



# Nutrient Testing Laboratories

## Nutrient Management Factsheet – No. 1 in Series

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The following is a list of laboratories known to provide agricultural testing services for farmers in British Columbia, in particular for nutrient management. It is not an endorsement of any laboratory. For each laboratory, the types of analyses offered are listed by the following code:

- S = basic soil fertility
- C = crop or tissue nutrients
- M = manure or compost nutrients
- W = water quality

Note that laboratories may offer additional services not listed in this factsheet. If other services are required, contact the laboratories directly.

For the purposes of developing a Nutrient Management Plan for the Canada-BC Environmental Farm Plan program, only the basic soil fertility, crop nutrient, and manure nutrient analyses are used. Fertilizer recommendations on soil test reports are not used.

### Locations in British Columbia

#### **Agrichem Analytical**

409 Stewart Rd, Saltspring Island BC V8K 1Y6  
 Phone/Fax: (250) 538-1712  
 Email: [info@agrichem.ca](mailto:info@agrichem.ca) Web: [www.agrichem.ca](http://www.agrichem.ca)

- Services offered: S, C, M, W

#### **Exova (formerly Bodycote/Norwest)**

#104, 19575 - 55A Avenue, Surrey, BC V3S 8P8  
 Phone: (604) 514-3322 Fax: (604) 514-3323  
 Toll free: (800) 889-1433  
 Web: [www.exova.com](http://www.exova.com)

- Services offered: S\*, C, M\*, W

\*Soil and manure analyses are done at another location

- Provides recommendations on soil test reports

#### **Maxxam Analytics (formerly Cantest Ltd.)**

4606 Canada Way, Burnaby BC V5G 1K5  
 Phone: 604-734-7276 Toll-free: 1 (800) 665-8566  
 Email : [info@maxxamanalytics.com](mailto:info@maxxamanalytics.com)  
 Web: [www.maxxam.ca](http://www.maxxam.ca)

- Services offered: S\*, M\*, W

\*Soil analyses are done by another laboratory

#### **MB Laboratories Ltd.**

By Courier: 4 - 2062 West Henry Ave, Sidney BC V8L 5Y1  
 By Mail: PO Box 2103, Sidney BC V8L 3S6  
 Phone: (250) 656-1334 Fax: (250) 656-0443  
 Email: [mblabs@pacificcoast.net](mailto:mblabs@pacificcoast.net)  
 Web: [www.mblabs.com](http://www.mblabs.com)

- Services offered: S, C, M, W
- Provides recommendations on soil test reports

#### **Pacific Soil Analysis Inc.**

5 – 11720 Voyageur Way, Richmond BC V6X 3G9  
 Phone: (604) 273-8226 Fax: (604) 273-8082  
 Email: [cedora19@telus.net](mailto:cedora19@telus.net)

- Services offered: S, M

#### **Plant Science Lab (affiliated with TerraLink Horticulture Inc.)**

464 Riverside Road, Abbotsford, BC V2S 7M1  
 Phone: (604) 864-9044 Fax: (604) 864-8418  
 Toll Free: (800) 661-4559  
 Email: [sales@terralink-horticulture.com](mailto:sales@terralink-horticulture.com)

- Services offered: S, C, M\*, W

\*manure analyses are done at another laboratory

## Some Locations Outside British Columbia

### A & L Canada Laboratories Inc.

2136 Jetstream Road, London ON N5V 3P5  
Phone: (519) 457-2575 Fax: (519) 457-2664  
Web: [www.alcanada.com](http://www.alcanada.com)

- ◆ Services offered: S, C, M, W
- ◆ Provides recommendations on soil test reports

### ALS Laboratory Group

819 58 St. East, Saskatoon SK S7K 6X5  
Phone: (306) 668-8370 Fax: (306) 668-8383  
Toll free: (800) 667-7645  
Web: [www.alsglobal.com](http://www.alsglobal.com)

- ◆ Services offered: S, C, M, W
- ◆ Provides recommendations on soil test reports

