

A weekly summary of world developments in agri-biotech for developing countries, produced by the Global Knowledge Center on Crop Biotechnology, International Service for the Acquisition of Agri-biotech Applications SEAsiaCenter (ISAAA).

May 25, 2007

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#### **NEWS AND TRENDS**

Philippine National Oil Company Subsidiary and Britain's NRG Chemical Engineering Sign Deal Worth US\$1.3 Billion for Biodiesel and Bioethanol **Production Plants** 

Peer-Reviewed "Biotechnology for Biofuels" (an Open Access Journal) to be Launched

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# News

**GLOBAL** 

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### WILD RELATIVES OF POTATOES, PEANUTS THREATENED BY CLIMATE CHANGE

According to a study released by scientists of the Consultative Group on International Agricultural Research (CGIAR), wild relatives of plants such as the potato and the peanut are at risk of extinction, threatening a valuable source of genes that are necessary to boost the ability of cultivated crops to resist pests and tolerate drought. This heralds a challenging future for agriculture. In recent years, genes available in wild relatives have helped breeders develop new types of domesticated crops that can fight devastating diseases, and cereal varieties that are more likely to survive drought conditions.

"The irony here is that plant breeders will be relying on wild relatives more than ever as they work to develop domesticated crops that can adapt to changing climate conditions," said Annie Lane, the coordinator of a global project on crop wild relatives led by Bioversity International. "Yet because of climate change, we could end up losing a significant amount of these critical genetic resources at precisely the time they are most needed to maintain agricultural production."

Read the press release at <a href="http://news.bioversityinternational.org/index.php?itemid=1783">http://news.bioversityinternational.org/index.php?itemid=1783</a>.

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### PLANTS WITH MORE VITAMIN C NOW A POSSIBILITY

UCLA and Dartmouth scientists have identified a crucial enzyme, GDP-L-galactose phosphorylase, in the biosynthetic pathway by which plants produce vitamin C.

"If we can find ways to enhance the activity of this enzyme, it may be possible to engineer plants to make more vitamin C and produce better crops," said Steven Clarke, UCLA professor of chemistry and biochemistry, director of UCLA's Molecular Biology Institute, and co-author of the research study.

"We hit on gold", added Clarke, "because we now have a chance to improve human nutrition and to increase the resistance of plants to oxidative stress. Plants may grow better with more vitamin C, especially with more ozone in the atmosphere due to pollution."

The full news is available at: <u>http://newsroom.ucla.edu/page.asp?RelNum=7960</u>

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#### MONSANTO TO INVEST IN INTERNATIONAL FRUIT AND VEGETABLE SEED COMPANIES

Monsanto Company recently announced the formation of the International Seed Group, Inc. (ISG), a holding company to invest in vegetable and fruit seed businesses with capital and technology investments. The cornerstone of the venture is Holland-based Western Seed, which specializes in tomato hybrids as well as other vegetable and

fruit crops. ISG also acquired Poloni Semences, a melon breeding company based in France. Seed industry veterans Anthony Padgett and David Atkinson are under contract to manage ISG, while Western Seed and Poloni Semences continue to operate under the direction of their current management.

"ISG will complement our Seminis business," noted Kerry Preete, who leads Monsanto's vegetable seed division, which includes Seminis and the new holding company. "By acquiring Western and Poloni, we improve our position in greenhouse tomato and pepper production and enter the high-value European melon market."

Readers can access the press release at <u>http://monsanto.mediaroom.com/index.php?s=43&item=490</u>.

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### GOLDEN RICE RESEARCHER TALKS ABOUT PRO-POOR TRANSGENICS

The collaboration between Peter Beyer and Ingo Potrykus, a retired professor of Plant Sciences at the Swiss Federal Institute of Technology in Zürich, produced a strain of rice enriched with a vitamin A precursor. The rice, known as Golden Rice because of its color, was designed to reduce the ravages of blindness among many people in poor countries unable to afford a proper mixed diet with adequate vitamins. In response to a consultation on a forthcoming report to be published by World Bank, Potrykus commented on the potential benefits of genetically modified (GM) crops for the poor.

Potrykus agrees that the slow progress in transgenics is due to lack of funding for this kind of research, especially in public institutions, both in developing countries and in the West. However, this is not the overwhelming cause for the "slow progress", according to Potrykus. What hinders progress in transgenic research is the system of "extreme precautionary regulation" established around the world. This regulatory system prevents the use of GMO-technology for the benefit of the poor, and paralyzes public institutions. In the context of Golden Rice, poor people in developing countries are being robbed of an opportunity for health improvement because of the delay in the adoption of traits imposed by regulatory requirements.

