



# GM Observer

News about farming and GM in the United Kingdom



Welcome to this year's second edition of the GM Observer – the newsletter of the Agricultural Biotechnology Council (abc). abc is the umbrella group of the agricultural biotechnology industry in the UK. Our goal is to provide factual information and education about the agricultural use of GM technology in the UK, based on respect for public interest, opinions and concerns.

## GM crops have beneficial economic impact

A recent study published by the European Commission's Joint Research Centre has evaluated the economic benefits of a number of GM crops across the world both before and after approval. It concludes that they have the potential to offer significant energy and time savings, as well as significantly higher yields for certain crops.

The report noted that the adoption of GM technologies throughout the world had increased at a rapid rate in the ten years since commercialisation, and that a number of on-farm and off-farm benefits were observable. These included reduced production costs (including reduced machinery use and carbon emissions), simplified crop management systems, and increased yields. For example, studies in China, India, Argentina and South Africa have reported yields from Bt cotton crops that are anything between 10 per cent and 87 per cent higher than conventional cotton. Savings in weed management costs were also observed.

The report also forecasts the benefits of further EU countries deciding to grow GM crops. In the UK, for example, it estimates total savings of up to Euros 33.5 million per year if all sugarbeet grown was herbicide resistant.

A copy of the report can be found at: <ftp://ftp.jrc.es/pub/EURdoc/eur22547en.pdf>

## Bt cotton on the increase in India

There has been a dramatic increase in the total area under Bt cotton production in India, according to a new study from IMRB International. The report found that of the total cotton growing area, Bt cotton plantings increased from 6.2 per cent in 2004/5 to 39 per cent in 2006/7. It also concluded that significant yield increases were associated with the use of Bt varieties of cotton, leading to greater profit margins for farmers.

Farmers in India typically experience as much as 50% damage to their conventional cotton crop in relation to 25% elsewhere in the world. This damage is done by up to 166 different types of pest during all stages of cotton production, with damage from the bollworm alone equalling roughly Euros 300 million a year.

This recent study, which evaluated the impact of Bt cotton use in five regions in India, found that the incidence of bollworm pests was considerably lower in Bt cotton in comparison to non-Bt varieties, resulting in higher yields and higher outputs per hectare. Subjective assessments also showed that farmers saw advantages of using Bt cotton in terms of reduced pest incidence and pesticide cost, cotton quality, yield and profit, without any apparent impact on the environment.

In 2006, India reported the highest percentage growth amongst countries in the developing world for uptake of GM crops. In the last twelve months alone, plantings in India increased by 192% to 6.1 million acres.

Further details from the IMRB report can be found at the following link: <http://www.bharattextile.com/newsitems/2002910>

## Brazil to invest \$4.77 billion in biotechnologies

The Government of Brazil has announced its intention to invest \$4.77 billion in biotechnology over the next decade to fuel growth in agriculture, pharmaceuticals and other related industries.

The extra money will be used to fund the research and development for a new strain of sugar cane that is resistant to drought. Brazil is the world's leading producer of sugar cane, and this investment will build on growth already established by the use of biotechnology in ethanol production. Developments of more-productive cane strains over the last three decades have helped Brazil make biofuels at a lower cost than their fossil fuel equivalents, and it is hoped that the development of new cane varieties will facilitate the expansion of crops into areas that are more susceptible to droughts.

Brazil is currently home to a tenth of the world's GM crops, with last year seeing an increase of 22% in plantings, according to the International Service for the Acquisition of Agri-biotech Applications (ISAAA).