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## **AFRICA**

### **INSTITUTES COLLABORATE TO BOOST AFRICAN RICE PRODUCTION**

<http://www.warda.org/warda/newsrel-riceproduction-aug07.asp>.

Three leading international agricultural research institutes have announced plans to join forces to boost African rice production and save the region millions of dollars in lost foreign exchange. The three centers are the Africa Rice Center (WARDA) based in Benin, the Centro Internacional de Agricultura Tropical (CIAT) based in Colombia and the International Rice Research Institute (IRRI) based in the Philippines.

The three institutes have proposed the establishment of a united front for promoting rice and rice research in sub-Saharan Africa (SSA) and a common conduit for transferring technology and information from international research to farmers in the region. Called the sub-Saharan Africa Rice Consortium (SARC), it will consolidate two existing regional rice networks in SSA. The Consortium aims to provide farmers with better access to improved seeds and technologies, and to develop a critical mass of trained scientists, thereby enhancing Africa's capacity in rice research.

### **EGYPT'S NATIONAL BIOSAFETY COMMITTEE IMPROVES PERFORMANCE**

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The Egyptian National Biosafety Committee (NBC) has been reformed to acquire more expertise and to improve its performance. The NBC is headed by the Minister of Agriculture, and composed of experts from the Ministry of Agriculture, Environment, Health, and Trade, and professors from several Egyptian universities. The main goal of the new NBC is to review the legislations related to the safe use of genetic engineering (GE) and of products derived from molecular biology applications, to avoid any risks to human health and the environment. The NBC is responsible for the approval of biotech products, both for experimental use and for their commercialization. One of the most important roles of NBC is to provide training and technical consultancy in Biosafety regulations to institutes, research bodies, both from the public and private sectors.

### **KENYA TO HOST AFRICA'S NEWEST AGRICULTURE BODY**

<http://www.agra-alliance.org>.

The Alliance for Green Revolution in Africa (AGRA) will have its headquarters in Nairobi, Kenya, said the new Chairman of the Board, former UN Secretary-General Kofi Annan after a meeting with the country's President Mwai Kibaki.

Annan said the Alliance will work with African governments, the private sector and development agencies to help break the cycles of hunger and poverty in Africa through a comprehensive set of initiatives that will provide small-scale farmers with the tools and opportunities they need to boost their productivity, increase their incomes, and build better lives.

In addition, Annan told the press in Nairobi after a fact-finding mission in Kenya that saw him meet face-to-face with small-scale farmers, that the new agricultural initiative will be involved in Africa programs aimed at:

- ◆ developing better and more appropriate seeds;
- ◆ fortifying depleted soils with responsible use of soil nutrients and better management practices;
- ◆ improving access to water and water-use efficiency; improving income opportunities through better agricultural input and output markets;
- ◆ developing local networks of agricultural education; understanding and sharing the wealth of African farmer knowledge;
- ◆ encouraging government policies that support small-scale farmers; and
- ◆ monitoring and evaluating to ensure that Alliance efforts improve the lives of small-scale farm households and help build a sustainable future for all Africans.

AGRA is an initiative of the Rockefeller Foundation and the Bill and Melinda Gates Foundation. The Bill and Melinda Gates foundation has donated \$150 million to start off the new initiative.

### **KENYAN MPs BACK CALL TO ENACT BIOSAFETY LAW**

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Fifteen Kenyan parliamentarians belonging to various Parliamentary Select Committees such as education, science and technology, health, trade, agriculture, environment and natural resources have called for speedy enactment of Biosafety Bill 2007 into law, to give legal backing for biotechnology research and development activities that are on-going in the country.

Speaking during a fact-finding mission to assess the country's human and technical capacities to undertake biotech research, the MPs urged the Minister for Science and Technology, Dr Noah Wekesa, to table the Bill in Parliament as soon as possible so that it could be debated and passed into law to enable scientist to harness the "immense potential of biotechnology to improve agricultural productivity and industrial development".

"When the Bill comes to Parliament, we will lobby for its enactment into law," said Sammy Weya, MP for Alego Usonga Constituency, a cotton growing area. The seeing-is-believing tour, which included a visit to Bt Cotton (Bollgard II) contained field trials site at the Kenya Agricultural Research Institute in Mwea Station, about 150 km north east of the Capital Nairobi, was also attended by government officials, scientists, regulators, farmers, seed traders and the media.