Read the complete article at <u>http://www.cropgen.org/article\_120.html</u>.

# AFRICA

#### ADDING VALUE TO THE KING CROP OF AFRICA

The International Institute of Tropical Agriculture (IITA) is carrying out research in Tanzania to improve cassava production in the country. The institute is working in collaboration with the Ministry of Agriculture, Food Security and Cooperatives, the Tanzania Food and Nutrition Center, Sokoine University of Agriculture, non-governmental organizations (NGOs), farmers groups, and the private sector. Cassava has a high potential as a money earner. Processed cassava products are important ingredients in the food and textile industries.

Unfortunately, the crop is threatened by pests and diseases. The most common diseases that affect cassava in this region are the Cassava Brown Streak Disease (CBSD), and the Cassava Mosaic Disease (CMD). IITA has been working on the development of new varieties resistant to the diseases, and with high yields.

Read the complete article at <u>http://www.iita.org/cms/details/news\_feature\_details.aspx?articleid=1038&zoneid=342</u>.

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#### FOLLOW-UP ON BANANA HYBRIDS

A Bioversity-sponsored scientist, Beloved Mensah Dzomeku of the Crops Research Institute in Ghana, will be studying the impact of new banana hybrids to banana farmers in Africa. The so-called FHIA hybrids were produced by the Honduran Foundation for Agricultural Research. The International Institute of Tropical Agriculture (IITA) and the African Center for Research on Bananas and Plantains (CARBAP) have also released new hybrids bred for disease resistance. Dzomeku and his collaborators will visit selected households that received IITA, CARBAP and FHIA hybrids to determine the extent to which the technologies have been adopted and have spread. They also plan to assess the impact of these technologies on banana yields, farm income, food security, and social dynamics.

Read the press release at <a href="http://news.bioversityinternational.org/index.php?itemid=1782">http://news.bioversityinternational.org/index.php?itemid=1782</a>.

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#### USAID FUNDS BT COTTON FIELD TRIALS

The United States Agency for International Development (USAID) will provide \$160,000 to support Bt cotton field trials in Uganda. Arthur Makara, the Biosafety Officer Uganda National Council of Science and Technology (NCST), said that the council is still reviewing the application for field trials. If the application will pull through, the planting will start at the end of May.

Read more at <u>http://allafrica.com/stories/200705210041.html</u>.

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#### PUBLIC AWARENESS ON GMOS IN TANZANIA REMAINS LOW

The public must be aware of genetically modified organisms (GMOs) since biotechnology is rapidly developing and affecting humans and the environment, said Erick Mugurusi, Director of Environment in the Vice President's Office of Tanzania. The awareness on GMOs in Tanzania remains low, even in the science community, since there is not enough expertise in the area. Mugurusi believes that the authorities and other institutions should promote public awareness, education, and participation in research, development, handling and trans-boundary movement, so that Tanzania can benefit from biotechnology while reducing environmental, health and socioeconomic risks.

The article is available at <a href="http://www.ippmedia.com/ipp/guardian/2007/05/22/90989.html">http://www.ippmedia.com/ipp/guardian/2007/05/22/90989.html</a>.

# AMERICAS

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#### PSR'S CONVERSION SERVICE FOR REGULATED TRAITS APPROVED

Professional Seed Research Inc. (PSR) has received approval from the United States Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS) for the handling of regulated genes. All trait providers (Monsanto, Dupont, Syngenta and Dow) have also approved the PSR conversion service for regulated and

unregulated traits in corn. Using its screening system, PSR is able to speed backcrossing by 3 to 4 generations. Its sister company, PSR Global Genetics LLC, is developing a large number of inbred lines that can be quickly converted with regulated and non-regulated genes. "This allows the advantage of producing donor parents from our proprietary genetics, reducing the number of backcross generations required by the trait providers", says Jim Dodd, CEO.

