

News from Europe, America and Africa (EAA)

Biotech seen gaining favour in France

Biotechnology has recently been part of the headlines in the French media. Some of the groups of respected French scientists/academicians have presented three reports, which were requested by the French government (GOF). These reports recommended the lifting of the EU moratorium on new biotechnology approvals. The reports were in favor of the development of agricultural and pharmaceutical biotechnology in France because French scientists and academicians believe that biotechnology benefits outweigh the risks. But the French Food Safety Agency (AFSSA), which is responsible for food safety, has yet to render its views on biotechnology products. However, it is worth noting that French industry representatives and consumers reacted positively to the recent decision by the EU Agricultural and Environmental Councils on biotech labelling and traceability.

One of the reports entitled “Meeting the Challenge of Biotechnology,” prepared by current Minister for European Affairs Noelle Lenoir, was presented to the Minister of Economy, Finance and Industry. The initial version had been provided to the previous government (which was voted out the office in June 2002). The new government had asked for additional information on biotechnology. This report describes how far France is behind in biotechnology and related initiatives. Noelle Lenoir’s report clearly points out that, compared to the UK and Germany, not to mention the United States, France is not attractive to researchers and contractors in the field of biotechnology. The report shows France to have insufficient investments in biotechnology research in both public and private sectors. The report recommended that the French government should invest more in biotechnology to keep pace with other countries. The report also recommended that France should follow a “cautious and reasonable” introduction of biotech crops in agriculture, on a case-by-case basis and should also support basic research in the field of biology.

In France, the recent EU decisions of Agricultural and Environmental Minister Councils, reached on biotech labeling and traceability, has disappointed some industry, representatives in the EU reached a compromise

on a threshold as low as 0.9 percent, above which products would have to be labelled as containing biotech products. They wanted a higher threshold (above 1.0 percent). While the European Federation of Animal Feed Compounders (FEFAC), whose president is French, considers that the threshold (of 0.9 percent) adopted will allow the feed industry to relatively satisfy their customers' demand. The French Association of Seed Industries (GNIS) commented that the 0.9 percent threshold would be difficult to implement once biotech crops are grown in the EU because of higher probability of cross-pollination between biotech crops and non-biotech crops. *Source:* www.checkbiotech.org 07 Jan 2003

Kenyan Initiatives for Banana Biotechnology

The banana tissue culture project in Kenya has come up with a way to assist small-scale farmers acquire tissue culture banana plantlets. This would provide an infrastructure for farmers who want to avail the plantlets the project established a village bank. Over the last years, Kenya Agricultural Research Institute (KARI) have been involved in the tissue culture banana project to benefit small-scale resource-poor farmers in Kenya and East Africa. Though the project has been adopted well by the farmers, it has met challenges namely lack of micro credit to purchase plantlets, adequate water for irrigating the orchards and a well-organised marketing system for the fruits. ISAAA AfriCenter supports the project. The village bank was set-up to address the problem with financing. Since the tissue culture plants were better than conventional ones, farmers were willing to pay a higher price. Still, small-scale farmers could not afford the number of plantlets that would make their undertaking economically viable. A credit for purchasing plantlets was established, however, no infrastructure was laid down initially. The established village bank is accessible to farmers as opposed to commercial banks. Cooperatives were also not viable as those in the area they have been experiencing management problems. *Source:* Crop Biotech Update, December 19, 2002.

U.S. delays suing Europe over ban on modified food

Robert B. Zoellick, the United States trade representative, has said that the administration would decide soon whether to sue the Europeans for what

he called their “immoral” opposition to genetically modified food. He said that stand was leading to starvation in the developing world. A cabinet meeting to consider the suit was cancelled this week as European agricultural officials descended on Washington to argue for patience. Even so, the conflict will resurface soon, Mr. Zoellick has said he believes that genetically modified food could help alleviate hunger – as well as open markets for American farmers – and wants the European opposition to be confronted so that developing nations accept food from genetically modified crops. But the heated rhetoric few weeks ago, when Mr. Zoellick accused the Europeans of having a Luddite attitude against biotechnology, was muted this week as both sides stressed the importance of lifting the ban. Experts agree that the United States could win a case at the World Trade Organization and force a lifting of the four-year-old ban. At the same time, they agree that the ultimate resolution of this case will rest on labelling – not opposing notions of science – and that it promises to pit European ideas of proper regulation against American notions about free and unfettered trade. European consumers have for years questioned the safety of genetically modified food out of fear that those modifications may have unknown, and unintended, consequences for human health. They are demanding labels that identify which food has been genetically modified and has passed rigorous testing. The agricultural establishment in the United States is just as strongly opposed, saying that once the food has passed tests there is no need to distinguish it with label that could be seen as a warning.