### **HORTICULTURE PROGRAMME TO BOOST INCOMES AND JOBS IN RURAL KENYA**

<http://www.ifad.org/media/press/2007/34.htm>.

A multi-million dollar program supported by the International Fund for Agricultural Development (IFAD) will boost incomes and improve health and quality of life for poor rural people in Kenya. The Smallholder Horticulture Marketing Programme will help farmers improve crop quality and yields and find the most cost-effective ways to get produce to the market. It will also encourage growers to add value to crops by transforming them into a range of products such as purées, dried fruits and conserves.

The program will focus on potatoes, bananas, cabbage, kale, tomatoes and other crops grown mainly by the poor. It will concentrate on produce sold in the domestic market rather than the export market. "If we can identify the inefficiencies in the marketing chain between the time a crop is grown and the time it reaches the consumer, we can address them," said IFAD's President Lennart Båge. "This should translate into more dollars in farmers' pockets."

### **STATUS OF AGRI-BIOTECH IN SOUTH AFRICA**

<http://www.fas.usda.gov/gainfiles/200707/146291657.pdf>

According to the US Department of Agriculture Foreign Agricultural Service (FAS), farmers in South Africa continue to plant GM crops. About 92% of cotton, 44% of corn, and 59% of soybeans planted in South Africa are GM. South African farmers prefer GM crops because these varieties require fewer inputs and have higher yields, and are easier to manage than traditional varieties.

The South African government generally supports biotechnology, and the country has a regulatory structure that is very progressive. South Africa is expected to play a vital role like countries in Africa develop biotechnology policies.

### **SOUTH AFRICA INCLUDES BIOTECHNOLOGY IN 10-YEAR PLAN**

<http://link2media.co.za/PrView.cfm?id=2328217>

The South Africa Cabinet has recently approved its Ten-Year Innovation Plan for South Africa (2008-2018). It includes biotechnology as an essential part of the plan. In "Innovation Towards A Knowledge Economy" where the Plan was presented, Dr. Phil Mjawara, Director General of the Department of Science & Technology, stressed that South Africa is positioning itself for the knowledge economy and innovation was deemed to be a key ingredient.

Research and development investment by government, Mjawara said, was important to increase "both the capacity to innovate internally and the capacity to absorb external innovation." He

identified grand challenges for science and technology, among which was the need to leverage research and development investments and see to the growth of the biotechnology industry.

### **AGRA CLARIFICATION ON BIOTECHNOLOGY RESEARCH WELCOMED**

<http://www.absfafrica.org/Africa%20welcomes%20AGRA%20clarification.pdf>

The Alliance for a Green Revolution in Africa (AGRA) issued a press statement that the organization “supports the use of science and technology” – including genetic modification (GM) technology – “to aid Africa’s smallholder farmers in their urgent efforts to end widespread poverty and hunger”. The press release clarifies previous allegation that the Alliance does not favour the use of the GM technology in Africa as hinted from the speech of the AGRA president former UN Secretary General Kofi Annan.

The Alliance’s position on biotechnology is consistent with the New Partnership for Africa’s Development (NEPAD) plan on biotechnology which states that “regional economic integration in Africa should embody the building and accumulation of capacities to harness and govern modern biotechnology”. Major agricultural organizations in Africa agree that although the potential of conventional breeding is not fully harnessed, new technologies such as biotechnology should be utilized because of their enormous potential to contribute food sufficiency and poverty alleviation.

### **COWPEA PRODUCTION BENEFITS FARMERS IN NIGERIA**

[http://www.iita.org/cms/details/news\\_details.aspx?articleid=1136&zoneid=81](http://www.iita.org/cms/details/news_details.aspx?articleid=1136&zoneid=81).

In the International Improvement of Tropical Agriculture (IITA)/Gatsby crop-livestock project, farmers are taking advantage of extra early varieties of cowpea to double their production and increase their income. The rainy season in the Guinea savanna in northern Nigeria normally starts in June and ends in September. With such a short rainy season, cowpeas can be planted only once. Under the project, extra early cowpea varieties are harvested by August, and a second batch is planted in September. The grain yields from extra early cowpea varieties were estimated at about 700 to 1100 kg/ha, a record high.