Read on for more details at <u>http://www.seedtoday.com/articles/</u> PSR\_s\_Conversion\_Service\_is\_Approved\_for\_Regulated\_Traits-44335.html

### NEW SUNFLOWER HYBRID WITH DUPONT™ EXPRESSSUN™ TRAIT FROM PIONEER

Pioneer Hi-Bred International and DuPont Crop have introduced new sunflower hybrids with herbicide tolerance. Pioneer brand hybrid 63N81 contains the DuPont<sup>™</sup> ExpressSun<sup>™</sup> trait, which provides tolerance to Express<sup>®</sup> herbicide with TotalSol<sup>™</sup> soluble granules from DuPont. The sunflower hybrid was developed through traditional methods of plant breeding without the use of genetic modification.

The initial hybrid with the ExpressSun<sup>™</sup> trait is available in limited quantities for sunflower growers in North Dakota, South Dakota and Minnesota. Products for a wider area will be available in 2008, and Pioneer expects to increase supplies of sunflower products with the ExpressSun<sup>™</sup> trait throughout a widening geography through 2010.

The news article is available at <a href="http://www.pioneer.com/web/site/portal/menuitem.15f13f3b00ff37a9b771c663d10093a0/">http://www.pioneer.com/web/site/portal/</a> menuitem.15f13f3b00ff37a9b771c663d10093a0/

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#### USDA APPROVES GM RICE IN KANSAS

Ventra Bioscience has been given permission by the Agriculture Department to plant genetically modified rice that contains human proteins near Junction City, Kansas. Kansas officials, including Gov. Kathleen Sebelius, have given their support to the project. The rice strains made by Ventria Bioscience produce lysozyme, lactoferrin and human serum albumin in their seeds. All three are commonly found in breast milk. The company says that they aim to use the rice to create drinks that can combat diarrhea, and dietary supplements to help reverse anemia. The USA Rice Foundation, the Center for Science in the Public Interest, and the Center for Food Safety, however, opposed the plan due to the potential risk of contamination of the commercial rice supply.

The news is available at <a href="http://www.agriculture.com/ag/futuresource/FutureSourceStoryIndex.jhtml?storyId=91800608">http://www.agriculture.com/ag/futuresource/FutureSourceStoryIndex.jhtml?storyId=91800608</a> and <a href="http://www.nature.com/news/2007/070514/full/070514-17">http://www.agriculture.com/ag/futuresource/FutureSourceStoryIndex.jhtml?storyId=91800608</a> and <a href="http://www.nature.com/news/2007/070514/full/070514-17">http://www.agriculture.com/ag/futuresource/FutureSourceStoryIndex.jhtml?storyId=91800608</a> and <a href="http://www.nature.com/news/2007/070514/full/070514-17">http://www.nature.com/news/2007/070514/full/070514-17</a>.

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#### IMPACT OF CORN-BASED ETHANOL AND BIOTECH CROPS

Supporting the level of production to sustain corn-based ethanol production would require 95.6 million acres of corn to be planted. This would mean additional corn acres from reduced soybean acreage. In "The long term impact of corn-based ethanol of the grain, oilseed, and livestock sectors with implications for biotech crops", Amani Elobeid and

colleagues of the Iowa State University add that the demand for biotech corn varieties to sustain continuous production would increase dramatically, as well as the demand for soybean and wheat that can be grown in marginal areas.

The authors estimated that under the current ethanol tax policy, and if the prices of crude oil, natural gas and distillers grains stay at current levels, the break even corn price is \$4.05 per bushel. At this price, corn based ethanol production would reach 31.5 billion gallons per year.

Read more on this report and other papers at <u>http://agbioforum.org</u>.

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## BIO OKS POLICY ON PRODUCT LAUNCH STEWARDSHIP

The United States' Biotechnology Industry Organization (BIO) released a policy statement encouraging its members to help facilitate the flow of goods in commerce, and to minimize trade disruptions of agricultural biotechnology products.

The Product Launch Stewardship Policy seeks to address variance in regulatory authorizations in different countries. Members are requested to seek appropriate regulatory authorizations from major countries like the United States, Canada, and Japan before commercializing a new biotech-derived crop. It also encourages companies to consult with grain handlers and others in the value chain, follow best seed quality practices, as well as to develop detection methods for growers, grain producers, processors, and buyers.

Further details are available at <a href="http://www.bio.org/news/newsitem.asp?id=2007\_0521\_01">http://www.bio.org/news/newsitem.asp?id=2007\_0521\_01</a>.

