

# Crop variety performance data for more informed sowing programs

**G**RAIN growers across the nation are being provided with important new data to inform their crop variety choices for the 2019 season. Harvesting of the extensive winter crop variety trials conducted through the GRDC National Variety Trials (NVT) program is now complete and data from those trials is being made available to Australia's growers and their advisers.

GRDC NVT Acting Senior Manager, Rob Wheeler, says single site results from successful trials in 2018 have been finalised and this data has been fed into multi-year, multi-environment trial (MET) variety performance analysis.

"These multi-year, rolling datasets for all crops and growing regions will provide growers with the most valuable information to support their decision-making around what to sow this year," Rob says. "Long-term MET results are the most accurate and reliable means of interpreting variety performance across sites and years."

## Instructional videos available

To further support growers and advisers, the GRDC has produced new instructional videos on 'how to interpret NVT data (long-term yield results) using the NVT website' and 'how to navigate NVT's website'. The videos can be viewed via the GRDC's YouTube channel at <http://bit.ly/2W75A5U>.

NVT Systems Manager Neale Sutton demonstrates how to interpret trial data on NVT's website, to help growers find the most suitable crop performance data for their own situation.

Rob says it is important that growers factor long-term analysis of trials into their variety selection considerations, rather than results from a single year.

"This is especially important after a year such as 2018 where – in many regions – the season was far from normal."

Rob says, similar to the experiences of many growers in parts of Queensland, New South Wales, Victoria and South Australia,

some NVT trials were impacted by drought, frost, wind and other climatic events.

"But despite what was an incredibly tough season in some areas, the 2018 NVT program overall was a productive one, with a great proportion of the trials generating valuable data that has now been published."

## Look at quality attributes as well as yield

Growers and advisers are encouraged to base their variety decisions on not just yield results but also market receival quality data. "Simply focusing on yield does not provide growers with a reliable indication of which varieties may potentially offer the best returns – the quality of the grain harvested is also an important factor," Rob says.

Planning for the NVT program for 2019 is well underway, with the number of trials expected to be more than 600, as per previous years. The largest co-ordinated field trial network of its kind in the world, NVT is a 100 per cent GRDC investment that is fully administered by the GRDC on behalf of Australian grain growers and the Australian Government.

A national program of comparative crop variety testing with standardised trial management, data generation, collection and dissemination, NVT seeks to assist growers to optimise the profitability of their farming systems through choosing the most appropriate varieties for their growing environments.

Rob says NVT represents a huge logistical undertaking given it evaluates varieties for the 10 major crop types – wheat, barley, canola, chickpea, faba bean, field pea, lentil, lupin, oat and sorghum – within hundreds of trials across the country.

"About 2000 near-release or released varieties are evaluated each year, generating highly valuable comparisons for variety agronomic performance, grain yields, disease and pest resistance and physical grain quality traits," he says. "NVT accepts lines into the program for testing two years prior to their commercial release. This ensures sufficient data is available for growers on newly released varieties to make informed decisions."

Data analysis for NVT is conducted by a team of statisticians through the Statistics for the Australian Grains Industry program.

Rob says with 2018 NVT results reflecting what occurred around the country in terms of the variable season, some trial results were compromised by these conditions at a number of sites. "Data from those compromised trials is presented in a 'quarantined' report. This report is published on the NVT Online website to provide growers with a transparent account of the fate of unreleased but not abandoned NVT trials, but the data is of no value for the purposes of head-to-head variety comparison."

Meanwhile, a team of dedicated GRDC NVT regional staff has now been appointed – enhancing co-ordination of trials and extending NVT's reach and presence in the regions.

**NVT regional staff are Peter Bird (west), Laurie Fitzgerald (north) and Rob Wheeler (south). Ben O'Connor provides further regional support for north eastern Victoria and southern New South Wales. Contact details for regional staff can be found on the NVT Online website.**

**Rob thanks the many trial co-operators (landholders) across the country who continue to support the NVT program by allowing trials to be conducted on their properties. Trial results and analysis can be viewed at [www.nvtonline.com.au](http://www.nvtonline.com.au)**



**GRDC's NVT Acting Senior Manager, Rob Wheeler, says harvest of the 2018 winter crop variety NVT trials is now complete and data from those trials is being made available to inform growers' variety choices in 2019. (PHOTO: GRDC)**