

Western States Agricultural Laboratory Proficiency Testing Program

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Project Leaders

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Objectives

1. Provide an external measure of individual laboratory accuracy.
2. Develop a framework for improving the long-term quality of agricultural analyses.
3. Identify levels of accuracy and precision of specific analytical methods.

Summary

The program is based on the quarterly exchange of soil and plant materials, on which standard agricultural analysis is conducted using standard methods. The 1998 Western States Program merged with five other programs from across the United States and Canada to form the North American Proficiency Testing Program for Agricultural Laboratories (NAPT). Information and results from the previous three years of NAPT program can be accessed via internet (<http://rbt.agsci.usu.edu/soil.science/usual/aglab.pt/>) or located via the Utah State University home page. The number of soils utilized was increased from three to six per quarter to accommodate the greater range of soil properties. Laboratories enrolled in the program can choose from a list of 75 soil analyses. Soil and plant materials utilized in the program were collected from across the United States, of which four were collected from California. For the second quarter of the 1998 NAPT Program, 165 laboratories have enrolled, of which 35 provide analytical services in California.

Beginning in the 1999, NAPT Program has become an organized activity of the Soil Science Society of America, coordinated by Robert O. Miller, Soil Scientist at Colorado State University, and sample materials prepared by Janice Kotuby-Amacher, Analytical Laboratory Director of Utah State University. Two laboratory analytical workshops have been organized to address laboratory analytical problems. The program has been well received by the industry, and results have been published in the popular press and in scientific proceedings. Annual results from the 1996 and 1997 program are available from the project leaders. Two manuals (*Plant, Soil and Water Reference Methods for the Western Region and*

Western States Agricultural Laboratory Exchange Program: Suggested Soil and Plant Analytical Methods, Version 4.10) describing the analytical methods used were published and are available for distribution.