



# QUALITY ASSURANCE

for Canadian Food  
Grade Soybeans



# BUILDING ON CANADA'S STRENGTHS AS A TRUSTED SOYBEAN SUPPLIER



Canada has earned an enviable reputation as one of the world's most reliable suppliers of non-GMO food grade soybeans. Our regulatory system, growers, processors and exporters have earned the confidence of discerning soybean buyers around the world.

The Canadian soybean industry builds on these strengths through two important quality assurance programs:

- **The Canadian Seed Certification System**, which guarantees the varietal purity of the seed used to grow non-GMO Identity Preserved soybeans in Canada, and
- **The Canadian Identity Preserved Recognition System (CIPRS)**, a premium quality assurance service offering comprehensive process controls, audits and traceability from the port right back to the grower and seed provider.

Both of these systems are national programs, endorsed and enforced by Canada's federal government, seed production industry and soybean value chain. This national scope and support means buyers can count on a consistent approach to quality assurance, with the flexibility to meet the specific requirements of each customer.

Quality assurance is reinforced by industry-wide support for continuous improvement and expansion of Canada's non-GMO food grade supply. Ongoing investments keep the Canadian soybean industry at the leading edge of varietal development and best agronomic practices, and in tune with the requirements of international soybean buyers.

## Partners in quality assurance

Canada's approach combines the strengths of government regulators, the seed industry and the entire soybean value chain. Each of these partners plays a key role in maintaining the integrity and reliability of Canadian quality assurance programs:

The soybean industry's national association, **Soy Canada**, is the bridge between regulators and Canadian soybean growers, seed development companies, exporters and processors. Soy Canada recommends the specifications that must be met for soybeans to earn the CIPRS certification, as well as best practices for meeting these standards. Soy Canada also works with regulators and the industry to build consensus on continuous improvements to CIPRS.

**The Canadian Grain Commission (CGC)** is responsible for the system that certifies the quality and quantity of all bulk vessel exports of Canadian grains and oilseeds. CGC has provided inspection and grading services for more than a century, and today this respected government agency also oversees CIPRS, Canada's identity preserved system. In this role, CGC approves the process control standard, accredits auditors, reviews audit reports, decides whether a company's identity preserved program meets the CIPRS requirements and issues the certification.

**The Canadian Seed Growers Association (CSGA)** oversees certification of crops grown for use as pedigreed seed. CSGA establishes varietal purity standards and ensures that seed crops meet these standards.

**The Canadian Food Inspection Agency (CFIA)** is the regulatory agency responsible for seed certification. In this role CFIA is responsible for registration of seed establishments, licensing of samples and accreditation of seed testing laboratories.

**The Canadian Seed Institute (CSI)** is the not-for-profit organization established by the Canadian seed industry to deliver consistent, cost-effective monitoring and quality assurance programs for seed certification. As the accredited audit organization for CIPRS, CSI brings expertise in standards development and conformity assessment to Canada's quality assurance programs for soybeans.

## Canadian seed certification and CIPRS

Enhancing quality assurance and marketability in 4 ways:

1. **Varietal identity assured** through use of certified seed
2. **Process controls verified** by CGC-accredited auditors
3. **Documentation enhanced** to support accurate labeling and marketplace differentiation
4. **Certificate of Recognition awarded** to verify that a company's CIPRS process is operating as it should and meeting the CGC standard

# CANADA'S SEED CERTIFICATION SYSTEM

## The first strong link in Canada's quality assurance chain

To earn CIPRS certification, non-GMO food grade soybeans must be grown from seed that has been produced and verified under the rigorous, multi-level quality controls of the Canadian Seed Certification System.

Canada uses a traceable and internationally acceptable method of multiplying seed after a variety has been developed through public and private plant research programs. This planned, disciplined approach guarantees varietal purity and seed quality throughout the seed multiplication process.

Canada's system is based on the Association of Official Seed Certifying Agencies (AOSCA) system for domestic production. It uses ISO-based document control, HACCP principles and officially recognized standards, inspections procedures and personnel.

