ("Grasscycling") - they are a source of nitrogen for your lawn.
8. Keep stored manures and compost covered to prevent leaching of nutrients.
9. Incorporate or compost plant residues.
10. Grow ground covers in place of turf in deep shade.
11. When appropriate, substitute slow-release fertilizers for those that are highly soluble and substitute locally available organic fertilizers like farmyard manure, backyard compost and municipal yard waste compost or sewer sludge for manufactured chemical fertilizers.
12. Keep soil in raised beds framed with solid sides; avoid soil compaction.
13. Avoid cultivating soils on steep slopes; construct terraces where appropriate.