

## UC Davis Analytical Laboratory

A CA&ES Core Support Facility

high quality agricultural and environmental testing

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Please visit our website: [anlab.ucdavis.edu](http://anlab.ucdavis.edu)



**Our mission is to provide high quality agricultural and environmental testing support to CA&ES researchers**

### Sample Types and Tests

#### Soil Types

- Soil
- Compost
- Soil Extracts



#### Plant and Feed Samples

- Plant Tissue
- Fruit and Vegetables
- Animal Feed
- Biowaste
- Manure



#### Water Samples

- Water
- Wastewater
- Miscellaneous liquids
- Extracts



#### Soil Tests

- Elemental Analysis
- Fertility and Nutrient Status
- Physical Characteristics
- Salinity

#### Plant and Feed Tests

- Nutrients
- Elemental Analysis
- Total Nitrogen & Carbon
- Fiber, Ash, Moisture
- Carbohydrates

#### Water Tests

- Elemental Analysis
- Salinity
- Alkalinity
- Nutrients

### Lab Instrumentation



#### Sample Preparation

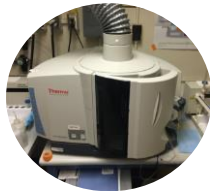
- Wiley Mills
- Braun Soil Pulverizer
- Microbalances

#### Inorganic

- Thermo iCAP 6500 and 7400 ICP-OES
- CEM microwave sample digestion system

#### Spectrometers

- Lachat QuickChem Flow Injection Analyzers (FIA)
- Timberline Flow Injection Analyzer
- Molecular Devices SpectraMax Plus Plate Reader



#### Nitrogen / Carbon

- LECO-TruMac carbon/nitrogen analyzer
- LECO TruSpec carbon/nitrogen analyzer
- Thermo-Finnegan 1112 carbon/nitrogen analyzer
- Skalar Formacs TOC/TN Analyzer

#### Chromatography

- Sciex API 3200 HPLC tandem mass spectrometer
- Exion LC system and UV detector
- Dionex ICS-2000 Ion Chromatograph

#### Fat and Fiber Instruments

- Gerhardt Soxtherm Fat Extractor
- Labconco Crude Fiber Apparatus

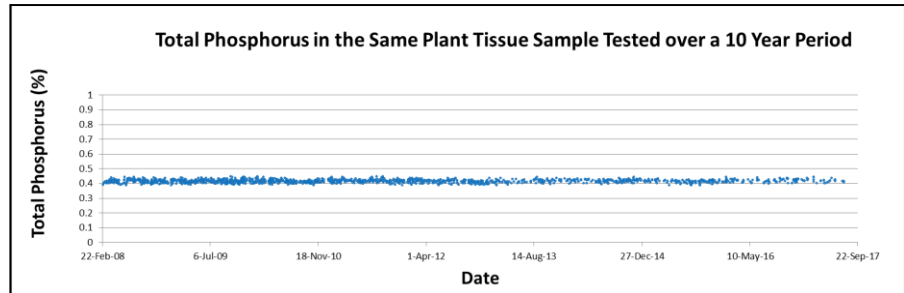
# Benefits of Using the Analytical Laboratory

## Test results you can count on

- **Our top priority is high quality**  
High quality testing is a critical requirement for research projects and peer reviewed papers.
- **We verify the accuracy and precision of all test results**  
Every set of your samples is run with numerous quality control samples. This extensive effort greatly exceeds that of typical commercial labs or graduate student researchers.

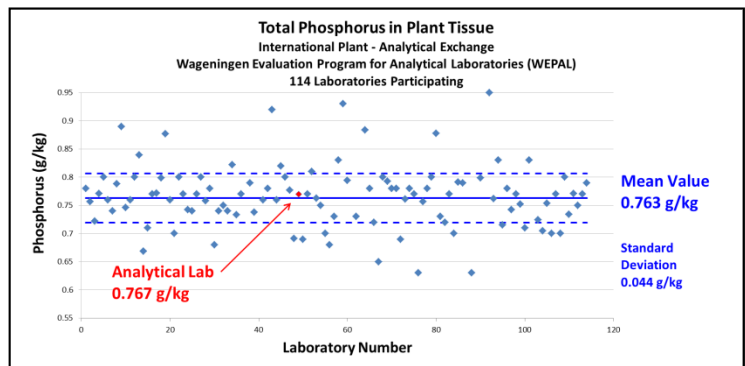
## Consistent test results - year after year

- **We have an extensive quality assurance program**  
Our quality assurance program allows consistency of test results over many years.



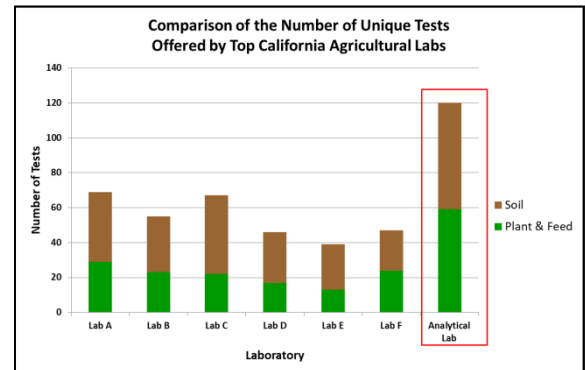
## Results that conform with national standards

- **We are consistently rated excellent in lab proficiency programs.**  
We participate in programs such as the North American Proficiency Program (NAPT), Agricultural Lab Performance Program (ALP), and National Forage Testing Association (NFTA). These programs send us blind samples for testing and compile the results to evaluate lab performance.



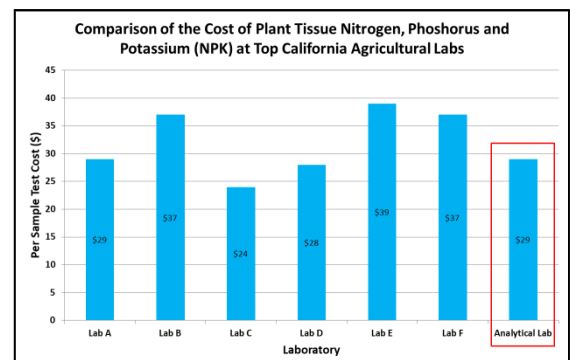
## A large selection of tests

- **We offer over 200 tests**  
We also develop tests in response to your needs. We are proficient in testing a wide variety of challenging sample types.



## Reasonable test prices

- **Our rates are comparable to top agricultural labs in California.**  
Despite the large overhead required to produce high quality work, we are able to keep costs down with high throughput testing.



## Convenient location

- **Our location in Hoagland Hall is convenient for you to drop off samples or to meet with us.**