


# Soil Test Interpretation Ratings for Nova Scotia Crops

A soil test report by Lab Services shows current levels of nutrients, soil acidity, and organic content. It also provides lime and nutrient recommendations for improving soil conditions.

Following these recommendations can avoid over- or under-fertilizing and liming your fields. You should test your soil at least every three years to ensure recommendations are up to date.

To correctly interpret a soil test report, you need to understand the relationship between the test results and how the crop will respond. This relationship is based on regional research which evaluates the crop response to nutrient applications under local soil, climate, and field management conditions.

## NOTE



Perennia Lab Services recommendations follow the fertilizing the crop approach for the specific crop that was indicated on the Field Soil Submission Form. Recommendations do not build soil test levels. For recommendations for crops that were not specified on the form, contact us at [labs@perennia.ca](mailto:labs@perennia.ca), a Certified Nutrient Management Planner or qualified Agrologist.

## TYPES OF SOIL TEST INTERPRETATION

### FERTILIZING THE CROP

This determines how much fertilizer to apply just for that crop year, so that the soil has enough of the nutrients required to achieve optimum crop yields. Laboratory Services provides recommendations based on this approach.

- This doesn't build the soil nutrient, it provides the correct amount of nutrients for the specified crop.
- This is a short-term program, so it's more economical and appropriate for rented land.
- Soil should be tested annually to ensure that the right amount of fertilizer is applied for the specific crop.

### FERTILIZING THE SOIL

This determines how to fertilize the specific crop while building the soil nutrient levels over time (if they are below optimum crop levels).

- Once the nutrients reach optimum levels, the soil nutrient level can be maintained by applying nutrients at crop removal rates. See Crop Nutrient Removal Rates.
- This is a long-term program because it takes years to reach optimum crop nutrient levels, especially in a cost-effective manner.
- Soil tests are usually conducted every three years.

## LAB RATINGS

Perennia Lab Services' ratings show the level of the nutrients in current soil samples, compared to what they should be for the specified crop.

There are ten levels of ratings, based on low, medium, high, and excessive levels of nutrients.

### NOTE

#### Laboratory Services Ratings

L-, L, L+ levels are low  
 M-, M, M+ levels are sufficient H-, H, H+ levels are high  
 E levels are excessive

### LOW SOIL TEST LEVELS (L-, L, L+)

Nutrient levels in the soil are below crop requirements.

- Crops will respond when additional nutrients are applied.
- If the field has very low soil levels, it can take years of applying extra nutrients to bring the soil to optimum levels.

### MEDIUM SOIL TEST LEVELS (M-, M, M+)

Nutrient levels in the soil are sufficient or slightly below crop requirements.

- In most cases, crops will respond when additional nutrients are applied, but yield may not offset the additional cost of fertilizer.

### HIGH AND EXCESSIVE SOIL TEST LEVELS (H-, H, H+, E)

Nutrient levels in the soil are above crop requirements.

- Crops may not respond if more nutrients are applied.
- Additional nutrients are usually not recommended.

### SOIL INTERPRETATION RATINGS FOR NOVA SCOTIA CROPS

The tables below show phosphorus, potassium, calcium, and magnesium interpretation ratings for different crop groups in Nova Scotia based on soil test level results.

Table 1. Available phosphorus (P<sub>2</sub>O<sub>5</sub>) soil interpretation ratings for nova scotia crops.

Soil Rating	Soil Test Levels (kg/ha)					
	Forages	Grain	Vegetables	Small Fruits	Tree Fruits	Turf
<b>Low (L-, L, L+)</b>	0-141	0-141	0-336	0-231	0-239	0-336
<b>Medium (M-, M, M+)</b>	142-215	142-215	337-582	232-360	240-383	337-582
<b>High (H-, H, H+)</b>	216-411	216-411	583-1144	361-558	383-598	583-1144
<b>Excessive (E)</b>	411+	411+	1145+	559+	599+	1145+

Table 2. Available potassium (k<sub>2</sub>o) soil interpretation ratings for nova scotia crops.

Soil Rating	Soil Test Levels (kg/ha)					
	Forages	Grain	Vegetables	Small Fruits	Tree Fruits	Turf
<b>Low (L-, L, L+)</b>	0–121	0–121	0–179	0–121	0–179	0–179
<b>Medium (M-, M, M+)</b>	122–236	122–236	180–330	122–236	180–330	180–330
<b>High (H-, H, H+)</b>	237–514	237–514	331–703	237–514	331–703	331–703
<b>Excessive (E)</b>	515+	515+	704+	515+	704+	704+

Table 3. Available calcium (ca) soil interpretation ratings for nova scotia crops.

Soil Rating	Soil Test Levels (kg/ha)					
	Forages	Grain	Vegetables	Small Fruits	Tree Fruits	Turf
<b>Low (L-, L, L+)</b>	0–1883	0–1883	0–1883	0–1187	0–1883	0–1883
<b>Medium (M-, M, M+)</b>	1884–4157	1884–4157	1884–4157	1188–3083	1884–4157	1884–4157
<b>High (H-, H, H+)</b>	4158–7012	4158–7012	4158–7012	3084–5434	4158–7012	4158–7012
<b>Excessive (E)</b>	7012+	7012+	7012+	5435+	7012+	7012+

Table 4. Available magnesium (mg) soil interpretation ratings for nova scotia crops.

Soil Rating	Soil Test Levels (kg/ha)					
	Forages	Grain	Vegetables	Small Fruits	Tree Fruits	Turf
<b>Low (L-, L, L+)</b>	0 – 80	0 – 80	0 – 80	0 – 80	0 – 80	0 – 80
<b>Medium (M-, M, M+)</b>	81 – 432	81 – 432	81 – 432	81 – 329	81 – 341	81 – 432
<b>High (H-, H, H+)</b>	433 – 1048	433 – 1048	433 – 1048	330 – 563	342 – 714	433 – 1048
<b>Excessive (E)</b>	1049+	1049+	1049+	564+	715+	1049+

## NEED HELP?

Need help with interpreting the soil test and the recommendations? Contact us at [labs@perennia.ca](mailto:labs@perennia.ca), a Certified Nutrient Management Planner or qualified Agrologist.

## LAB CONTACT INFORMATION

For more information contact Lab Services at [labs@perennia.ca](mailto:labs@perennia.ca)  
[www.perennia.ca/labservices](http://www.perennia.ca/labservices)