

Organic Centre Wales Producer Conference 2009: Adapt and Survive

Aberystwyth, 15 October 2009

Workshop report: Genetic technologies and organic farming

Chair: Nic Lampkin, Organic Research Centre Elm Farm

The gene technology debate tends to be dominated by GMO s. However, the term 'genetic technology' embraces a wide range of techniques. This workshop aimed to clarify some of the issues and start an informed debate.

Martin Williams from the Plant Health and Biotechnology Branch of the Technical Services Division, WAG

explained the Welsh Assembly Government's stance on GMO's. While WAG cannot declare Wales a GM free zone (to do so would be to work outside the EU legislative framework), they endorse taking the most restrictive approach possible to the commercialization and growing of GM crops.

Mike Abberton, Programme leader for Plant Breeding and Genetics at IBERS gave a researchers' viewpoint. His focus is crop improvement, with particular respect to grasses, forage legumes and oats, and relies heavily on genetic techniques in the course of his work. He focused on molecular markers and genome mapping as examples of where genetic techniques had greatly facilitated the improvement of clover and other crop varieties, which had directly benefited the organic (and indeed the wider farming) sector.

Roger Hitchings, who is a full-time organic horticulture adviser with the Organic Advisory Service and sits on the ACOS board, outlined the position of the organic movement. The organic standards have no issues with the use of genetic techniques such as those described by Mike Abberton, as a research tool to speed up and facilitate the development of new varieties that would benefit organic farmers. It was equally clear the use of GM varieties is prohibited. However, there are some grey areas that are still under debate, and the use of 'protoplast fusion' techniques to produce F1 varieties of some (but not all) vegetable crops, is a case in point. This essentially involves the removal of the plant cell wall, after which the resulting 'protoplasts' are forced together, allowing their genetic material to combine. Seed produced in this way is allowed by the main organic certification bodies but not by Demeter, and is currently under discussion by ACOS and IFOAM among other forums.

The overall conclusion of the workshop was that the organic sector is not 'anti-science', an accusation often levelled at it. It considers each technique on its merits, based on the extent to which they are compatible with the guiding principles of organic production systems.

To inform the debate, OCW has produced a factsheet explaining the key concepts and terminology used in genetic technology. Contact OCW on 01970 622100 or visit www.organiccentrewales.org.uk for more details.