While European nations agree on the need for labelling in the face of deep consumer fears, American lawmakers have had a more mixed record. Although it took 12 years of lobbying by farmers, chefs and environmentalists, the agriculture department last year created an official organic label to show consumers what produce has been raised without conventional pesticides or fertilizers, antibiotics or growth hormones. The food is growing in popularity – it is a \$4 billion industry – and public response was overwhelmingly in favour of the new label. As industry feared, the cost of the label has proved prohibitive for some of the smallest farmers – averaging \$5,000 each year- and the paperwork is time-consuming. Federal officials believe that the process could be streamlined over the years. In last year’s farm bill, Congress included a provision opposed by much of agribusiness

that required that all meat, fish and produce be labelled with its country of origin within two years. Already, Canada has complained that the new country of origin labelling will restrict its trade with the United States, especially in meat. In a study released last month, Canadian officials complained of the cost and suggested that the new provision should be withdrawn.

That is unlikely until the European ban on genetically modified food is lifted and the issue of labeling is confronted head on. Trade and agricultural experts predict that in the end a compromise may have to be reached among competing interests within the United States as well as between the Europeans and the Americans. *Source:* www.checkbiotech.org 06 Feb 2003.

Brussels refuses to back US over GM food for Africa

The European Union yesterday rejected a plea by Washington to give assurances to drought-stricken southern African countries about the safety of genetically modified emergency food relief. The US State Department had urged the EU to assure African states that biotech food supplies were safe, and should be distributed immediately to the millions of hungry people in the region. The dispute has erupted on the eve of the United Nations World Summit on Sustainable Development, to be held in Johannesburg, which is expected to address Southern Africa's increasing vulnerability to famine as a top priority. But some non-governmental organisations believe that US is using Africa's poverty to gain greater international acceptance for GM food.

Zimbabwe, Zambia and Mozambique have turned away food relief shipments of GM grain. They fear that if it finds its way into their agricultural systems it could blight their crop and livestock exports, particularly to the EU. They also believe the food may be harmful to their people. Commission officials say the US could have solved many problems by buying food-aid maize locally, as does the EU, to provide countries with non-GM maize, or by million corn so it cannot take root. Acute food shortages in southern Africa threaten 14m people with starvation. The shortages are expected to peak

over the next two months. The World Health Organisation says 300,000 people may die of starvation in the coming months.

The Geneva-based WHO is hosting a three-day meeting with regional governments from next Monday in Harare to try to forge a response to controversy over GM foods and widespread malnutrition. It is said that GM food was unlikely to pose a threat to human, but it was up to individual governments to decide whether to accept imports. The US is supplying about 500,000 tonnes of food – about half the region's humanitarian food aid requirements – by the end of the year. But the rejected food, according to a UN World Food Programme official, is being stockpiled in Durban, South Africa's largest port. Some is on its way to Beira, a port in central Mozambique. *Source: Financial Times, August 23, 2003*

European Commission for Protection of Biotechnological Inventions

The European Commission has officially requested Germany, Austria, Belgium, France, Italy, Luxembourg, the Netherlands, Portugal and Sweden to implement Directive 98/44/EC on the legal protection of biotechnological inventions into national law. The Directive should have been implemented by 30 July 2000. It aims to clarify certain principles of patent law applied to biotechnological inventions. Such clarifications have proved essential in order to fully exploit the medical, environmental and economic potential of biotechnology in line with high ethical standards. If the Member States do not uphold their commitment to implement the Directive correctly, the European biotechnology sector will be seriously disadvantaged. The requests take the form of reasoned opinions, the second stage of formal infringement proceedings under Article 226 of the EC Treaty. In the absence of a satisfactory reply within two months, the Commission may decide to refer the Member States concerned to the Court of Justice. The Commission, however, decided to maintain contacts with the Member States in order to try and accelerate the implementation procedure.

