CROP BIOTECH UPDATE

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), and AgBiotechNet
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EC AND FAO FORGE PARTNERSHIP

The European Commission (EC) and the United Nations Food and Agriculture Organization (FAO) recently signed an agreement designed to reinforce their joint efforts to reduce poverty, promote agricultural development, and fight hunger in developing countries. Specific attention will be initially given to foster close collaboration in five specific areas: food security, sustainable rural development and agricultural policies, food safety and quality, natural resources management, and statistical cooperation and information exchange.
The EC and the FAO are expected to work even more closely with this partnership, which will involve regular policy dialogue at headquarters level and enhanced collaboration at country level.

Cooperation between the EC and the FAO dates back to 1991. It has so far resulted in the implementation of 116 projects representing a total budget of approximately € 108 million. Most of the projects have provided technical assistance to developing countries in the fields of food security, agriculture, forestry and fisheries.

For more information, contact Teresa Buerkle, Information Officer for the FAO, at teresamarie.buerkle@fao.org. The press release can be accessed at http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/04/1096&format=HTML&aged=0&language=EN&guiLanguage=en

GONSALVES BRINGS HAWAII EXPERIENCE TO MANILA

Dr. Dennis Gonsalves of the Agricultural Research Service, United States Department of Agriculture (ARS-USDA) visited Manila, Philippines last September 14 to share his expertise in the commercialization of Rainbow Papaya through a seminar-workshop entitled The Commercialization Of GM Food: The Hawaiian Experience.

Currently the director of the Pacific Basin Agricultural Research Center, Dr. Gonsalves not only stressed the importance of papaya as a fruit crop, but also called for all stakeholders to "move forward on multiple issues, because we are trying to solve a problem, not write a paper." His studies on the fruit began in 1978, then moved on to transgenics in 1985, where the coat protein gene of the Papaya Ringspot Virus (PRSV), a pathogen that threatened to cripple the then flourishing Hawaiian Papaya industry, was inserted into the fruit's genome. Dr. Gonsalves presented a history of his work, including his field trials in 1993, his work in Thailand in 1994, and the road to commercialization of the Rainbow Papaya, including details on the regulatory process.

Free seeds have been distributed to growers since 1998, and Rainbow Papaya is currently being exported to the Mainland US and Canada.

Read more on Dr. Gonsalves' work and current projects at http://www.ars.usda.gov/pandp/people/people.htm?personid=34950.

NEW BIOTECH POLICY LAUNCHED FOR SOUTH AFRICA

South African Science and Technology Minister Mosibudi Mangena has announced the launch of a new South African biotechnology policy describing biotechnology development needs and opportunities in areas such as human health, plant improvement, animal health, and industrial processes.

Mangena said that the launch of the policy "serves as a rallying call to industry to join us in developing a bio-economy" in South Africa. He said that the government recognizes the potential benefits of biotechnology, and, "Government is committed to creating the best possible climate, be it regula[tory], political or commercial, for biotechnology investment."

The South African government has already invested US$67.6 million in infrastructure to support biotechnology development, including setting up Biotechnology Regional Investment Centres (BRICs) to support and incubate research in the field. The three BRICs are the Western Cape Biotech Institute, the Lifelab in Durban, and Biopad, which covers research initiatives in the central and northern areas of the country. Included in the total budget of R450 million is R40 million that has been earmarked for funding the National Bio-Informatics Network – a Cray supercomputer based at the University of the Western Cape.

The article can be viewed online at http://allafrica.com/stories/200409090302.html.

In a related report, Mangena also told a Johannesburg meeting on his department's strategic review and forcast on biotechnology platforms, that since implementing the country's National Biotechnology Strategy, the department has created five Trusts as agencies aimed with fast tracking the local biotech sector. "We need to recognise that, while the government is committed to developing biotech for South Africa, it can only be done through meaningful partnership with our biotech stakeholders, and with industry. We are determined to give the local sector every opportunity to mature – responsibly – as an African leader in biotechnology," the Secretary said. /AfricaBio

GM PAPAYA FOUND IN THAI PLANTATION

A papaya plantation in Thailand was destroyed when Department of Agriculture staff discovered one fruit among 239 plants to be genetically modified. The action was taken as the Thai government does not allow commercial farming of GM crops, although three research facilities in the country grow papaya on experimental basis.

Agriculture Minister Somsak Thepsuthin said that although it only involved one plant he had ordered an inquiry to determine the source of the GM seed. The papaya seedlings that were planted were purchased from a research station in Khon Kaen.

More details of the papaya story at http://straitstimes.asia1.com.sg/latest/story/0,4390,272789,00.html.

Transgenic papaya ringspot virus (PRSV)-resistant papaya is being researched on in Thailand to solve a most important disease of the crop. Plants infected with PRSV produce immature or poor quality fruits. Different methods to combat the disease have been tried but with limited success. PRSV papaya varieties genetically engineered to resist PRSV have been accepted for food use in the US since 1997 and in Canada since 2003.

COFFEE GENETIC CODE CRACKED

Brazil now owns the widest, most comprehensive genetic database on the coffee bean, following a two-year, $ 2 million project between Brazilian agricultural research agency EMBRAPA and Sao Paulo-based research foundation FAPESP. Having studied 200,000 strands of DNA, they have identified 35,000 coffee genes, a combination of which gives the drink its aroma and flavor.
The success of the two-year government project was announced by Brazil's Agriculture Minister Roberto Rodrigues. He proclaimed that Brazil would use the genetic code to create a super-coffee, richer in taste, more aromatic, and resistant to disease and frost.

