

# Alberta Grains Research Priorities

Alberta Grains is a farmer-led organization dedicated to representing the interests of Alberta's 18,000+ wheat and barley producers. Over the past decade, Alberta Grains has invested \$31 million in research projects. Participating in the Agricultural Funding Consortium and the Agriculture Development Fund, Alberta Grains collaborates with over 20 funding partners to co-fund research that brings value to Alberta wheat and barley farmers.

Alberta Grains' research priorities seek to ensure that research investments deliver tangible value to farmers, both in the short and long term. By focusing on the most pressing challenges and opportunities in faced by farmers in crop production, variety development, and post-harvest management, we aim to fund research that drives practical, impactful solutions for farmers.

Alberta Grains also observes national-level wheat and barley priorities, reflecting shared goals of improving crop resilience, enhancing sustainability, and advancing productivity in barley and wheat production. The commission adopts the broader national priorities while addressing Alberta-specific challenges. This alignment ensures a cohesive approach to national goals while addressing the unique needs of Alberta's agricultural landscape.

#### Alberta Grains Research 2025 Priorities

#### Variety Development & Genetic Advancement

- Abiotic stress resistance with a focus on drought and heat resilience
- Yield stability
- Disease resistance
- Short-season varieties with advanced agronomics, disease resistance, and quality parameters
- Lodging resistance
- Increased nitrogen-use efficiency and water-use efficiency
- Wheat Stem Sawfly and Wheat Midge resistance
- Grain quality retention

### Crop production

- Managing and mitigating herbicide resistance
- Integrated pest management
- Integrated disease management
- Management and mitigation of challenging soils
- Cropping systems and management practices to mitigate abiotic stress and increase yield stability
- Optimization of crop inputs
- Lodging mitigation
- Irrigation efficiency
- Optimizing harvest techniques

## **Post-production**

- Optimizing storage techniques for reducing post-harvest losses.
- Expanding value-added uses for wheat and barley

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