Strict controls are in place to prevent contamination during all phases of planting, processing and handling. In addition, quality management processes control the presence of weeds and plant diseases, and ensure viability and grading standards are met.

Third-party inspections in the field and at the seed conditioning plant verify that all processes are consistently followed. These controls are reinforced by seed testing to verify the quality, origin, consistency and purity of the seed.

Canada's strict standards for certified seed provide many tangible benefits for both buyer and seller, including truth in labelling and a written statement of assurance that segregation and containment requirements have been met within an audited, documented quality management system.

### Oversight by government and industry

The Canadian seed industry is governed by Canadian law under *The Canada Seeds Act* and corresponding regulations.

This legislation designates the Canadian Food Inspection Agency (CFIA) as the regulatory agency responsible for seed certification. CFIA registers seed establishments, licenses samplers and accredits seed testing laboratories, in conjunction with the Canadian Seed Institute.

The Canadian Seed Growers Association (CSGA) is designated as the regulatory agency responsible for the establishment of varietal purity standards and certification of pedigreed seed crops. CSGA develops field production regulations for certified seed crops, including standards for seed source, isolation, clean fields, crop rotations and official inspections.

### 5 generations of seed production



*As new seed varieties are released from plant research programs, subsequent generations of seed production are necessary to bring seed to market. Breeder class seed is used to grow Select seed, which is then used to propagate Foundation seed. Registered seed, identified with a purple label, is grown from Foundation seed. Registered seed is then used to grow Certified seed, which is identified with a blue tag.*

CONTROL POINTS	PLANTING & CERTIFICATION AS SEED CROP	HARVESTING, HANDLING & TRANSPORTATION	PROCESSING	SAMPLING, TESTING & GRADING	LABELLING
<b>SEED CERTIFICATION REQUIREMENTS</b>	<p>Eligible stocks of registered seed must be planted by the grower.</p> <p>A Seed Crop Certificate will be issued by CSGA only if the crop is of sufficient varietal purity.</p>	<p>Co-mingling of seed crops with unintended varieties is prevented during harvest and transport. CSI's Seed Program Quality Standard prescribes seed handling, storage, packaging, preservation and delivery requirements, including:</p> <ul style="list-style-type: none"> <li>Established systems for handling seed lots</li> <li>Clean and sound packaging material</li> <li>Sanitation procedures for all shipping containers, handling or transfer equipment and vehicles</li> <li>Tagging and labelling when moving seed from one location to another.</li> </ul>	<p>After seed crops are certified by CSGA, the pedigreed seed must be processed in CFIA-registered facilities.</p> <p>These facilities must have quality assurance manuals and systems in place to cover the entire enterprise.</p>	<p>Samples are tested for mechanical purity, germination and other quality traits and then graded by CFIA-accredited personnel in CFIA-accredited labs.</p>	<p>Labelling is done by CFIA-registered facilities using an audited quality management system.</p>
<b>AUDITS</b>	<p>Crop inspections are conducted by CFIA or approved private inspectors to ensure varietal purity has been maintained.</p>	<p>Procedures are documented, monitored and audited by third parties.</p>	<p>Quality management systems are regularly inspected by ISO-certified auditors of CSI.</p>		



# CANADIAN IDENTITY PRESERVED RECOGNITION SYSTEM

## The world's most fully integrated quality assurance process

The Canadian Identity Preserved Recognition System (CIPRS) controls and tracks the production and processing of non-GMO IP soybeans at every stage, ensuring that the right traits are delivered to the right customer, every time.

### Comprehensive quality controls from seed to port

To be considered for CIPRS, soybeans must be grown from certified seed produced under the strict standards of the Canadian Seed Certification System. Rigorous process controls continue all through the production, handling and grading process for CIPRS soybeans, right up to when the product is loaded into overseas shipping containers.

Detailed records are kept at every control point, then verified by accredited Canadian Seed Institute auditors. The focus is on process controls that have been proven, through analytical testing, to be the most effective means of meeting customer specifications. The result is a consistent, cost-effective audit trail that assures varietal identity and careful management of all production processes.

