



North American Proficiency Testing Program

The **SSSA North American Proficiency Testing (NAPT) Program** furnishes agricultural and environmental laboratories with quality assurance / quality control tools to generate accurate and precise analyses. Laboratories receive quarterly blind and double-blind statistical evaluations of soil, plant, water, and environmental soil. The program assists laboratories in leveraging their participation in assuring clientele and consumers that their data meet high standards. Participating laboratories benefit from the scientific resources of the Soil Science Society of America and the vast expertise of its many member scientists.

The NAPT program is operated as an activity of the Soil Science Society of America (SSSA) and an oversight committee comprised of volunteer representatives of 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 and environmental 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

Salinity: saturated paste pH, EC_e , HCO_3 , Ca, Mg, Na, SAR, Cl, SO_4 , NO_3 , B
 pH and EC: (1:1), (1:2), 0.01M $CaCl_2$
 Buffer pH[†]
 NO_3-N [†] and NH_4-N (KCl extr.)
 PO_4-P [†] and SO_4-S (PO_4 extr.)
 Bases: K, Ca, Mg, Na, Al[†]
 Mehlich-1 and Mehlich-3 multi-element
 Micronutrients: Zn[†], Mn[†], Fe, Cu, Cl, B[†]
 Soil organic matter[†]
 Total N, TKN, Total C, TOC, $CaCO_3$ [†]
 CEC
 Particle size analysis[†]
 Soil health: CO_2 respiration[†], enzyme activity[†], PMN, POxC, ACE protein

Specific Plant Analyses

NO_3-N [†], NH_4-N , PO_4-P , SO_4-S , Cl
 Total N[†], S, and C
 P, K, Ca, Mg, S, Na, Al, B, Zn, Mn, Fe, Cu, Mo, Ba, Cd, Co, Cr, Ni, Pb, Se, Sr, and V[†]

Specific Water Analyses

pH and EC
 Ca, Mg, Na, K, NH_4-N , SAR, Adj. SAR
 HCO_3 , CO_3 , Cl, NO_3 , SO_4 , Cation-Anion Difference
 B, PO_4-P , Total P ICP, TKN, Total N, TOC

Soil Environmental Analyses

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

[†] multiple methods

As a NAPT program participant, you will receive CSA News, a monthly publication of ASA, CSSA, and SSSA, and have the option to be listed as a program participant on the NAPT website. New participants also receive a waterproof copy of the NAPT Quality Assurance and Quality Control Manual, which provides guidelines for laboratories to follow in developing and maintaining a QA/QC plan.

Participants select to receive soil, plant, water and/or environmental soil samples. Four exchanges (4x) occur in February, May, August, and November. Although most laboratories opt for all four quarters, some may choose to do just two exchanges where offered. Test data are submitted online at the completion of each quarter.

For labs outside the US, delivery of soil and plant materials to international locations is welcome but cannot be guaranteed without an import permit. When you enroll, please email a copy of your import permit to John Lawley at john.lawley@usu.edu or call 435-797-2117.

The Performance Assessment Program (PAP) is an additional voluntary program offered to all soil and plant testing laboratories. This program has been adopted by the NRCS as assurance that analyses are being performed using validated testing methods and requires adherence to a code of ethics. More on the [PAP website](#).

	Soil	Plant	Water	Env	2x	4x
Soil Program	✓				\$480	\$760
Plant Program		✓			\$320	\$520
Water Program			✓		\$320	\$520
Soil and Plant Program	✓	✓			\$520	\$995
Soil and Water Program	✓		✓		\$520	\$995
Soil and Env. Soil Program	✓			✓	\$685	\$1,060
Plant and Water Program		✓	✓		\$470	\$745
Soil, Plant, and Water Program	✓	✓	✓		\$850	\$1,175
Soil, Plant, and Env. Soil Program	✓	✓		✓	\$850	\$1,305
Soil, Water, and Env. Soil Program	✓		✓	✓	\$685	\$1,305
Soil, Plant, Water, and Env. Soil Program	✓	✓	✓	✓	\$850	\$1,475
Soil PAP *	✓				-	\$390
Plant PAP *		✓			-	\$115

Enroll online!
www.naptprogram.org/forms

Shipping will be charged to all program participants based on location via UPS ground service.

An additional Processing Fee of \$195 will be charged to participants not enrolled by January 19, 2023.

* The Performance Assessment Program (PAP) is an add-on service for labs enrolled in a 4x program.

Ready to learn more? Visit the NAPT website at www.naptprogram.org or contact:

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Acknowledgment

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