Alberta Grains Research Priorities 2024

About Alberta Grains

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, with 70 per cent allocated to breeding and 30 per cent to agronomy research. The organization collaborates with over 20 funding partners and participates annually in the Agriculture Consortium Funding Process and the Agriculture Development Funding Call by the Saskatchewan Ministry

Alberta Grains Research Investment Goals

Our mission is to equip our farmers with the latest genetics and cutting-edge agronomic management strategies. Our goals include:

- Maximizing yield potential
- Promoting sustainable and resilient cropping systems
- Enhancing the value of wheat and barley production to increase profitability
- Improving resource utilization efficiency to reduce input costs

Research Priorities Survey 2024

In November 2023, Alberta Grains initiated a priority survey, which concluded in January 2024. The respondents comprised 85 per cent wheat and barley producers, with the remaining 15 percent consisting of researchers, agronomists, seed growers, brewers, agricultural fieldmen and independent consultants.

Research Priorities for 2024

Breeding

- Development of drought-resistant, nitrogen-efficient and solid stem varieties
- Focus on disease resistance and short season varieties
- Improvement in breeding techniques (Genome, AI)

Agronomy

- Integrated pest management (sawfly, wheat midge, cereal leaf beetle and grasshopper)
- Resistant weed management (wild oats, kochia, cleavers)
- Harvest and post-harvest management (reduce shattering and sprouting and storage grain quality)
- Disease management (leaf streaks, leaf spot, stem rust)

200-6815 8 Street NE, Calgary AB T2E 7H7 | P. 403.717.3711 | Toll Free. 855.917.3711 | F. 403.717.1966 | E. info@albertagrains.com

- Residue management of high-yield varieties
- Integrated disease and pest management in irrigated croplands
- Evaluating the interaction and response of new genotypes towards abiotic stresses and nutrient management under different environments
- Soil and environment research
- Soil moisture retention under wheat and barley cropping systems
- Methods to measure and reduce GHG emissions and enhance carbon sequestration

Economics

- Meta-analysis of wheat and barley research in the Prairies to understand what has been done under the 4R Nitrogen management system (for this study, a peer-review publication is necessary)

Proposal Evaluation Criteria

- Crops: all wheat classes, food and feed barley, malt barley, durum, winter wheat
- Relevancy of rationale with Alberta Grains research priorities
- Current literature review (not older than five years)
- Team capacity
- Collaborations outside one institute
- New varieties
- More than two experimental sites
- Well-established work plan including experimental design, treatment details, objectives relevant to methodology and parameters, etc.
- Strong knowledge transfer plan with exact numbers of extension events, presentations, fact sheets, articles and locations
- Economic analysis and cost evaluation
- Timeline
- Comprehensive budget details