### Brookside Laboratories Inc.

308 South Main St., New Knoxville OH 45871  
Phone: (419) 753-2448 Fax: (419) 753-2949  
Email: [lbaker@blinc.com](mailto:lbaker@blinc.com)  
Web: [www.blinc.com](http://www.blinc.com)

- ◆ Services offered: S, C, W

### Soil Foodweb Canada Ltd.

285 Service Rd, Box 420 Vulcan, AB T0L 2B0  
Phone: (403) 485-6981 Fax: (403) 485-6410  
Email: [info@soilfoodweb.ca](mailto:info@soilfoodweb.ca)  
Web: [www.soilfoodweb.ca](http://www.soilfoodweb.ca)

- ◆ Services offered: S, C

## Know Your Soil Test Methods

Different laboratories use different methods, and soil test values for a soil sample can vary from one laboratory method to another. Soil nitrogen methods are an exception; the choice of the laboratory method should have a small effect on soil test values.

In conventional soil fertility testing, a method involves several factors. A main factor is the **extractant** (the chemical solution added to a given soil to remove what should reflect the 'available' portion of a nutrient from that soil). Knowing this basic information about your soil test methods will help with interpreting soil test values. How extractants compare and other factors behind soil testing are discussed in greater detail in Factsheet 3 of the Nutrient Management Factsheet Series: *Understanding Different Soil Test Methods*.

For each laboratory that provides its soil fertility testing services, default extractants are listed for soil phosphorus and potassium in the table below. In other words, when no specific method has been requested, these extractants have been used. Soil test users should confirm this information with their chosen laboratory. Laboratories may offer other methods depending on client needs and the laboratories' capabilities.

**Table 1.** Default methods (extractants) for available soil phosphorus (P) and potassium (K) tests of nutrient testing laboratories. Laboratories may offer additional methods.

Laboratory	P extractant	K extractant
Agrichem Analytical	Kelowna	Kelowna
A & L Canada Laboratories Inc.	Olsen (Bicarbonate)	Ammonium Acetate
	Bray 1	
ALS Laboratory Group (formerly Enviro-Test)	Modified Kelowna 94 <sup>a</sup>	Modified Kelowna 94 <sup>a</sup>
Brookside Laboratories Inc.	Mehlich 3	Mehlich 3
Exova (formerly Bodycote or Norwest)	Modified Kelowna 95 <sup>b</sup>	Modified Kelowna 95 <sup>b</sup>
MB Laboratories Ltd	Modified Kelowna 94 <sup>a</sup>	Modified Kelowna 94 <sup>a</sup>
Pacific Soil Analysis	Bray 1	Ammonium Acetate
Plant Science Lab	Mehlich 3	Mehlich 3
Soil Foodweb Canada	Mehlich 1	Mehlich 1

a. Qian, Schoenau and Karamanos (1994) proposed this extractant.

b. Ashworth and Mrazek (1995) proposed this extractant.

**Table 2.** Common soil test phosphorus and potassium extractants and their compositions.

Extractant	Chemical Composition
Ammonium Acetate	1.0 M CH <sub>3</sub> COONH <sub>4</sub> at pH 7.0
Bicarbonate (Olsen)	0.5 M NaHCO <sub>3</sub> at pH 8.5
Bray 1	0.03 M NH <sub>4</sub> F + 0.025 M HCl
Kelowna	0.015 M NH <sub>4</sub> F + 0.25 M CH <sub>3</sub> COOH
Mehlich 3	0.015 M NH <sub>4</sub> F + 0.2 M CH <sub>3</sub> COOH + 0.013 M HNO <sub>3</sub> + 0.25 M NH <sub>4</sub> NO <sub>3</sub> + 0.001 M EDTA
Modified Kelowna 94 <sup>a</sup>	0.015 M NH <sub>4</sub> F + 0.025 M CH <sub>3</sub> COOH + 0.25 M CH <sub>3</sub> COONH <sub>4</sub>
Modified Kelowna 95 <sup>a</sup>	0.015 M NH <sub>4</sub> F + 0.5 M CH <sub>3</sub> COOH + 1.0 M CH <sub>3</sub> COONH <sub>4</sub>

a. See footnotes in Table 1.