

North American Proficiency Testing Program

The North American Proficiency Testing (NAPT) Program assists soil, plant, and water testing laboratories in their performance through inter-laboratory sample exchanges and a statistical evaluation of the analytical data. This program benefits the agricultural testing laboratory industry.

The program guidelines have been developed for the agricultural laboratory industry by representatives from groups familiar with and involved in standardizing methods and developing nutrient recommendations for soil and plant analysis methods within the U.S. and Canada. It is operated as an activity of the Soil Science Society of America and overseen by an oversight committee comprised of representatives of the above-mentioned groups. These include: Regional Soil and Plant Analysis Workgroups; Scientific Organizations; State/Provincial Departments of Agriculture; and private and public and plant analysis labs.

Program Objectives:

- Provide an external quality assurance program for agricultural laboratories.
- Develop a framework for long-term improvement of quality assurance of the agricultural laboratory industry.
- Identify variability of specific analytical methods.

Specific Soil Analyses:

- Saturated Paste Percentage, pH, EC_e, HCO₃, Ca, Mg, Na, SAR, Cl, SO₄, NO₃ & B
 - Soil pH: (1:1), (1:2) & 0.01 M CaCl₂
 - Buffer pH †
 - NO₃-N †
 - NH₄-N, Al, & KCl extractable
 - Extractable P †
 - Extractable K †
 - Extractable Ca, Mg & Na †
 - Extractable SO₄-S & S
 - Micronutrients: Zn, Mn, Fe, Cu, B & Cl †
 - Soil organic matter †
 - Soil total organic carbon & nitrogen †
 - Inorganic carbon
 - Particle size analysis: sand, silt & clay
 - CEC
- († multiple methods)

Specific Plant Analyses:

- NO₃-N †, PO₄-P, SO₄-S, NH₄-N & Cl
- Total nitrogen †
- Total P, K, S, Ca, Mg, Na, Al, B, Zn, Mn, Fe, Cu & Mo †

Specific Water Analyses:

- pH, EC, Ca, Mg, Na, K, Cl, SAR, NO₃-N, NH₄-N, HCO₃, CO₃, SO₄-S, B, Total P ICP, Total N†, TOC & Cation:Anion Ratio

Soil Environmental Analyses:

- Ag, Al, As, Ba, Be, Bi, B, Ca, Cd, Cr, Co, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, Pb, P, S, Sb, Se, Sn, Sr, V & Zn & Hg



As a 2012 program participant, you will receive *CSA News*, a monthly publication of ASA • CSSA • SSSA, and have the option to be listed as a program participant on the NAPT website. Participants new to the program in 2012 will also receive the new *Soils Lab Manual*. This document provides a model for developing a Quality Assurance/Quality Control (QA/QC) plan for a soil testing laboratory. The information presented comes from previous publications on QA/QC and from the authors' laboratory experiences. Program participants will also receive additional materials and inserts on a periodic basis.

The manual has been printed on a durable, specialty paper that can get wet and be easily cleaned, valuable for the laboratory environment.

Improving the Quality of the Agricultural Analysis Industry

Fee Structure:

2012 NAPT Fees:

- Soil Program only (4x year)–\$580
- Soil Program only (2x year)–\$360
- Plant Program only–\$375
- Water Program only–\$395
- Plant & Water Program–\$570
- Soil & Plant Program–\$760
- Soil & Water Program–\$760
- Soil & Environmental Soil Program–\$810
- Soil, Water & Environmental Soil Program–\$995
- Soil, Plant & Water Program–\$895
- Soil, Plant, Water, Environmental Soils–\$1125
- Soil, Plant & Environmental Soil Program–\$995
- *QA/QC Manual–\$50
- **Performance Assessment Program (PAP)–\$300

*Purchase requires participation in an NAPT Program

**Soils Program only (2x year) participants are not eligible for this program.

NOTE: An additional Processing Fee of \$175 will be accessed to participants not enrolled by January 20, 2012

Four exchanges will occur in March, May, July, and September 2012. For Soil Programs enrolled in the 2x per year, exchanges will occur in March and July.

Shipping—Outside US

For shipping outside of the United States, the following rates will be added to the program price, based on your shipping location:

- Canada–\$60
- Mexico–\$100
- Philippines–\$200
- Argentina–\$200

If you would like your samples shipped in a manner other than US Mail, contact john.lawley@usu.edu for rates.

NOTICE TO LABS OUTSIDE THE US:

Delivery of soil and plant materials to labs outside the United States cannot be guaranteed without an import permit. Please fax a copy of your import permit to John Lawley at 435-797-3376 prior to January 20, 2012.

To Enroll:

To enroll in the NAPT program, send the enrollment/renewal form available online with payment (payable to SSSA in US funds drawn on a US bank) by January 20, 2012 to:

NAPT Program

Attn: Nate Ehresman
Soil Science Society of America
5585 Guilford Rd. • Madison, WI 53711-5801
Phone: 608-268-4972 • Fax: 608-273-2021
email: napt@soils.org

Enroll or renew online:

www.naptprogram.org/forms/

Further Information:

For further information on the NAPT program or how to purchase specific Reference Soils and plant materials utilized in the program, separately from the enrollment/renewal form, visit www.naptprogram.org or contact the program coordinator:

Dr. Grant Cardon
Utah State University
4831 Old Main Hill
Logan, UT 84322-4831

Phone: 435-797-2278
Email: napt@usu.edu

Acknowledgment

The North American Proficiency Testing Program is overseen by an oversight committee of SSSA and acknowledges the contributions of the following groups: regional work groups NEC-67, NCR-13, SERA-6, and WERA-103; Soil and Plant Analysis Council; Soil Science Society of America; Canadian Society of Soil Science; The Minnesota Dept. of Agriculture; Missouri Soil Testing Association Certification FSA Program; Nebraska Dept. of Agriculture; Iowa Dept of Ag & Land Stewardship; Illinois Soil Testing Association; Purdue FSA Program; Ontario Ministry of Agriculture, Food and Rural Affairs; Michigan State FSA Program; Ohio FSA Program; Wisconsin FSA Program; USDA-NRCS; USEPA; and the commercial lab industry.

North American Proficiency Testing Program for Soil, Plant, & Water Analysis Laboratories



Soil Science Society
of America



NAPT Program
North American Proficiency Testing

2012 Information

www.naptprogram.org