Brazil, already the world's largest coffee producer, says it will restrict the use of the DNA database to Brazilian institutions for five or six years, before making it available to Brazilian private companies. Officials have not specified how many years it will take before the data are made available to other nations.

Read the full story at the National Coffee Association's Website at http://www.ncausa.org/public/pages/headlinedetails.cfm?id=266&returnto=1

NEW BIOTECH LAB FOR UNIVERSITY OF NAMIBIA

Namibia's first genetically modified organism (GMO) testing, training, and research laboratory was launched September 13 at the University of Namibia.

Dr. Kandawa Schultz, chairperson of the National Biotechnology Alliance, said that the laboratory would play an important role in assisting the Namibian government and institutions interested in reinforcing and implementing Namibia's National Biosafety Framework.

In addition to performing GMO testing, the lab will also carry out capacity building through training and research. According to Schultz, the idea for the creation of a

biochemistry and biotechnology laboratory was first initiated in 1998, when it was recognized that Namibia needed an institution involved with the application of modern biotechnology techniques.

Visit the University of Namibia at www.unam.na. You can also view the National Biosafety Framework of Namibia at http://www.dea.met.gov.na/met/programmes/biodiversity/biosafety.htm

MALAYSIAN GOVT TO SUPPORT KENAF SECTOR

The Malaysian government has approved RM12 million as a grant to develop the kenaf-based industry under the Ninth Malaysia Plan (2006-2010). This was announced by National Economic Action Council steering committee chairman Tan Sri Thong Yaw Hong. Kenaf is harvested for its fiber and woody core to be processed into bio-composites like particle boards and fiberboards. It can also be used to reinforce polypropylene-based composites to make automotive parts easier to recycle.

Ooi Tee Ching reports in the Business Times that the grant will be used for the research and commercialization of downstream kenaf-based products, and for research of better-yielding kenaf varieties.

For the full article and other local agri-news in Malaysia visit http://www.bic.org.my/BICalert/0904/p2.html.

INVESTING IN AFRICAN AGRI RESEARCH

Agricultural research capacity is an important factor in building food security and economic stability in Africa. Hence, new and better-targeted technologies and a well-developed agricultural research system are important prerequisites for their dissemination and adoption. This is the view of Nienke Beintema and Gert-Jan Stads in their paper “Investing in Sub-Saharan Agricultural Research: Recent Trends” published by the International Food Policy Research Institute.

Beintema and Jan Stads note that research and development funding has increasingly become irregular and donor-dependent. This problem is aggravated by poor national science and technology (S & T) policies and inefficient and ineffective agricultural research management. Hence, institutional reforms and sound S & T policies are needed to improve the efficiency and effectiveness of agricultural research in Africa.

Although empirical evidence shows high rates of return from agricultural research and development investments, growth in scientific investments has stagnated. The authors believe that attaining the goal of doubling Africa's agricultural research intensity ratio (agricultural R & D investments as a percentage of agricultural gross development product) is a challenging task.

For the full report, download a copy at http://www.ifpri.org/pubs/ib/ib24.pdf.

ANNOUNCEMENT: NATIONAL AGRICULTURAL BIOTECH COUNCIL CONFERENCE

The 17th meeting of the National Agricultural Biotechnology Council (NABC) will take place June 27-29, 2005 in Nashville, Tennessee. Co-hosted by the University of Tennessee and the University of Kentucky, the conference will explore the theme, "Agricultural Biotechnology: Beyond Food and Energy to Health and the Environment." Agricultural producers and consumers as well as representatives from corporate, government, academic institutions, and public interest groups are expected to participate.

NABC is a non-profit consortium of 37 leading agricultural research agencies and universities in North America. Read more on the conference at http://www.isb.vt.edu/news/2004/news04.sep.html#sep0407.

NEW DOCUMENT

A revised version of Pocket K No. 11 on the Contribution of GM and Livestock Production is now available online at http://www.isaaa.org/kc. It discusses the future demand for livestock products and feed grains, genetically modified organism (GMO) materials in GM feed ingredients, current use of GM feed ingredients in livestock diets, safety of GM feed crops, and future of GM feed crops.

Pocket Ks are Pockets of Knowledge, packaged information on crop biotechnology products and related issues. They are produced by the Global Knowledge Center on Crop Biotechnology of the International Service for the Acquisition of Agri-biotech Applications. There are already 15 Pocket Ks all available online at http://www.isaaa.org/kc.

BIOTECH MEDIA WORKSHOP IN HYDERABAD

The International Crops Research Institute for the Semi-Arid Tropics, Asian Media Information and Communication Centre, and the International Service for the Acquisition of Agri-biotech Applications will hold a seminar-workshop on “Covering Biotech: Issues and Opportunities for the News Media” from October 11-13, 2004 in ICRISAT, Andhra Pradesh, India. The workshop will help improve public perceptions and acceptance of biotechnology and its products by enhancing the capacities of science and business journalists towards quality reporting and better coverage about biotechnology. For more information about this workshop email Gopikrishna Warrier of ICRISAT at g.warrier@cgiar.org.

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