

## Terminator technology

The Department of Agriculture of the USA has licensed the Terminator Technology to Delta & Pine Land (D&PL). Both parties are co-owners of three patents based on the controversial technology, which genetically modifies plants to produce sterile seeds, so that farmers cannot reuse harvested seeds. Under the licensing deal, the technology will not be used on heirloom varieties of garden flower and vegetables and will not be used in any variety of plant available in the marketplace prior to 1 January 2003.

## Non-GMO certificates in Tyrol

The South Tyrol in Austria is the world's first region to introduce an official guarantee that food is free from GM materials. The production process, from seed to finished food, is subject to constant monitoring before the food is awarded a special green logo.

## NSF funds more *Arabidopsis* research

The National Science Foundation announced in October the allocation of 28 awards under its new 2010 project. The awards amount to \$43.8 million over four years as the first in a programme to identify within the next ten years how each of the plant's 25,000 genes functions. The work will be on *Arabidopsis* following the completion of the genome sequencing programme.

## EU finds GM crops probably as safe as conventional ones

The EU Commission has recently published the findings of some 81 Fifth Framework Programme research projects conducted by over 400 scientific teams in the EU over the past 15 years on the safety of genetically modified (GM) crops. It failed to find any new risks to human health or the environment from GM crops or food derived from them and concludes that they are probably as safe as conventional crops and foods. The report is available at <http://europa.eu.int/comm/research/fp5/eag-gmo.html>

## UK GM report

The UK's Agriculture and Environment Biotechnology Commission reports that ethical concerns of the public as well as strategic and economic issues must be accommodated before commercialisation of genetically modified (GM) crops. The Supply Chain Initiative on Modified Agricultural Crops (SCIMAC), the body responsible for overseeing the introduction of GM crops, has declared its full support for the viewpoint and for local consultation on trial sites. The biotechnology industry has reiterated its commitment to farm-scale trials despite their criticism in the UK. The impasse between SCIMAC and the organic farming sector on the separation distances between GM and organic crops remains, however.

## GM traceability

The EU Commission tabled proposals in July 2001 on tightening up the labelling and traceability of GM materials in foodstuffs. Concerns were expressed in a September debate in the EU parliament, however, particularly on the inability of consumers to identify unlabelled produce from animals raised on GM feed and the lack of evidence that produce from animals fed on GM material is identical to that from animals fed on conventional feed. In response, the Commission stated that only GM material approved by the EU would be considered for inclusion in animal feed. The Commission intends that final agreement by parliament will kick-start the hitherto moratorium-bound GM approvals process.

## Monarch butterflies and corn pollen

It has been shown that milkweed plants growing in cornfields in the Midwest USA sometimes support monarch butterfly larvae at the same time that corn pollen is being shed. In such instances, the larvae could be exposed to Bt-pollen. The further north the cornfields, the later the pollen is shed and the greater the risk of exposure. There are not sufficient data to reach the conclusion that there is no risk to larvae or that the risk is negligible. It was also noted that, in the field, corn plants shed part of

their anthers as well as pollen (anthers tend to have a higher concentration of Bt than the pollen) and this was not tested in laboratory-based experiments.

## Syngenta sells Leiden operation

Syngenta is selling its research operation Syngenta Mogen at Leiden, Netherlands, and consolidating its biotechnology activities in the USA and the UK. Syngenta Mogen specialises in the genetic manipulation of food crops. Its work includes the development of a genetically modified potato with resistance to certain diseases including to *Phytophthora*.

## Snippets

...Says-Lesage and co-workers from the INRA centre at Aubiere have described a new method of detection of trace contamination of sunflower seeds with downy mildew caused by *Plasmopara halstedii*. The authors use a PCR method to detect mildew specific DNA and plan to use the technique in a commercial diagnostic test system.

...CropGen reports the development of a method of inserting a gene into a tomato that does not involve the DNA from a cell's nucleus. The advantage is that the genetically modified (GM) trait is not passed on to the progeny so preventing the risk of spreading the modified gene. The development is expected to aid research into the production of edible plant vaccines and pharmaceuticals.

...workers at the USDA Agricultural Research Service in Ames, Iowa have succeeded in cloning the powdery mildew resistance gene from barley. The work was a collaboration with the UK's Sainsbury Laboratory and involved isolation of two of 30 alternative forms of the *Mla* resistance gene, *Mla6* and *Mla1*. The genes have been patented.

...The European Court of Justice has concluded that biotechnological patenting should be halted across Europe.

...Tesco's, the UK supermarket chain, is to increase its annual organic food sales to £1 billion within 5 years.

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