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WTO RULES IN FAVOUR OF GM

http://www.fas.usda.gov/scriptsw/PressRelease/pressrel_dout.asp?Entry=valid&PrNum=0017-06
and <http://usinfo.state.gov/usinfo/Archive/2006/Feb/08-676796.html>

The World Trade Organization (WTO) has ruled preliminarily in favour of the U.S. challenge of the European Union (EU) moratorium on approvals of genetically modified (GM) agricultural crops. Joined by Argentina and Canada, the U.S. asserted that the moratorium violates international trade rules and undermines the development and use of biotechnology.

The WTO has yet to officially release the document to the media, but members of the U.S. government have released statements regarding the ruling. "It is a safe and beneficial technology that is improving food security and helping to reduce poverty worldwide," said U.S. Trade Representative Rob Portman, "We believe agricultural biotechnology products should be provided a timely, transparent, and scientific review by the European Union, and that is why Canada, Argentina and the United States brought the case in the first place."

The Union imposed its moratorium on the approval of GM crops in 1998, and set no deadline for lifting it. Recently, however, the European Commission (EC) has already allowed the entry of a small number of biotech crops, while some EU member states refuse to accept them. The current dispute resolution set before the WTO covers both these aspects: a challenge of the overall EU moratorium, as well as challenges of individual countries' bans on products already approved for sale and trade in the European Union.

AREA PLANTED TO GM CROPS CONTINUES TO GROW

<http://www.isaaa.org>

Dr. Clive James reports in International Service for the Acquisition of Agri-biotech Applications (ISAAA) Brief No. 34 on the global status of commercialized GM crops in 2005. Dr. James mentions that:

- 2005 was the tenth anniversary of the commercialization of genetically modified (GM) crops.
- In 2005, the global biotech crop area continued to soar as the billionth acre (400 millionth hectare) of a biotech crop, was planted by one of 8.5 million farmers, in one of 21 countries. This unprecedented high adoption rate reflects the trust and confidence of millions of farmers in crop biotechnology.
- Over the last decade, farmers have consistently increased their plantings of biotech crops by double-digit growth rates every single year since biotech crops were first commercialized in 1996.
- The global area of approved biotech crops in 2005 was 90 million hectares (ha), up from 81 million ha 2004. The increase was 9 million ha, equivalent to an annual growth rate of 11% in 2005.
- A historic milestone was reached in 2005 when 21 countries grew biotech crops, up significantly from 17 countries in 2004. Notably, of the four new countries that grew biotech crops in 2005, compared with 2004, three were EU countries, Portugal, France, and the Czech Republic whilst the fourth was Iran. Portugal and France resumed the planting of *Bt* maize in 2005 after a gap of 5 and 4 years respectively, whilst the Czech Republic planted *Bt* maize for the first time in 2005, bringing the total number of EU countries now commercializing modest areas of *Bt* maize to five, viz: Spain, Germany, Portugal, France and the Czech Republic. In 2005, the 21 countries growing biotech crops included 11 developing countries and 10 industrial countries; they were, in order of area, USA, Argentina, Brazil, Canada, China, Paraguay, India, South Africa, Uruguay, Australia, Mexico, Romania, the Philippines, Spain, Colombia, Iran, Honduras, Portugal, Germany, France and the Czech Republic.
- In 2005 biotech rice was grown commercially for the first time on approximately four thousand hectares in Iran by several hundred farmers. Iran and China are the most advanced countries in the commercialization of biotech rice, which is the most important food crop in the world, grown by 250 million farmers, and the principal food of the world's 1.3 billion poorest people, mostly subsistence farmers. Thus, the commercialization of biotech rice has enormous implications for the alleviation of poverty, hunger, and malnutrition, not only for the rice growing and consuming countries in Asia, but for all biotech crops and their acceptance on a global basis. China has already field tested biotech rice in pre-production trials and is expected to approve biotech rice in the near-term.
- In 2005, the US, followed by Argentina, Brazil, Canada and China continued to be the principal adopters of biotech crops globally, with 49.8 million ha planted in the US (55% of global biotech area) of which approximately 20% were stacked products containing two or three genes, with the first triple gene product making its debut in maize in the US in 2005. The stacked products, currently deployed in the US, Canada, Australia, Mexico, and South Africa and approved in the Philippines, are an important and growing future trend which is more appropriate to quantify as "trait hectares" rather than hectares of adopted biotech crops.
- The largest increase in any country in 2005 was in Brazil, provisionally estimated at 4.4 million ha (9.4 million ha in 2005 compared with 5 million in 2004), followed by the US (2.2 million ha), Argentina (0.9 million ha) and India (0.8 million ha). India had by far the largest year-on-year proportional increase, with almost a three-fold increase from 500,000 ha in 2004 to 1.3 million ha in 2005.
- Biotech soybean continued to be the principal biotech crop in 2005, occupying 54.4 million ha (60% of global biotech area), followed by maize (21.2 million ha at 24%), cotton (9.8 million ha at 11%) and canola (4.6 million ha at 5% of global biotech crop area).
- In 2005, herbicide tolerance, deployed in soybean, maize, canola and cotton continued to be the most dominant trait occupying 71% or 63.7 million ha followed by *Bt* insect resistance at 6.2 million ha (18%) and 10.1 million ha (11%) to the stacked genes. The latter was the fastest growing trait group between 2004 and 2005 at 49% growth, compared with 9% for herbicide tolerance and 4% for insect resistance.