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## DEVELOPMENT OF TRANSGENIC ORCHIDS IN THAILAND

A research team of Kasetsart University in Thailand has reported their first attempt to transform orchid (Dendrobium) by particle bombardment. Protocorm-like bodies (PLBs) of Dendrobium were used as target explants in this experiment.. Protocorms are the structures that form between the germination of the orchids' seeds and the establishment of seedlings. The experiments have shown that osmotic treatment, and fine-tuning the distance from the stopping screen to the target tissue are the major factors of increasing reporter gene expression in transformed plantlets. The team hopes to optimize the transformation method to improve the research and development of transgenic orchids in Thailand.

For the abstract of their report visit <u>http://www.safetybio.com/news/News\_show.asp?GID=2589</u>

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### INDIA'S PROPOSED LABELING RULE TOO STRINGENT SAYS REVIEW

The proposed labeling regulation in India will be among the most stringent in the world, and could potentially result

in low consumer benefits at a high cost. This was forwarded by Guillaume Gruere of the International Food Policy Research Institute and S. R. Rao of India's Ministry of Science and Technology in "A review of international labeling policies of genetically modified food to evaluate India's proposed rule".

The authors' review of experiences of developed countries showed that mandatory labeling regulations did not result in additional consumer choice or information. Similarly, developing countries with labeling rules did not effectively implement their regulations.

See the review, and read other papers in <u>http://agbioforum.org</u>.

MALAYSIA TO INTRODUCE NEW LAW TO REGULATE GM FOOD

Malaysia is planning to introduce a new law to regulate GM food, and under the new bill, any food product must be approved by a government panel for food security. In line with this, imported GM foods will require labeling. "We regulate to ensure its safety. We are not taking the position to ban GM food, that's not in our interest" said K. Nagulendren, a senior official of the Natural Resources and Environment Ministry.

For more information, visit: <u>http://www.canadianbusiness.com/markets/market\_news/article.jsp?</u> content=D8P8RT102#adSkip.

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## 2 MINISTRIES TO ASK PERMISSION TO CONDUCT FIELD TRIALS IN THAILAND

The Science Ministry and the Agriculture Ministry of Thailand will ask permission to the Cabinet to conduct field trials on genetically modified (GM) crops for research and development purposes. The Thai government has allowed researchers to conduct experiments on GM organisms in laboratories, but not in the field. Field trials are necessary to be able to have complete knowledge on transgenic crops. This development can help the country to make informed decisions in whether or not Thailand should continue developments in biotechnology.

For the full article, visit: <u>http://www.nationmultimedia.com/2007/05/22/byteline/byteline\_30034828.php</u>

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### AUSTRALIAN REPORT SAYS GM COTTON STAND TO BENEFIT FARMERS

The arrival of genetically modified cotton varieties, which are less reliant on conventional insecticides and herbicides, has revolutionized pest control and weed management, opening a window of opportunity previously denied to northern Australia. This was stressed in the Cotton Production and Management Guidelines for the Ord River Irrigation Area 2007, published by the Cotton Catchment Communities Cooperative Research Centre in Australia.

The report notes that previous production attempts in the northern regions were unsuccessful due to environmental limitations and excessive use of insecticides. The availability of these new varieties has triggered the need for new farming systems in the area which the report elaborates on.

A sustainable cotton industry, with yields of 9.5 to 10.5 bales/ha, is now possible in the Ord and adjacent regions, including the Northern Territory, says the report. In addition, low insect population densities can be maintained and managed; soils can be protected rather than degraded; and a globally attractive quality cotton product can be produced.

A PDF copy of the Guidelines is available at http://www.cotton.crc.org.au/Assets/PDFFiles/NthNews/NORpak.pdf

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## CONTROVERSY OVER GM CANOLA IN AUSTRALIA

The Australian Bureau of Agricultural and Resource Economics (ABARE) reported that the planting of GM canola will have little effect on existing organic supplies of the said product. Organic canola has not been produced in Australia for a number of years now, and according to the report, there are sufficient alternatives within organic crops to meet feed and formulation demand. The Organic Federation of Australia (OFA), however, disagrees with the claims that the planting of GM canola will not have an effect on the organic industry. *"There are no markets around the world that will allow products to be called organic if they have a level of contamination from GM products. So organic growers would lose their premium on the market," he added.* 

For the full article, visit: <u>http://www.foodnavigator-usa.com/news/ng.asp?n=76625-australia-canola-gm</u>.