## CIPRS: ON THE FARM

CIPRS soybeans are usually grown by farmers who are contracted by grain elevators to deliver a specific product for a specific customer.

The contract between the grower and grain elevator outlines the procedures that must be followed when seeding, growing, harvesting and storing the crop, regardless of whether the operations are carried out using the farm's own equipment or by custom operators.

The grower agrees to these requirements in writing and keeps records to demonstrate that the procedures have been followed. The type of seed, isolation distance and crop stewardship practices must all be consistent with this crop production plan.

The contracting or purchasing elevator must have a documented internal audit process to verify that these processes have been followed, as well as documented procedures for corrective actions that will be taken to address non-conforming products.

### Soy Canada IP protocol

CONTROL POINTS	SEED SELECTION	PLANTING	GROWING	HARVESTING & ON-FARM STORAGE	TRANSPORT FROM THE FARM
<b>REQUIREMENTS &amp; PROCEDURES</b>	<p>The grower plants only certified seed as specified in the production plan. "Bin run" seed cannot be used.</p>	<p>Non-GM IP soybeans must not be grown on a field that was planted with GM soybeans the previous year.</p> <p>Seeding equipment is thoroughly cleaned and inspected before an IP field is planted.</p> <p>There must be at least 3 metres of isolation distance between an IP soybean crop and any other soybean or pulse crop.</p> <p>For the current and previous year, the grower must keep maps and records of these practices for every IP field.</p>	<p>The grower inspects fields throughout the growing season to ensure proper control of volunteer weeds and uniformity of the crop.</p> <p>The grower must provide the contracting elevator with either a field inspection report or a report on any IP problems with IP fields.</p> <p>The elevator has a documented procedure in place to address any non-conforming product.</p>	<p>Before IP fields are harvested, the grower ensures that combines, trailers, unloading equipment and storage bins are thoroughly cleaned and inspected.</p> <p>Any contaminated crop is disposed of as indicated in the crop production plan.</p>	<p>The mode of transport is thoroughly cleaned and inspected before use.</p> <p>The grower must record and sign a truck inspection report verifying that the truck/hopper was cleaned prior to loading. This record is presented to the elevator when the crop is delivered.</p> <p>If a custom trucker is used, the grower provides the trucker with a report identifying the IP soybean variety being delivered and the grower name, which is provided to the elevator at time of delivery. The same cleaning and inspection requirements apply.</p>
<b>AUDITS</b>	<p>The auditor checks the grain company's internal audit report to ensure that the use of certified seed is verified.</p>	<p>The auditor checks the grain company's internal audit process to ensure that grower field maps are reviewed for correct isolation distance. CIPRS auditors also have access to crop history and equipment clean-out records.</p>	<p>The contracting or purchasing grain elevator must be able to provide the field inspection reports and records of any corrective actions taken.</p>	<p>The contracting or purchasing grain elevator must be able to provide the cleaning and inspection reports.</p>	<p>The contracting or purchasing grain elevator must be able to provide the cleaning and inspection records, as well as the shipping documentation provided by the trucker or grower at delivery.</p>
<b>ADDITIONAL BEST PRACTICES recommended by Soy Canada</b>	<p>IP seed should be stored separately.</p>	<p>IP fields should be planted before the equipment is used on other soybean fields.</p> <p>Field maps or field history should be kept for at least three years.</p>	<p>Contracting elevator companies should have documented processes outlining the criteria growers should use when evaluating crops.</p>	<p>IP crops should be harvested, transferred and stored before the equipment is used on other soybean fields.</p>	<p>The previous three loads of the conveyance vehicles and equipment should be for only clean substances, such as grain or food items.</p> <p>The truck or hopper should be covered.</p> <p>The trucker should have a completed bill of lading, signed by the producer, trucker and receiver.</p>

## How CIPRS works

CIPRS is a national voluntary program involving all links of the production chain.

To earn CIPRS certification, a company must have a quality management system that includes validated processes tailored to the requirements of each contract. The buyer specifies what must be delivered, including requirements for seed variety, special growing methods, pesticide use and more. Once the buyer's quality requirements are defined, the company determines the processes needed to fulfill the terms of the contract, including specific on-farm practices.