### **US SCIENTISTS BREED DISEASE-RESISTANT PLANT FOR AFRICA**

<http://www.sciencedaily.com/releases/2007/07/070722111035.htm>

Michael Timko, a Professor of Biology in the University of Virginia, is helping African breeders to develop the resistance of cowpea to the weed *Striga* in West Africa. He and other scientists have sequenced the cowpea genome and are using this information to speed up and improve the breeding process by modern molecular-based technologies.

Cowpea is a primary protein source for millions of people. About 80% of the world's cowpea crop is grown in Africa, mostly by subsistence farmers. The entire plant is used for food, and for hay and fodder for cattle. However, the *Striga gesnerioides*, or “witchweed,” is so virulent that farmers must relocate their cowpea crop to new soil every few years. Timko’s approach is to improve the performance of plants by identifying genes that control key characteristics, and then use this knowledge in selective breeding programs that emphasize those traits using associated genetic markers. The resulting product is the delivery of improved parasite-resistant hybrids to the farmer in shorter amounts of time.

## **OTHER COUNTRIES**

### **DRAFT ENVIRONMENTAL IMPACT STATEMENT**

[agweekly@bio.org](mailto:agweekly@bio.org).

The United States Department of Agriculture has issued a draft of the Environmental Impact Statement, which is a requirement in revising its agricultural biotechnology regulations. Some of the regulation changes that are being considered include the following:

- ◆ Expanding regulatory oversight to biological control organisms and GMOs that have the potential to be noxious weeds

- ◆ Expanding the tiered permitting system based on potential risk and familiarity with the GMO
- ◆ Providing an alternative process to deregulation that will include conditional approvals
- ◆ Revising the permitting system for PMPs and PMIPs for multi-years with intensive reviews of standard operating procedures, audits, and inspections
- ◆ Building on its current AP policy, revising regulations for determining the safety of the low-level presence of regulated GE products
- ◆ Establishing a regulatory mechanism for imports of commodities that are not for propagative use

### **INDIAN STUDIES SHOW BENEFITS OF Bt COTTON**

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The Associated Chambers of Commerce and Industry of India (ASSOCHAM) reports that two studies on Bt cotton farming in India prove that farmers benefited from planting Bt cotton. The socio-economic appraisal of Bt cotton cultivation in India was undertaken by Indicus Analytics while the study on economic benefits of Bt cotton cultivation in India was conducted by IMRB International.

ASSOCHAM Immediate Past President, Anil K. Agarwal, said that both studies established the significant socio-economic benefits that have accrued to cotton farmers as a result of the introduction of this technology. Farmers planting Bt cotton had higher incomes than non-Bt farmers, earning a net profit of 162% more per acre. They also had higher yields of approximately 50% over conventional cotton harvests. The number of sprays against bollworms was also reduced by about five sprays less per acre.

Bt cotton farming households fared economically better than non-Bt cotton farming households, and had better access to markets, shops, banking and telecommunication facilities; as well as maternal services, education, and health services.

### **GM POTATOES WILL NOT BE RELEASED IN THE ANDES**

[http://www.cipotato.org/pressroom/press\\_releases\\_detail.asp?cod=41](http://www.cipotato.org/pressroom/press_releases_detail.asp?cod=41).

The International Potato Center (CIP) has stressed that it will not release genetically modified (GM) potatoes in the Andes, which includes the countries of Peru, Bolivia, Ecuador, Colombia, Venezuela, Argentina and Chile. CIP feels that the understanding of potential environmental risks and cultural consequences associated with the introduction of transgenic potatoes in the center of diversity is not yet adequate. The Center has already developed a transgenic potato which however has never been grown in the field in Peru or anywhere else in the world. The CIP GM potato was specifically developed to resist the potato tuber moth (PTM), *Phthorimaea operculella* (Zeller).

### **PEANUTS AS NEW SOURCE OF BIODIESEL?**

<http://www.ars.usda.gov/is/pr/2007/070730.htm>.