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## BIOTECH INDUSTRY WELCOMES EU MINISTERS' SUPPORT FOR BIOTECHNOLOGY

The European Union Council of Ministers has supported the Commission's Mid-Term Policy Review of the EU's Life Science and Biotechnology Strategy. The Commission communication says Europe must take full advantage of biotechnology, and proposes a refocusing of the strategy to address the greatest needs of the biotech sector. The proposed strategy can give a major boost to the European biotechnology strategy work, and it is very important that they work together in a coordinated way to achieve policy coherence," said Johan Vanhemelrijck, Secretary General of EuropaBio.

The press release is available at <a href="http://www.europabio.org/articles/DRAFT%20PR\_Competitiveness%20Council\_FINAL.doc">http://www.europabio.org/articles/DRAFT%20PR\_Competitiveness%20Council\_FINAL.doc</a>.

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### CO-EXISTENCE FIELD TRIALS TO CONTINUE IN GERMANY

Field trials aimed at investigating appropriate measures to ensure co-existence of conventional and genetically modified maize will be continued in 2007. Approximately 22.8 hectares of genetically modified Bt maize will be planted at five sites in Germany. The research program includes investigation of isolation distances, of the influence of intermediate crops; and of the climate and the orientation of the maize rows. The trials are coordinated by the Federal Agricultural Research Centre (FAL) and conducted by several national and provincial research Centers.

Readers can access the news report at <u>http://www.coextra.eu/country\_reports/news859.html</u>.

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## SWISS SCIENTISTS APPLY FOR GM WHEAT FIELD TRIALS

Swiss scientists have applied to carry out field tests in Zurich and Lausanne for genetically modified (GM) wheat. According to Beat Keller, a lead researcher of the project, outcomes of the field tests will determine whether the GM wheat tested in the labs will have the same result when put into a normal agricultural environment. The researchers also intend to look at aspects of biological safety to see if the plants have any unexpected impact on the environment, as well as on organisms living in the ground or insects. "It is important to clearly say that we are not developing a product for the market," said Keller.

To read the full article, visit: <u>http://www.swissinfo.org/eng/front/detail/Scientists\_plan\_new\_GM\_crop\_trials.html</u> <u>?siteSect=105&sid=7828206</u>

# Research

#### ORIGIN OF SEED SHATTERING IN RICE

A simple change in a single gene can cause a dramatic phenotype change during rice domestication, the group of researchers in China and Singapore said in their paper published in the journal Planta. The researchers isolated and characterized a single dominant gene called *Shattering1 (SHA1)*, which is responsible for controlling seed shattering. They have determined that a single nucleotide change in *SHA1* is correlated with the seed shattering character in rice.

During rice domestication, the seed shattering characteristic was eliminated. Wild rice species disperse seeds freely at maturity, while cultivated rice retains seeds on their straws. The non-seed shattering characteristic of cultivated rice contributes to its easy harvest during production.

Previous research using genetic and molecular analyses had determined that seed shattering in rice is controlled by two dominant genes in chromosomes 1 and 4. The isolation and characterization of *SHA1* provided important information on the control of the shattering character. *SHA1* encodes for a plant specific transcription factor and was determined to have a single amino acid substitution (K79N) caused by a single nucleotide change (g237t). Among the 233 rice accessions the researchers examined, g237t was only found in the cultivated indica and japonica cultivars, but not in any of the wild rice accessions.

For more information, the full paper can be accessed by subscribers at <u>http://www.springerlink.com/content/</u><u>h713487822047663/</u>.

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STALK LODGING IN BT, NON-BT CORN HYBRIDS INCREASES WITH HIGH PLANT DENSITY

Stalk lodging can lead to significant losses in grain yield during corn production. The corn plant lodging ability is dictated by the strength of its corn stalk, particularly the rind portion. The strength of the rind can be measured using a device called rind penetrometer.

Researchers at the University of Wisconsin compared the rind strength of different corn hybrids in fields with increasing plant density. The researchers wanted to determine if the corn hybrids with the Bt gene will lodge less than those without the Bt, in addition to testing whether rind strength measurements can be used for predicting stalk lodging potential.

The researchers observed that the Bt hybrids lodged less in only one of the ten field locations in Wisconsin. The rind strength of the hybrids, whether Bt or non-Bt, also decreased as the plant population increased from 64,220 to 123,500 plants per hectare. The recommended plant density for corn production is 74,100 plants per hectare.

