

# Soil and Crop Packages

2024

**SGS**

## SOIL PACKAGES

### PACKAGE I

pH, phosphorus, potassium, magnesium (includes buffer pH, if pH is less than 6.5) OMAFRA Recommendations

### PACKAGE II

Package I plus zinc and manganese OMAFRA Recommendations

### PACKAGE III

Package I plus organic matter, calcium, zinc, manganese, base saturation, cation exchange capacity  
SGS Recommendations

### PACKAGE IV

Package I plus organic matter, calcium, base saturation, cation exchange capacity, zinc, manganese, copper, iron, boron  
SGS Recommendations

### HOME, LAWN AND GARDEN

#### PACKAGE

pH, phosphorus, potassium, magnesium, calcium, sodium, organic matter and total salts, with lime requirements and fertilizer recommendations

#### TOPSOIL PACKAGE

Texture (sand, silt, clay), total salts (EC), pH, buffer pH, phosphorus, potassium, magnesium, calcium, cation exchange capacity, chloride, sodium, sodium adsorption ratio, organic matter. Hand written amendment recommendations and nutrient guidelines.

#### PACKAGE IV by Mehlich III

##### Extraction

Same as package IV + Aluminum  
All results by Mehlich III extraction  
No recommendations, non-accredited test

##### Options

(If no base package is selected, a prep fee will apply)

Organic Matter  
Zinc and Manganese  
Total Salt  
Boron  
Sulphate Sulphur  
Nitrate Nitrogen  
Bray Phosphorus  
Aluminum (Mehlich)  
Atrazine  
Nematode Count  
Soybean Cyst Nematode  
Solvita

##### Physical Analysis

Texture (Sand, Silt, Clay)  
Sand Fraction (Particle Size Distribution)  
Bulk Density  
Hydraulic conductivity/permeability  
Packing Core (USGA)  
Proctor Mold Test

## SOIL HEALTH PACKAGE

Includes 5 tests for scoring on OMAFRA SHAP calculator: OM%, Aggregate stability, Active C, CO<sub>2</sub> Burst, Potential Minerizable Nitrogen (PMN)

## PLANT TISSUE PACKAGES

### BASIC

Nitrogen, phosphorus, potassium, magnesium, calcium

### COMPLETE

Basic plus zinc, manganese, copper, iron, boron, sulphur

### Options

(If no base package is selected, a prep fee will apply)

Sulphur  
Nitrate Nitrogen  
Molybdenum  
Chloride  
Aluminum

## FERTILIZERS

**N, P<sub>2</sub>O<sub>5</sub>, K<sub>2</sub>O**

**N**

**P<sub>2</sub>O<sub>5</sub>**

**K<sub>2</sub>O**

### AGRICULTURAL LIME

Dry matter, calcium, magnesium, neutralizing value, particle size, Ag Lime Index

## MANURE PACKAGES

### LIQUID MANURE

Dry matter, nitrogen, phosphorus, potassium, total salt, ammonium nitrogen

### DRY MANURE

Dry matter, nitrogen, phosphorus, potassium, ammonium nitrogen

### Options

(If no base package is selected, a prep fee will apply)

Calcium and Magnesium  
Zinc, Manganese, Copper, Boron, Iron  
Total Salt  
Carbon/Nitrogen Ratio  
pH

## HEAVY METALS

### HEAVY METALS

Aluminium, Arsenic, Cadmium, Chromium, Cobalt, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, Zinc

This package is designed for agricultural use in obtaining Certification from the Ministry of the Environment for land applied biosolids and NASMs.

## COMPOST PACKAGES

### Compost I

Dry matter, nitrogen, organic matter, organic carbon, C/N ratio, pH, total salt (EC), phosphorus, potassium, calcium, magnesium, sodium

### Compost II

Compost I plus cadmium, cobalt, chromium, copper, mercury, molybdenum, nickel, lead, selenium, zinc, arsenic, manganese, aluminum

### Options

PCB  
Foreign Material  
Solvita Test

## IRRIGATION WATER

### IRRIGATION WATER

Total salt (EC), pH, nitrate nitrogen, phosphorus, potassium, calcium, magnesium, sodium, chloride, sulphate, zinc, manganese, copper, iron, boron, silicon, molybdenum, total hardness, bicarbonate, total dissolved solids

## DNA MULTISCAN

This analysis can detect the presence of plant pathogenic and beneficial organisms in various mediums quickly and simultaneously.  
Levels are reported as high, medium, low and not detected.

### Basic Scan

Best suited to monitor and detect the presence of 30 common plant pathogens in soil, water and plant tissue including Pythium, Phytophthora and Verticillium.

### Diagnostic Scan

Best suited as a diagnostic tool; can detect the presence of over 60 pathogens, sub-species and beneficial organisms.

### Pesticide Scan

Over 475 chemical pesticides are included in this scan by LC and GC methods. Suitable for soil, water and produce.

### Supplies and Forms

If you require sample containers or submission forms, please contact the laboratory.

Contact details:

### SGS GUELPH

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Prices subject to applicable taxes and may be changed without notice. Prices effective February 2024. Rates are in Canadian funds.

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