Peanut is slowly receiving more attention as a biodiesel crop. Researchers at the US Department of Agriculture's Agricultural Research Service (ARS) and the University of Georgia, are testing a peanut called Georganic. It is not suited to current commercial edible standards for peanuts, but is high in oil and has low production input costs. Georganic can be planted and grown with just one herbicide application for weed control, and without the need for fungicides.

Many old and new peanut varieties are being tested for field performance, and their oils are being analyzed for diesel performance characteristics. It has been found that high-oleic-acid peanuts—a quality desired for extended shelf life of food products, also make the best biodiesel fuel.

### **GREECE EXTENDS BAN ON GM MAIZE**

[http://www.coextra.eu/country\\_reports/news878.html](http://www.coextra.eu/country_reports/news878.html).

A month after European Union Trade Commissioner, Peter Mandelson, warned Member States of a possible legal action from the World Trade Organization against the bloc due to individual bans on biotech food, Greece again has decided to extend a ban on GM maize MON810 for at least two more years, despite approvals for commercialization in the EU. The country also increased the varieties

barred from sale and cultivation from 31 to 51, all of which are derived from the MON810 seed type, developed by Monsanto. The Ministry of Agriculture strongly opposes the circulation of GMOs.

Greece has justified its decision and stated that its actions are well-advised. A declaration from the Ministry of Agriculture commented that the new ban "is founded on the same solid scientific and legal basis, but also includes new scientific data and finds. These concern a possible threat to human health as well as to the beekeeping industry."

### **ENVIRONMENTAL CONCERNS BOOST AUSTRALIAN SUPPORT FOR GM FOODS**

[http://www.biotechnology.gov.au/reports\\_](http://www.biotechnology.gov.au/reports_)

Biotechnology Australia, a government agency tasked with managing the National Biotechnology Strategy and with coordinating non-regulatory biotechnology issues, has released a survey showing that the Australian public support for GM food crops has increased from 46% in 2005 to 73% in 2007. This positive perception is attributed mainly to the role that GM foods play in countering drought and pollution.

Respondents in the study placed the highest values on the following biotechnology applications:

- ◆ cleaning up pollution (97% support);
- ◆ developing environmentally-friendly vehicle fuels (97%);
- ◆ recycling water more effectively (96%);
- ◆ helping address climate change (91%); and
- ◆ combating salinity (90%).

"Support for health and medical applications of biotechnology have always been higher than for food and agricultural applications, which is due to factors such as the perceived purpose of the research or products, and perceived strict regulation of health-related products," said Mr Craig Pennifold, Head of Biotechnology Australia.

### **GM SUPPORTERS CONFIRM BIOTECH CROPS AS COST EFFICIENT**

[http://www.da.gov.ph/News\\_events/news2.html](http://www.da.gov.ph/News_events/news2.html)

In the seminar "Economic Studies on GM Crops", the Biotechnology Coalition of the Philippines (BCP) has confirmed that the benefits from the cultivation of GM crops and fruits such as rice and delayed ripening (DR) papaya far outweigh the risks. Dr. Nina Barzaga, the new president of BCP, stressed that the funding needed to prove safety and viability through the Program for Biosafety Systems (PBS) is low compared to the long-term profitability of farmers and all those engaged in marketing GM crops and fruits.

BCP said that the technology development for Bt corn is lower at 33% compared to the regulatory compliance which comprised 67% of the total development cost. The cost of development for DR papaya on the other hand, was divided between laboratory costs (54.16%), greenhouse costs (20.56%) and field test costs (15.19%).

### **BIOTECHNOLOGY POLICIES IN EUROPE**

[http://ec.europa.eu/research/biosociety/index\\_en.htm](http://ec.europa.eu/research/biosociety/index_en.htm)

A report from the European Commission, a product of the BioPolis Initiative, compared the national biotechnology policies across Europe. All 27 member states of the European Union as well as Switzerland, Norway and Iceland, and the candidate countries Croatia and Turkey were included in the study.

Data collected during the study includes: biotechnology research and development (R&D) spending by public bodies; policy measures designed to foster the sector; the number of scientific publications and their citation rates; the number of patents applied for; and the number of skilled staff working in the non-profit sector.

Several recommendations were made for a successful performance:

- ◆ there should be a coordination of policy actions that address the core innovation policies such as science, technology and education, public health and regional development; promote basic research and the development and commercialization of products and services;

- ◆ focus on certain points where the country has a niche; and
- ◆ develop collaborations with other countries.

