
**OUR MISSION:**
The mission of the Office of Indiana State Chemist Seed Section is to provide education and service to consumers of seed and the seed industry, assuring quality products of the highest integrity are available in the marketplace and are truthfully represented. The State Chemist serves as the Seed Commissioner administrating these laws. The Section also fulfills assigned responsibilities in seed arbitration and inspections under seed contracts.

**INSPECTION:**
**SAMPLING:**
- Inspection Visits: 585
- Dealers Sampled: 456
- Official Samples: 2,261
- Labelers Sampled: 342

**TESTING:**
- Official Samples Total: 2,261
- Service Samples Total: 1,893
- Total Samples Tested: 4,154

**ENFORCEMENT ACTIONS TAKEN IN 2012:**
Enforcement action initiated in 2012 was dictated by the seriousness of the violations found as a result of either laboratory analysis or inspecational observations discovered during facility inspections.

- Official Samples tested in 2012: 2,261
- Official Samples passing: 2,174 ......(96.2%)
- Samples deficient: 88 ............(3.8%)
- Minor Violations based on product analysis (Relabeling Orders): 44 ............(1.9%) 913,000 lbs. of seed*
- Serious Violations based on product analysis (Stop Sale Orders): 44 ............(1.9%) 171,700 lbs. of seed**
- Inspector-Issued Stop Sale Orders: 72 ............................................. 46,800 lbs. of seed
- Total Pounds of Seed Under Stop Sale Orders: ................................. 218,500 lbs. 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 lateral flow immunoassay) and Bt traits including Cry1Ab, Cry3Bb, and 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.

**COMPLAINT INVESTIGATIONS:**
OISC inspectors 9 complaint investigations involving seed purchasers with issues related to alleged germination performance and seed purity, along with mislabeling. These complaints involved 4 distributors.

**GENETIC TRAIT TESTING MONITORING PROGRAM:**
Soybean varieties and corn hybrids were again monitored in 2012 for low level contamination of conventional lines with genetically modified (GM) traits. Selective testing was done on all non-GM seed lots sampled during the 2012 season to determine if possible low-level contamination was present. Immunoassay tests were utilized to screen seed lots for low-level contamination of GM traits.

<table>
<thead>
<tr>
<th>Event/Trait Herbicide Resistance</th>
<th># Samples Tested</th>
<th>Type of Test</th>
<th># Testing +</th>
<th>Levels Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round-up Ready Corn - Liberty Link Corn</td>
<td>36</td>
<td>Immunoassay</td>
<td>13</td>
<td>range: 0.39%-0.72%</td>
</tr>
<tr>
<td>Roundup Ready Soybeans</td>
<td>36</td>
<td>Immunoassay</td>
<td>1</td>
<td>range: 0.14%-0.31%</td>
</tr>
<tr>
<td>Cry1Ab, Cry3Bb, Cry1F, Cry34, MCry3A</td>
<td>36</td>
<td>Immunoassay</td>
<td>11</td>
<td>range: 0.25%-0.77%</td>
</tr>
</tbody>
</table>
USDA FEDERAL SEED ACT ENFORCEMENT:
Samples were collected and submitted to the USDA Seed Regulatory and Testing Branch 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 fines totaling $2,600 involving 1 interstate shipper.