The research article was published by the Agronomy Journal and can be accessed by subscribers at <u>http://agron.</u> scijournals.org/cgi/content/abstract/99/3/657.

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#### EIGHT PLANT SPECIES FOR PHYTOREMEDIATING DIESEL-CONTAMINATED SOILS IN JAPAN

Japanese researchers have determined that eight plant species have potential use for phytoremediation of dieselcontaminated soils in the country. These plants are Italian ryegrass, sorghum, maize, alfalfa, Bermuda grass, rice, and the weeds kudzu, and beggar ticks.

Diesel-contaminated soils have become a civic problem in Japan, say Etsuko Kaimi and colleagues. The researchers studied a total of 12 representative plants from known phytoremediators, hydrocarbon-tolerant plants, crops, and weeds. The authors determined the capabilities of the plants in reducing the total petroleum hydrocarbon (TPH) in soils contaminated with 2% (w/w) diesel oil, and they measured the level of soil dehydrogenase activity (DHA), an indicator of degradation activity by microorganisms in the soil.

The observed reduction in TPH was explained by Kaimi and co-authors to be the result of rhizosphere microbial activity. This was supported by the strong correlation between TPH and DHA. The researchers stated that the fibrous root systems of the plants allowed the close interaction between the rhizosphere and the contaminant.

The paper published by the journal Plant Production Science can be downloaded at <u>http://www.jstage.jst.go.jp/article/</u>pps/10/2/211/\_pdf.

# Announcements

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#### GENEBANK MANAGEMENT: CONSERVATION AND PROMOTING USE

The training course entitled "Genebank management: conservation and promoting use" will be held on 4-15 June, 2007 in Wageningen, the Netherlands. Some of the topics to be addressed in the course include: setting objectives for genetic conservation programs; genebank management procedures; rationalization of collections; and design of strategic genebank management plans.

The course is one of the six two-week courses offered and organized by Wageningen International and the Centre for Genetic Resources, the Netherlands. The program is intended to enhance the participants' capabilities to deal with

contemporary issues in genetic resource management.

More information at http://documents.plant.wur.nl/cgn/downloads/Plantgeneticresources\_2007.pdf

#### CHILE MEETING ON AGRI BIOTECH

The Latin America and the Caribbean Meetings on Agricultural Biotechnology will be held October 22-26, 2007 in Viña del Mar, Chile. Organized by the Foundation for Agrarian Innovation, REDBIO, and the Food and Agriculture Organization (FAO), the event will tackle biotechnological advances, as well as policy and economic aspects that impact on investments.

More information on the meetings at <u>http://www.redbio2007chile.cl/</u> and <u>http://www.redbio.org</u>.

## INDONESIAN NATIONAL SEMINAR ON CHEMISTRY ENGINEERING

A National Seminar on Chemistry Engineering and the Process will be held in Diponegoro University, Indonesia, on 25-26 July 2007. The event will examine research advances in chemistry engineering and processes to exploit natural resources as food material and as alternative energy sources. Topics of the seminar include a variety of areas related to biotechnology and bioprocessing.

For more information please visit <u>http://www.tekim.ft.undip.ac.id/srkp/</u>.

#### **REGISTRATION OPEN FOR GMCC-07 CONFERENCE**

GMCC-07 is the third edition of a biannual international scientific conference on coexistence between GM and non-GM agricultural supply chains. GMCC-07 will gather the multidisciplinary scientific community involved in researching how agricultural supply chains can adapt to novel regulatory and market-driven coexistence requirements world-wide. GMCC-07 will also serve policy-makers to access the latest scientific results and identify future research needs with policy relevance.

The scientific program will be multidisciplinary, covering research activities and practical experiences on the following areas: gene flow in agricultural systems; strategies for coexistence and organizational measures; case studies of specific supply chains; socio-economics of coexistence; legal and policy issues; traceability and control of coexistence.

More information at: http://gmcc-07.intbase.com

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# **Document Reminders**

## BOOK ON MEDIA AND AG BIOTECH OUT

The Public, the Media and Agricultural Biotechnology, a book on case studies that look at public opinion data, communication theory and international examples to see how public opinion on agricultural biotechnology is formed, is off the press. Experiences on communicating biotechnology are shared by country practitioners from the Philippines, India, South Africa, and the developed world. Published by CAB International in the United Kingdom, the book is edited by Dominique Brossard of the University of Wisconsin-Madison and colleagues.

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