



**2012**

# **INDIANA SEED CONTROL REPORT**

*Providing education, service and protection to Indiana Consumers and seed industry to assure quality seed products of the highest integrity are truthfully represented and available in the marketplace*

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- OUR PURPOSE**

**The Indiana Seed Law** (IC 15-15-1) is administered by the Office of Indiana State Chemist & Seed Commissioner. Seeds are the primary means to produce the plants which carry the traits that provide us with the food and fiber for an increasing population with ever higher expectations of the products purchased. Our field, laboratory, and office staff strive to carry out our mission in administration and enforcement of the Act.

- INSPECTION, SAMPLING AND TESTING IN SUPPORT OF THE INDIANA SEED LAW**

Total Official Samples Collected in 2012:	2,261	Seed Permit Holders (distributors/labelers):	275
Total Service Samples Tested in 2012:	1,893	Crop Kinds Tested:	264
Total Samples Tested in 2012:	4,154	Label Claims Verified:	11,350
Total Inspectional Visits Made in 2012:	585	Retail Dealers Visited and Sampled:	456
Individual Labelers Sampled:	342		

- ENFORCEMENT ACTION TAKEN IN 2012**

Enforcement action initiated in 2012 was based on the seriousness of the violations found as a result of either laboratory analysis or inspectional observations discovered during facility inspections.

Official Samples Tested in 2012:	2,261		
Official Samples Passing:	2,174	96.2%	
Samples Deficient:	88	3.8%	Impacting 1,084,700 pounds of seed
Minor Violations (relabeling orders)	*44	1.9%	Impacting 913,000 pounds of seed
Serious Violations (stop sale orders)	**44	1.9%	Impacting 171,700 pounds of seed
Inspector-Issued Stop Sale Orders	72	Orders	Impacting 46,800 pounds of seed

Laboratory analysis done to verify label claims of “mechanical purity” (included Pure Seed %, other crop seed %, inert matter %, weed seed %, noxious weed seed), seed count, and “viability” (germination, hard seed and dormancy). Additional claims evaluated included genetic trait verification for glyphosate tolerance (by both lateral flow immunoassay and bioassay) and Bt traits including Cry1Ab, Cry3Bb, Cry34, MCry3A, and Cry1F (utilizing lateral flow immunoassay test kits).

\* Relabeling orders issued against seed lots classified as “minor” violations as a result of laboratory analysis

\*\* Stop sale action taken against seed lots classified as “serious” violations as a result of laboratory analysis

- SEED DISTRIBUTION IN INDIANA**

Table 1. Kind of Seed	2011 Distribution	2012 Distribution
Alfalfas	1,299,500 lbs	1,385,900 lbs
Clovers	671,100 lbs	954,400 lbs
Vegetables	673,100 lbs	737,500 lbs
Grasses	10,095,000 lbs	10,353,400 lbs
Corn	112,816,900 lbs	111,039,000 lbs
Soybeans	304,384,800 lbs	291,915,700 lbs
Wheat	32,746,100 lbs	48,204,100 lbs
Oats	2,400,700 lbs	3,893,300 lbs
Miscellaneous	16,206,000 lbs	18,781,100 lbs

- **GENETIC TRAIT TESTING MONITORING PROGRAM**

Soybean varieties and corn hybrids were again monitored in 2012 to detect the possibility of low level contamination of conventional lines with genetically modified (GM) traits. Immunoassay tests were utilized to screen seed lots for low-level contamination of GM traits.