### **PROTEINS OF GM FEED DEGRADE IN LIVESTOCK**

[http://www.efsa.europa.eu/etc/medialib/efsa/science/gmo/statements.Par.0002.File.dat/EFSA\\_statement\\_DNA\\_proteins\\_gastroint.pdf](http://www.efsa.europa.eu/etc/medialib/efsa/science/gmo/statements.Par.0002.File.dat/EFSA_statement_DNA_proteins_gastroint.pdf)

In response to a request made by the European Commission to investigate the potential for transgenes or their products to be incorporated into animal tissues or products such as eggs and milk, the European Food Safety Authority (EFSA) recently prepared a literature survey on the fate of recombinant DNA of GM feed within the gastrointestinal tract of livestock. EFSA has concluded that biologically active genes and proteins are common constituents of foods and feed of varying amounts. A rapid degradation into short DNA or peptide fragments is observed in the gastrointestinal tract of animals and humans. A large number of experimental studies on livestock have also shown that recombinant DNA fragments or proteins derived from GM plants have not been detected in tissues, fluids, and edible products of farm animals.

### **BIOTECH INDUSTRY URGES MEMBER STATES TO ADDRESS ZERO TOLERANCE**

[http://www.europabio.org/articles/Final\\_Low\\_Level\\_Presence\\_Reference\\_and\\_Key\\_messages\\_docume...pdf](http://www.europabio.org/articles/Final_Low_Level_Presence_Reference_and_Key_messages_docume...pdf)

The European biotech industry announced its support for the European Commission Director-General for Agriculture and Rural Development Report on the Economic Impact of Unapproved GMOs on EU Feed Imports and Livestock Production. It also calls on institutions to urgently address the issue of low-level presence of European Union (EU)-unapproved GM materials entering Europe in traded commodities. The EU continues to apply a zero tolerance for EU-unapproved GM materials being present in low levels in imported products. The industry has urged Member States to keep pace with approvals in other regions of the world, many of which are key trading partners of the EU. Imports of essential GM derived feed and food products may slow down considerably or come to a halt, as traders would be unwilling to assume the risk of having traces of EU non-authorized biotech crops detected in their shipments.

### **OPINIONS ON GM FOODS MUST BE BASED ON FACT**

<http://www.cnw.ca/fr/releases/archive/August2007/08/c5191.html>

"Genetically modified foods and the crops from which they are derived are some of the most extensively studied food products in the world," says Denise Dewar, Executive Director of Plant Biotechnology for CropLife Canada. "GM foods have been safely consumed for over a decade."

Countless studies by international organizations have concluded that genetically modified crops pose no risk to human health and the environment. A report from the European Union concludes "the use of more precise technology and the greater regulatory scrutiny probably make them even safer than conventional plants and foods."

The World Health Organization states "no effects on human health have been shown as a result of the consumption of such foods by the general population in the countries where they have been approved."

To ensure that our food is safe and nutritious, Canada has one of the most rigorous and well-respected regulatory approval processes in the world. The Canadian Food Inspection Agency and Health Canada ensure the safety of our food. In establishing science-based regulation of these products in Canada, Health Canada's guidelines reflect recent international standards, which are based on scientific principles developed over the last 10 years through expert international consultation with agencies such as the World Health Organization and the Organization for Economic Co-operation and Development.

"The call for mandatory labelling of GM food would ultimately impose greater costs to growers, manufacturers and consumers and it is difficult and expensive to enforce," said Dewar. "In many countries that have adopted the system, it has failed to provide consumers with choice."

Canada's agricultural biotechnology sector is an important part of the country's growing bio-

economy, and GM crops allow farmers to grow plants that are more nutritious, achieve higher crop yields and provide more options to manage weeds and insects.

## **OTHER NEWS**

### **CLIMATE CHANGE TO CAUSE MORE HUNGER WHERE FOOD IS ALREADY SCARCE**

<http://www.fao.org/newsroom/en/news/2007/1000646/index.html>.

