The Seed Testing Data You Need to See This Spring

SGS is bridging local expertise with global testing standards, helping ensure Canadian growers stay competitive.

By: Holly Gelech, Senior Business Development Manager, SGS Canada Crop Science

Every day we are energized by the technical complexity and crop diversity of the work we conduct at our seed laboratories. What excites us most? Knowing that our seed customers benefit directly from the strength of our network.

Canadian Operations: Regional Expertise, Global Standards

In Canada, our work is closely aligned with the agricultural landscape. In Grande Prairie, Alta., our team operates within a key fescue seed producing region, collaborating with local seed growers and turf grass companies. While fescue is not always a high-profile commercial grain crop, fescue is an integral component in grass blends, with SGS testing ensuring both domestic and international quality requirements are met.

Our Sherwood Park laboratory serves as a national hub, offering services across three core areas, testing all crop types, from forages to vegetables to field crops.

- Routine Accredited Analysis and Seed Health including germination, purity, vigour, seed size and trait assays. Our flexibility shows in our many method standards - Canadian, International Seed Testing Association (ISTA), Association of Official Seed Analysts (AOSA).
- Disease diagnostics, ranging from visual identification of fungal pathogens to molecular testing techniques.
- Seed chemistry, encompassing treatment analysis and evaluation of quality indicators such as chlorophyll and tannins.

Collaboration To Build Confidence

Our Canadian customers gain from our close relationship with our colleagues in Brookings, South Dakota. Active exchange of knowledge across our networks includes:

- Stress tolerance evaluations, such as saturated cold and accelerated aging tests, which helps assess seed vigour under environmental pressures.
- Regulatory and movement support, as customers expand into new international markets. With ISTA-accredited laboratories and local specialists across multiple countries, we help clients navigate varied testing protocols and export documentation requirements.
- Vegetable seed diagnostics, where precision is critical due to condensed production timelines in controlled environments.

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Trends and Ongoing Focus for Planting

With the planting season underway, SGS is your partner to optimize planting strategies. The key diagnostic tests, central to decision-making are warm germination, cool stress test, and thousand kernel weight. These metrics are foundational in predicting emergence rates and achieving desired plant densities.

This season, we've seen huge variability in germination and kernel weight — wheat ranging from 100% all the way down to 25% germination, barley as low as 14% germination, and pulses like peas dipping to 24% germination in some samples. That's why our tagline is "When you need to be sure." We have our finger on the pulse of what's happening in the field.

SGS has built a responsive and technically rigorous seed testing network, connecting northern Alberta to the U.S. Midwest, and serving clients from early-stage breeding through to global distribution. Via integrated diagnostics and regional insight, we aim to support informed, confident decisions in every phase of seed manufacturing.

We're growing confidence — and doing it together.

Interested in learning more about our testing capabilities or need help prepping for the season? Reach out to the SGS Canada Crop Science team. Visit cropscience.sgs.ca for more info.