<u>Event</u>	<u># Samples Tested</u>	<u>Type of Test</u>	<u># Testing +</u>	<u>Levels Found</u>
Herbicide Resistance <i>(Roundup Ready Corn Liberty Link Corn Roundup Ready Soybeans)</i>	36	Immunoassay	13	range: 0.39%-0.72%
	10	Immunoassay	1	range: 0.14%-0.31%
Bt Events <i>(Cry1Ab, Cry3Bb Cry1F, Cry34, MCry3A)</i>	36	Immunoassay	11	range: 0.25%-0.77%

- **CASES SUBMITTED TO USDA IN SUPPORT OF FEDERAL SEED ACT COMPLIANCE**

Samples were collected and submitted to USDA Seed Regulatory and Testing Division in 2012 in support of the Cooperative Agreement for enforcement of the Federal Seed Act on shipments of seed moving in interstate commerce. OISC submitted 13 samples that were found to be in violation of the Indiana Seed Law and Federal Seed Act in 2012, representing 11 interstate shippers. Final settlement of cases submitted in previous years was achieved during 2012 on 1 seed lot with a fine totaling \$2,600 involving 1 interstate shipper.

- **PROVIDING SUPPORT TO OTHER AGENCIES AND UNIVERSITY DEPARTMENTS**

The OISC seed program provides support in the form of seed testing and document review and approval to the following State agencies:

INDOT (Indiana Dept. of Transportation) – Road construction and renovation projects in Indiana that utilize seed planting to stabilize soil utilize OISC as a reviewer of documents (seed analysis reports) for each specific seed lot used by contractors around the state. INDOT requires an official review be done by OISC on each specific project before the contractor is allowed to proceed with seeding and sowing. Case Review summaries are issued by the seed administrator for each INDOT Job Number utilizing seed. During 2012, the seed administrator reviewed 2,277 documents for 90 specific INDOT Projects completed in the state. In the case of seed lots utilizing seed of the standard agricultural crop kinds used in the Midwest, OISC inspectors visit Indiana seed dealers and sample specific seed lots destined for use on INDOT projects. Samples are submitted to the state seed laboratory for testing and results are provided to INDOT and the dealer to determine if lots meet the minimum quality standards set forth in INDOT guidelines. In 2012, 81 seed lots were sampled and tested to determine if quality levels were sufficient to meet INDOT guidelines.

Certificates of Origin – Indiana seedsmen marketing their seed products overseas are sometimes faced with certain demands of the receiving foreign country. Some countries require a “certificate of origin” that declares a confirmation of where that seed was grown. Requests for certificates declaring this are forwarded to the OISC seed program along with supportive documentation and an official “government certificate” is prepared and supplied to the seedsman for forwarding to the requesting foreign country. In 2012, three (3) certificates were issued by OISC to seedsmen in Indiana for this purpose.

Certificates of Free Sale – Some foreign countries require the issuance of a “certificate of free sale” seeking the assurances from a government agency that specific products comply with the requirements of US laws for distribution in our domestic commerce. In 2012, the OISC Seed Administrator issued certificates for 2 specific products achieving registration under our Indiana Seed Law or Legume Inoculant and Plant Growth Substances Law at the request of the exporting company.

Purdue P&PDL/ADDL - Plant & Pest Diagnostic Laboratory/Animal Disease Diagnostic Laboratory (Purdue)  
The OISC seed laboratory is called upon to identify unknown seed specimens in submitted samples from either the P&PDL and/or ADDL diagnostic laboratories on the Purdue campus. During 2012, one (1) sample was received by the state seed laboratory for identification and/or confirmation for these laboratories.

OISC Feed Control Section – Analysis was performed on official feed samples obtained by OISC staff in support of the Indiana Feed Law, to analyze for weed seed content and other contaminants via a microscopic examination. In 2012, 55 samples were analyzed with 11 found to be out of compliance with feed rule limitations (20%).

- **PROVIDING SUPPORT TO INDIANA FARMERS AND GROWERS**

The Indiana State Seed Laboratory, by virtue of specific language in the Indiana Seed Law which reads ...”the state seed commissioner is authorized to make or provide for making purity and germination tests for farmers and dealers on request ...” provides a fee-based testing service to farmers and dealers. A summary of 2012 testing is shown below:

Total Samples Submitted and Tested	1,893	No. of Clients Submitting Samples	70
Number of Seed Crops Tested	271		
Total Testing Fees Collected	\$12,268		