In a cruel twist of fate, climate change is likely to undermine food production in the developing world where food is already scarce, while industrialized countries could expect a boost in production potential. The reason for this, according to Jacques Diouf, the Food and Agriculture Organization (FAO) Director-General, is that crop yield potential is likely to increase at higher latitudes for a 1 to 3°C increase in global average temperature depending on the crop, and likely to decline for even small global temperature rises at lower latitudes, especially in the seasonally dry tropics. Communities in semi-arid and sub-humid regions that depend on rainfed agriculture are mostly at risk.

Whereas the Green Revolution has provided a solution to global food shortage in the past three decades, the next 30 years will be the turn of new technologies. These new technologies can supplement conventional breeding approaches to enhance yield levels and nutritional quality, increase input use efficiency and reduce risk. But Diouf pointed out that most GM crops cultivated today were developed to be herbicide tolerant and resistant to pests. Traits valuable for poor farmers, especially within the context of climate change, such as resistance to drought, soil acidity and salinity, are sometimes being overlooked.

"I cannot sufficiently underline the need to also address the needs of resource poor farmers in rainfed areas and on marginal lands," said Diouf. "Ensuring that new biotechnologies help achieve this goal, in full awareness of biosafety, socio economic and ethical concerns associated with the use of some of these technologies remains a challenge for the entire scientific community."

### **DR. NORMAN BORLAUG AWARDED CONGRESSIONAL GOLD MEDAL**

[http://online.wsj.com/public/search/page/3\\_0466.html?KEYWORDS=Borlaug](http://online.wsj.com/public/search/page/3_0466.html?KEYWORDS=Borlaug).

World Food Prize Founder and 1970 Nobel Peace Prize Laureate Dr. Norman Borlaug was awarded the Congressional Gold Medal, America's highest civilian honor by US President George W. Bush and Speaker of the House Nancy Pelosi on 17 July 2007.

In his speech, Borlaug stressed the importance and benefits of the advances in biotechnology over the last decade. He also encouraged new initiatives in biotechnology to focus on biofuels; on crops and traits of greatest interest to the world's poor, such as beans, peanuts, tropical roots, tubers like cassava and yams, and bananas; and on research to enhance the nutritional content of food crops for essential minerals and vitamins.

Borlaug stressed the importance of public-private partnerships to improve access to biotech seeds by smallholder farmers, and to share research and development costs for "pro-poor" biotechnology.

### **MARKER-ASSISTED SELECTION**

<http://www.fao.org/newsroom/en/news/2007/1000630/index.html>

A comprehensive assessment on Marker-Assisted Selection (MAS) by the Food and Agriculture Organization (FAO) was conducted to evaluate the technology and to determine the reasons behind its "apparent failure to deliver its promise". Shivaji Pandey, the Chairperson of the FAO Working Group on Biotechnology, emphasized that while the technology can "revolutionize" the way varieties and breeding stocks are developed, there are several requisites that need to be in place before the full potential of MAS is realized. Pandey cited reasons such as: high costs involved in laboratory infrastructure; equipment needed for generating data; data handling and management capabilities; presence of well-qualified staff; and good funding. In addition, the application of the technology can only be fully realized when well-structured breeding programs are already in place, which is often

not the case in many developing countries. The technology must also be used only when there is a clear advantage over traditional selection techniques.

Please see the full report press release in

### **LOW-INCOME FOOD-DEFICIT COUNTRIES MAY SUFFER FOOD INSECURITY IN 2007**

<http://www.fao.org/newsroom/en/news/2007/1000628/index.html>.

A slowdown in cereal production and prospects for continued high international prices could result in tighter food supply situation in low-income food-deficit countries, according to the latest Crop Prospects and Food Situation report by the Food and Agriculture Organization. In Africa, in countries such as Morocco, Zimbabwe, Namibia, Lesotho, and Swaziland, grain production is severely affected by drought. In Somalia, output is anticipated to be reduced due to irregular rains in the main growing areas.

### **DISCOVERY IN PLANT VIRUS TO AID PREVENTION OF HIV AND SIMILAR VIRUSES**

<http://news.uns.purdue.edu/x/b/070730ChenMosaicvirus.html>.

Purdue University researchers have been able to genetically modify a plant to halt reproduction of a virus related to the human immunodeficiency virus (HIV). Cauliflower mosaic virus (CaMV) attacks the *Brassicaceae*, a group of plants that includes cauliflower, broccoli, cabbages, turnips, canola and many types of mustard.

