

Quality control in hybrid canola seed production at Pacific Seeds

At Pacific Seeds, we recognise the dynamic nature of hybrid canola seed production. Our focus is on continuous improvement, a commitment that drives every aspect of our operations. We are dedicated to a quality compliance standard that prioritises progressive enhancement in line with ISO 9001:2015. Our Quality Management Policy, accessible [here](#), outlines our commitment to producing the highest quality seed possible. This policy governs all phases from parent seed production to hybrid seed production, processing, storage, and distribution. It's critical that our stakeholders, including our trusted distribution partners and farmers, are aware of our approach to quality.

Quality control procedures for hybrid canola seed

Pacific Seeds utilise a series of stringent quality control procedures that scrutinise hybrid canola seeds at multiple stages:

- **Seed sample testing:** We perform extensive testing on seed samples taken at multiple points from harvest, through seed processing, and finally to finished goods. Tests include:
 - Germination percentage: To verify the viability and growth potential of the seeds.
 - Moisture content: Ensuring the seeds maintain optimal moisture levels.
 - Contaminant screening: Checking for the presence of weed seeds and other impurities.
 - DNA marker tests: To identify genetic offtypes.
 - Glyphosate tolerance testing: Employing lateral flow strip tests for genetically modified traits in glyphosate-tolerant varieties.
- **Spray trays:**
 - Growing seeds in a controlled environment and applying registered herbicides to test their herbicide tolerance, ensuring they meet the expected standards.
 - We adhere to Bayer's TruFlex (glyphosate) tolerance verification protocol, which requires a minimum tolerance level of 95%. This means that up to 5% plant mortality post over the top application of glyphosate, is considered normal and within specification.
- **Field grow-outs:** Field grow-outs involve the planting of representative samples in the field to simulate what will happen in a grower's paddock. These tests take the longest to conduct, typically taking 90 days from planting, to flowering and assessment.
 - There are two grow-out assessments undertaken:
 - The first is aimed at identifying any undesirable plants, by observing the plants through the flowering stage and where necessary to maturity.
 - A second test for herbicide tolerance, this time in a field setting. Seeds are planted and then sprayed post-emergence with registered herbicides to test herbicide tolerance. Plant counts are completed to ensure tolerance percentages remain within accepted thresholds, including the 95% glyphosate tolerance standard for TruFlex canola varieties.
- **Data loggers**
 - When seed is dispatched around the country, data loggers are attached to pallets to ensure seeds are transported within acceptable temperature ranges.

- **Seed analysis certificates**

- When seed is delivered, every bag includes a QR code and a batch number. Growers can scan the QR code and enter their batch number to download the seed analysis certificate.
- Through this process, growers may provide Pacific Seeds with their contact details, and in the event of a product recall, their details will be used to notify them of a recall and communicate next steps.

Achieving the highest quality in hybrid canola seed production relies on employing multiple tactics. Our thorough quality control procedures are focused on ensuring that when customers purchase Pacific Seeds products, they can do so having the utmost confidence it will meet their expectations.