AgroSpectrum ASIA
Envisaging Future | Updating Present

Australia's Grains Research and Development Corporation (GRDC) partners with University of Queensland (UQ) to develop higher yielding, resilient SorghumÂ

21 November 2025 | News

Sorghum Strategic Alliance receives initial $13 million outlay and significant co-investment from UQ

Sorghum Strategic Alliance receives initial $13 million outlay and significant co-investment from UQ

Australian Sorghum growers are set to gain from a new partnership between the Grains Research and Development Corporation (GRDC) and The University of Queensland (UQ). The collaboration aims to develop higher-yielding, more resilient, and better-quality varieties of this key summer crop.

The 7-year Sorghum Strategic Alliance â?? announced on 11 November at the TropAg Conference in Brisbane â?? represents GRDCâ??s largest collaborative commitment to sorghum research to date, with an initial $13 million outlay and significant co-investment from UQ.

The Alliance includes research in four foundational areas, with both investment dollars and project numbers expected to grow through its 7-year duration.

GRDC General Manager Applied Research, Development and Extension (RD&E) **Craig Baillie** said the investment underscored the organisationâ??s commitment to investing in research, development and extension (RD&E) that was grower-led and destined to deliver genuine gains on-farm.

â??Sorghum is a key summer crop for Australian grain growers across Queensland and northern New South Wales. This alliance with UQ is a strategic step forward that aims to deliver varieties with higher yields, improved resilience to climate challenges and greater marketability. Another project under the alliance will support growers to improve input use efficiency, lift soil health and deliver more resilient, productive and profitable sorghum within their farming systemsâ?• Mr Baillie said.

Ultimately, this substantial investment aims to sustainably increase and expand sorghum production ensuring Australian growers can meet future market and environmental challenges.

The projects will leverage UQâ??s leading expertise in genetics, predictive breeding and gene editing to develop the next generation of sorghum genotypes. The focus is on improving resilience, productivity and quality - targeting traits such as heat, drought and cold tolerance, protein content and quality, biomass production and digestibility.

GRDC have some of the worldâ??s most outstanding quantitative plant breeders and the Sorghum Strategic Alliance will allow us to bring on some early or mid-career researchers in crop genomics, agronomy and farming systems to further strengthen our international standing in plant breeding.

The alliance will include research into 4 initial foundational areas with scope to increase both the focus areas and investment level where there is a clear return-on-investment for growers. The foundational areas include:

- Boosting yield potential through advanced genetics and breeding.
- Optimising grain filling duration to deliver larger, more consistent sorghum grain in variable climates.
- Developing larger grain with increased and more digestible protein.
- Improving sorghum yields through targeted agronomic research.

This alliance builds on decades of RD&E investment, driven by grower input and evolving market demands.

The new projects are designed to address the most pressing challenges facing the industry and to provide solutions that are practical, profitable and sustainable. Each project has been designed in close consultation with growers and industry, building on GRDCâ??s previous RD&E investment.

Mr Baillie said GRDC had partnered with UQ because the organisation had been at the heart of sorghum breeding in Australia for decades. He said more than 90 per cent of commercial grain sorghum hybrid grown today in Australia contained genetics developed by the Department of Primary Industries (DPI) and UQ.

UQ Professor Matthew Morell said the alliance would allow the organisation to continue to deliver real-world solutions for Australian agriculture.