The retrovirus HIV and CaMV both use reverse transcription to recruit the host's proteins in order to reproduce and spread infection. The researchers found that in *Arabidopsis*, the virus recruits a protein complex essential for infection CDKC, which is the same protein complex that HIV uses. "In *Arabidopsis* there are two genes for the CDKC protein complexes that trigger the transcription process", said Zhixiang Chen, Purdue professor of botany and plant pathology. "If we knock out one of these genes, the plants become resistant to CaMV and the plant is still growing." The key question for researchers is to determine how blocking the function of one protein inhibits transcription and replication of the viruses. Discovering the answer could mean major advances for prevention of retroviruses and treatment of the diseases they cause in plants and animals.

### **Mass media's influence on biotechnology**

A new analysis was published on showing strong evidence that media can frame and might have actively framed agricultural and medical biotechnology, and the public debate through its coverage. For a copy of the study please contact Alina Cornea ([a.cornea@europabio.org](mailto:a.cornea@europabio.org))

### **NOTICE BOARD**

**17 – 18 September 2007** - The Federation of Indian Chamber of Commerce (FICCI), in collaboration with the Indian Council of Agricultural Research (ICAR) and the Department of Biotechnology (DBT), Government of India, is organizing the International Conference of Agricultural Biotechnology (AgriBio-2007) in New Delhi. The program is supported by the International Service for the Acquisition of Agri-biotech Applications (ISAAA), while the US Department of Agriculture is knowledge partner of the program. The AgriBio 2007 conference theme "Maximizing Gains, Minimizing Risks" underscores a need for a coherent approach; science based regulatory assessment and early deployment of biotech crops for larger benefits to society, a better environment and a sustainable agriculture. The conference emphasizes the latest international developments in the field of agricultural biotechnology and provides a platform for knowledge sharing and networking for policy makers, world's leading scientists and industry leaders. For details of the program, visit the conference website at: <http://www.AgriBio2007.com>. For registration and other queries contact: Mr. Vinay Chaudhry at

[vinay.chaudhury@ficci.com](mailto:vinay.chaudhury@ficci.com) or [biotech@ficci.com](mailto:biotech@ficci.com).

**24 – 28 September 2007** - The International Centre for Genetic Engineering and Biotechnology will be holding several courses and workshops on biosafety and agricultural biotechnology. These include:

- 1) a workshop on "Biosafety of GM crops and the evolution of regulatory frameworks: Issues and challenges," September 24-28, 2007 in Minas Gerais, Brazil;
- 2) a practical course on "Evaluation of risk assessment dossiers for the deliberate release of genetically modified crops," October 8-12, 2007 in Ca' Tron di Roncade, Italy;
- 3) a theoretical and practical course called "Molecular approaches in gene expression analysis for crop improvement," October 8-19, 2007 in New Delhi, India; and
- 4) a theoretical and practical course entitled "Insecticidal proteins: Application and regulatory issues," November 12-23, 2007 in New Delhi, India.

ICGEB offers a number of one- to two-week workshops and training courses throughout the year. Information on this year's courses and workshops is available online at <http://www.icgeb.trieste.it/MEETINGS/CRS07/Meetings2007.htm>.

**26 - 28 September 2007** - EuroBio 2007 will bring together more than 4,000 biotech professionals, 400 companies, 300 exhibitors and 200 speakers covering Europe's key biotech markets and technologies. Other features include a major trade show with 300 exhibitors and 4000 delegates, a EuroBio Career Fair, and EuroBio partnering. For more information:

<http://www.eurobio-event.com>.

**9 – 11 October 2007** - International Trade Fair for Biotechnology (BIOTECHNICA) Hannover, Germany. BIOTECHNICA is regarded as the leading event of the year for the European biotech industry, covering all sectors of biotechnology in depth - from basic biotechnology research, equipment, bioinformatics and services to the five principal areas of application - pharmaceuticals and medicine, industry, nutrition, agriculture and the environment. It also offers exhibitors and visitors a central platform for knowledge transfer. For more information:

[http://www.biotechnica.de/profil\\_e?x=1](http://www.biotechnica.de/profil_e?x=1)