

By the Numbers

- Served the Texas Feed & Fertilizer industry in 2016 with **5,425 total samples** analyzed:
 - ◇ **745 verification samples** analyzed for aflatoxin risk management program
 - ◇ **271 samples** analyzed for involvement in food emergency response
- Proficiency testing program has reached **196 labs in 60 countries**
- **35 Texas grain operators** participating in voluntary aflatoxin risk management program annually
- Average lab turn-around time for violative samples is:
 - ◇ **8 calendar days** for regulatory samples
 - ◇ **5 calendar days** for verification samples
- Chemists participate in approximately **80 proficiency sample challenge exercises** annually
- Lab quality course has served **107 students in over 47 countries**
- Provide lab tours for approximately **350 individuals** per year

Contact Us

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Biosafety Level 2 lab

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Office of the Texas State Chemist

Agricultural Analytical Service

ISO 17025 Accredited



Protecting animal and public health and enhancing agribusiness by providing accurate, defensible, and timely laboratory results and actions



Gas chromatography mass spectrometer

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Instrumentation

- Mass spectrometry (MS)
 - ◊ Gas chromatography (GC)
 - ◊ Ultra high performance liquid chromatography (UPLC)
 - ◊ Inductively coupled plasma (ICP)
- Inductively coupled plasma optical emission spectrometry (ICP-OES)
- Atomic absorption (AA)
- Polymerase chain reaction (PCR)
- Enzyme linked immune-sorbent assay (ELISA)

Protecting Consumers

Samples of feed, feed ingredients, and fertilizer are analyzed for contaminants, including:

- Trace and heavy metals
- Toxins
- Mycotoxins
- Pathogens
- Drugs

Collaborative Efforts

- Provide surveillance for the U.S. Department of Agriculture
- Perform inspections and sample analysis under contract with the Food and Drug Administration
- Participate in the Food Emergency Response Network of laboratories involving local, state, and federal agencies
- Provide Lab Quality training for professionals worldwide with the Food and Agriculture Organization
- Assist faculty and graduate student research via technical consultation

**A 30,000 sq. foot,
ISO accredited,
Biosafety Level 2
Compliant, Regulatory,
& Research Laboratory**

Regulatory Activities

- Manage risk to create a competitive and well functioning marketplace for agribusiness
- Analyze feed and feed ingredients for contaminants that pose a risk to animal and/or human health and the environment
- Generate accurate, reliable, and timely analytical results
- Provide evidence of fraudulent manufacturing practices
- Ensure label guarantees

Preventive & Verification Activities

- Utilize a Lab Quality System to ensure quality results
- Conduct a global aflatoxin proficiency testing program
- Produce reference material to ensure testing accuracy among laboratories
- Perform method validation
- Conduct regulatory science research to develop tools, practices and standards that improve protection and compliance of food systems



Microscopy work



UPLC system with electro spray ionization



Prepared toxin reagents



HPLC separations system



Sample collection



Reference materials



GC/MS with Triple-Axis Detector