Directive 98/44 was adopted by the Council and the European Parliament to promote the development of biotechnological inventions at Community

level (MEMO/00/39). Before it was adopted, there were numerous discrepancies between the Member States' laws. It also provides the European Community with a means of permitting European companies to compete on level terms with their Japanese and American rivals. To date, however, only six Member States have implemented the Directive into national law, which has created barriers to trade and hampered the operation of the internal market. In the action plan contained in the annex to the Communication "Towards a strategic vision of life sciences and biotechnology", the Commission commented that the Member States should implement the Directive into national law without delay (IP/02/122). The Directive also excludes from patenting on ethical grounds certain applications such as processes for cloning human beings or modifying their genetic identity, the use of human embryos for industrial purposes and processes for modifying the genetic identity of animals which may cause them suffering without substantial medical benefits.

Life sciences and biotechnology offer considerable potential in many areas, especially health care, agriculture and environmental protection. By 2005 the European biotechnology market could be worth over 100 billion. By 2010, global markets, including sectors where life sciences and biotechnology constitute a major portion of new technology applied, could amount to over 2,000 billion, excluding agriculture. Source: Europa website: http://europa.eu.int/comm/secretariat_general/sgb/droit_com/index_en.htm

Opposing Patents on Genes

People troubled by the fact that the United States government has granted patents on genes and is likely to continue may find new hope through a legal argument being made by a University of North Carolina at Chapel Hill patent expert and a Philadelphia law student. Dr. John M. Conley, and Dr. Roberte Makowski, a former agricultural biologist now studying law at Villanova University, say opponents of such patents have not taken advantage of the long-standing "product of nature" doctrine. They offer their opinions on biotechnology patents in the current issue of the *Journal of the Patent & Trademark Office Society*, the principal publication for patent attorneys.

Ultimately patented are versions of DNA sequences in the genes as they exist outside the body, but they are still genes we are talking about and also proteins and cell lines. It is not just the new uses to which you can put genes such as gene therapy that are patentable. Widespread concern exists about the ethics, economics and long-term effects of biotechnology patents. Opponents have had difficulty, however, finding a legal hook to hang their concerns on, and the courts have rebuffed them repeatedly. People who look at this from an economic perspective say it seems inefficient and counterproductive to let others monopolize genes, proteins, etc. before the full range of uses can be known. *Source:* www.checkbiotech.org, January 3, 2003.

FAO for Improved Cassava

Thirty of the world's leading experts in cassava research have established the Global Partnership for Cassava Genetic Improvement, a new partnership to promote and coordinate global investment in the genetic improvement of cassava, an important source of nutrition in tropical countries, the UN Food and Agriculture Organization (FAO) announced today. "This new partnership is a very positive development, reflecting the urgent need to support the genetic improvement of cassava to help millions of the world's hungriest people. The tropical root crop cassava is the third most important source of calories in the tropics, after rice and corn. More than 600 million people depend on the cassava in Africa, Asia and Latin America. Cassava is grown by poor farmers, many of them women, often on marginal land. For these people, the crop is vital for both food security and income generation.

Despite the importance of cassava in the fight against hunger, investment in research to improve the tropical root crop has lagged far behind that of other basic food crops. This has resulted in only minor increases in cassava productivity over the past 30 years — less than 1 percent annually compared to 2-5 percent in rice, wheat, and corn. In Africa, average cassava yield is 8 tonnes per hectare compared to potential yields of over 80 tonnes per hectare. Bacterial and viral diseases, insect pests, weeds, and drought have all combined to limit cassava production. Attempts by farmers to market their cassava products have also fallen well short of their potential, because

of rapid post-harvest deterioration and inadequate starch and protein content in the roots. Conventional breeding efforts have attempted to address many of the constraints facing cassava productivity, but with limited success. Progress has been slow, because of the crop's complex genetic makeup, which makes it difficult to breed efficiently. New tools such as advanced molecular biology and biotechnology can change this situation by offering new approaches to cassava improvement. New technologies have the potential to make cassava much more productive, nutritious, and profitable to grow, according to the UN food agency.

The Global Partnership for Cassava Genetic Improvement will develop and use advanced biotechnologies such as genomics to create cassava planting materials that incorporate desired traits, including: enhanced resistance to pests and disease, modified starch quality for better marketability and enhanced levels of protein and micro-nutrients that will make the crop more nutritious service. Cassava is the most reliable source of food for subsistence farmers in Africa, Asia, and Latin America, but it is also an important industrial and cash crop that can promote rural development. The technologies being promoted by this Partnership will allow breeders like me to improve more rapidly cassava's value and performance in the field. *Source:* <http://www.fao.org/english/newsroom/news/2002/10541-en.html>