

Final Project Summary

Project title	Monitoring of mycotoxins and other contaminants in UK cereals used in malting, milling and animal feed		
Project number	RD-2012-3779	Final Project Report	PR578
Start date	8/8/12	End date	8/8/16
AHDB Cereals & Oilseeds funding	£636,533	Total cost	£778,533

What was the challenge/demand for the work?

This study was undertaken to survey the incidence and levels of key contaminants in representative samples of UK-grown cereals (wheat, barley and oats) and co-products (wheatfeed and oatfeed), destined for milling, malt production, and animal feed to determine whether they met legal compliance guideline limits and were safe for human consumption. The project monitored current and emerging legislation and contaminant issues that could have impacted on the safety of cereal-based foods and their acceptability in key home and overseas markets.

How did the project address this?

A representative set of samples of wheat, barley and oats and their co-products from the milling, malt and feed industries were analysed annually for a pre-defined screen of contaminants. Surveillance data on the incidence and levels of key mycotoxins and other contaminants were generated to inform and alert the cereal processing industry on the safety of their products, and when relevant, to be used for discussions on impending revision of legislation. Surveillance data, such as ergot alkaloid residue levels were submitted to UK and EU authorities.

Horizon scanning gathered through the monitoring of publications, and attendance at scientific and stakeholder meetings provided intelligence on emerging issues including legislative issues, cereal contaminants and safety, which may have impinged on the market acceptability.

Summary reports of test results were published annually. This allowed data to be used by regulatory authorities and by other researchers in academia and industry.

What outputs has the project delivered?

Scientific reports summarising analytical results for all harvest and storage samples were reported on an annual basis. These reports identified trends in the occurrence and levels of targeted contaminants. This allowed industry to concentrate efforts in areas identified to be of most concern or relevance.

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Results were used by trade association members to enhance their due diligence programmes and support risk assessments.

Some results were submitted to EFSA on behalf of UK to support and make judgements on the setting of exposure limits, tolerances and maximum levels.

Emerging issues were surveyed in order that judgements could be made into future enhanced surveillance programmes. This information was made available to the Trade Associations to forward to their members to ensure relevant analytes were included within surveillance programmes.

Who will benefit from this project and why?

Overall, the data established by this project suggests that the bulk of UK-grown cereals comply with EU and UK legislation and recommendations, with regard to the presence of contaminants. This data reflects good farming and industry practices undertaken in the UK. Trade Associations and their members will benefit directly through the compilation of enhanced data sets. Results submitted to EFSA on behalf of the UK supported the industry impacted upon the setting of maximum levels in some instances. The published monitoring data generated provided clear evidence and assurance to the food industry, the public and exporters, that the UK cereals covered within this project were all grown in accordance with Good Agricultural Practices.

If the challenge has not been specifically met, state why and how this could be overcome Challenge was successfully met.

Lead partner	Campden BRI
Scientific partners	
Industry partners	AIC, MAGB and nabim
Government sponsor	

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