

FINAL REPORT

DAN00154

Wheat Collection for Variety ID

PROJECT DETAILS

PROJECT CODE: DAN00154

PROJECT TITLE: WHEAT COLLECTION FOR VARIETY ID

START DATE: 01.07.2011

END DATE: 30.06.2012

SUPERVISOR: GREG GRIMES (CURATOR)

ORGANISATION: NSW DEPARTMENT OF PRIMARY INDUSTRIES

CONTACT NAME: GREG GRIMES

Summary

The Australian Winter Cereals Collection (AWCC) was the central receival point for all wheat samples supplied. In total, 1973 wheat samples were collected from across Australia. Data collected included the supplier's name and address, variety name and history of sample. A sub-sample was supplied to Diversity Arrays Technology Pty Ltd. The remnant seed was stored for subsequent testing if required.

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Conclusions

The project was successful in delivering the desired outcomes/milestones. The methods developed will be used in further purity studies on other crops.

Recommendations

- The cut-off date for supply of samples should be at least two months before the end of project. This allows the processing of the delayed samples.
- Suppliers should be able to log the grower details electronically to avoid mistakes in hard copy translation and speed up the process of supplying samples for purity testing.

Outcomes

Economic Outcomes

The ability to monitor and check the genetic integrity of wheat varieties in the supply chain is invaluable. This allows a problem to be quickly identified and the area of concern in the supply chain. This approach will help safeguard our current export industry and give our customers confidence in the integrity of the product being supplied.

Achievements/Benefits

The integrity of the supply chain is of utmost importance for the reputation of Australia's grain industries. The assurance of the quality and purity of exported commodities are critical.

A high output method for measuring genetic homogeneity was developed by Diversity Arrays Technology Pty Ltd using Plant Breeder's Rights (PBR) samples of current wheat varieties.

In total, 1973 wheat varieties were collected, logged and placed into long-term storage by the AWCC. The samples supplied to Diversity Arrays Technology Pty Ltd were analysed with reference to PBR samples supplied by the AWCC. The results were supplied to each of the participants.

This system will allow future accurate testing of a large number of samples from all points in the supply chain. This will identify any areas of concern in purity and quality, protecting the export markets.