All of the requirements for testing, production, handling and transportation are defined in the company's CIPRS Quality Manual, including:

- Personnel responsibilities, authorities and training plans
- Location of testing in supply chain
- Product quality requirements
- Crop production and handling plans
- Varietal purity
- Transportation plan
- GMO testing methods and sensitivity
- Non-conforming product plan



# CIPRS SCRS

### Audited and certified

*The integrity of CIPRS programs is verified through conformity audits conducted by the Canadian Seed Institute, which is accredited by the CGC. Based on these third-party audit reports, CGC decides whether a program should be officially recognized as meeting the CIPRS standard. If so, CGC issues the CGC Certificate of Recognition and authorizes the company to use the CIPRS certification mark – the buyer's assurance that a company's CIPRS process is operating as it should.*

## CIPRS: AT THE ELEVATOR

Grain elevators receiving IP soybeans must have documented procedures to track and trace all soybeans through all stages of unloading, storage, handling and loading for transport to port.

These processes include measures to preserve IP quality and prevent co-mingling with other products. At every grain handling destination, personnel must follow defined processes for cleaning and flushing the facility before receiving IP soybeans.

For each load delivered, the elevator must be able to verify the eligibility of the grower to deliver. Samples are taken and stored, and information on the source is recorded. The elevator must be prepared to identify, verify and track incoming loads of both IP and non-IP soybeans.

**For complete information about CIPRS, visit [grainscanada.gc.ca](http://grainscanada.gc.ca)**

### Soy Canada IP protocol

RECEIVING	STORAGE	PROCESSING	LOADING
<p>Before IP soybeans are received, the elevator pit, conveyors and legs are cleaned and inspected. The elevator must document these procedures.</p> <p>The elevator must keep detailed records for both IP and non-IP soybeans received into the elevator. Scale tickets must indicate variety name and unloading/storage details.</p> <p>The elevator must take a sample from each load of IP soybeans. These samples are labeled so that they are traceable to each delivery.</p>	<p>The elevator must identify and document all bins and silos that are used to store IP soybean varieties and crush soybeans.</p> <p>Before IP soybeans are loaded and unloaded, IP storage bins and silos must be cleaned and inspected. The elevator must document these procedures.</p>	<p>All processing equipment must be cleaned and inspected before an IP crop is processed. These procedures must be documented.</p> <p>The elevator also records all movements of IP soybeans from raw bins through to processed storage bins, including transfers through the facility and from site to site.</p>	<p>Before IP soybeans are loaded, all containers, trucks and railcars must be cleaned and inspected. The elevator must document these procedures.</p> <p>The elevator must have clear criteria for determining whether a conveyance is acceptable for food use, and procedures to be followed for rejection of a conveyance.</p> <p>The elevator must also have a documented process for recording all movements of IP soybeans from the processed bins to the shipping conveyance.</p>
<p>The elevator must be able to provide records documenting cleaning procedures, including the date and name of the employee who conducted the inspection.</p>	<p>The elevator must be able to provide:</p> <ul style="list-style-type: none"> <li>• Records documenting cleaning procedures, including the date and name of the employee who conducted the inspection</li> <li>• Detailed bin and silo maps, schematics and/or data indicating the crop and variety stored in each bin</li> </ul>	<p>The elevator must be able to provide records documenting:</p> <ul style="list-style-type: none"> <li>• Cleaning procedures, including the date and name of the employee who conducted the inspection</li> <li>• All movement of IP soybeans from raw bins</li> </ul>	<p>The elevator must be able to provide records documenting cleaning procedures, including the date and name of the employee who conducted the inspection. The elevator must also have records of:</p> <ul style="list-style-type: none"> <li>• Processing bin from which every IP and non-IP soybean shipment was sourced</li> <li>• Container, truck or railcar identification number</li> <li>• Grain identification</li> <li>• The quantity loaded</li> </ul>
<p>Upon request, the elevator should provide half of the delivery sample to the grower.</p>			

# CONTACTS

To learn more about quality assurance programs for Canadian soybeans

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