- Biotech crops were grown by approximately 8.5 million farmers in 21 countries in 2005, up from 8.25 million farmers in 17 countries in 2004. Notably, 90% of the beneficiary farmers were resource-poor farmers from developing countries, whose increased incomes from biotech crops contributed to the alleviation of their poverty. In 2005, approximately 7.7 million subsistence farmers (up from 7.5 million in 2004) benefited from biotech crops - the majority in China with 6.4 million, 1 million in India, thousands in South Africa including many women *Bt* cotton farmers, more than 50,000 in the Philippines, with the balance in the seven developing countries which grew biotech crops in 2005. This initial modest contribution of biotech crops to the Millennium Development Goal of reducing poverty by 50% by 2015 is an important development which has enormous potential in the second decade of commercialization from 2006 to 2015.
- During the period 1996 to 2005, the proportion of the global area of biotech crops grown by developing countries increased every year. More than one-third of the global biotech crop area in 2005, equivalent to 33.9 million ha, was grown in developing countries where growth between 2004 and 2005 was substantially higher (6.3 million ha or 23% growth) than industrial countries (2.7 million ha or 5% growth). The increasing collective impact of the five principal developing countries (China, India, Argentina, Brazil and South Africa) is an important continuing trend with implications for the future adoption and acceptance of biotech crops worldwide.
- In the first decade, the accumulated global biotech crop area was 475 million ha. The continuing rapid adoption of biotech crops reflects the substantial and consistent improvements in productivity, the environment, economics, and social benefits realized by both large and small farmers, consumers and society in both industrial and developing countries.
- There is cause for cautious optimism that the stellar growth in biotech crops, witnessed in the first decade of commercialization, 1996 to 2005, will continue and probably be surpassed in the second decade 2006-2015. Adherence to good farming practices with biotech crops will remain critical as it has been during the first decade and continued responsible stewardship must be practiced, particularly by the countries of the South, which will be the major users of biotech crops in the coming decade.

GHANA BIOTECHNOLOGY ASSESSED

<http://news.africastv.com/africastv/article.php?newsID=57568>

Ghana can develop its own genetically modified (GM) seeds, but "the public sector must be ready to absorb the cost." This was stated by Dr. Walter Alhassan, coordinator for the Program for Biosafety Systems (PBS) in West and Central Africa, during the press conference for the release of the International Service for the Acquisition of Agri-biotech Applications' (ISAAA) Annual Report on GM Crops.

Speaking in Ghana's capital, Accra, Dr. Alhassan also announced that Ghana would host this year's West Africa Ministerial Conference on Biotechnology. This, Dr. Alhassan said, was due to the country's contributions to and interest in the field. Dr. Alhassan also encouraged Ghana's Ministries of Environment and Science, and Food and Agriculture to speed up the approval process of Ghana's National Biosafety Law, which is currently before Ghana's cabinet.

Also speaking at the conference was National Biosafety Project Coordinator Alex Owusu-Biney, who said that the United Nations Environment Program (UNEP) is considering an additional four years of support to help in the Law's implementation.

SMALL FARMERS BENEFIT FROM BIOTECH CROPS

<http://www.isaaa.org/kc>.

The high adoption rate by 8.5 million farmers worldwide who are planting biotech crops reflects the consistency of the technology in delivering significant economic, environmental, health, and social benefits to both small and large farmers in developing and industrial countries. This was stressed by Dr. Clive James, chair of the International Service for the Acquisition of Agri-biotech Applications (ISAAA) in his report on the global status of commercialized biotech/GM crops in 2005.

James added that 90% of these farmers are resource-poor farmers mostly planting Bt cotton in China, India, and South Africa; subsistence farmers cultivating maize in the Philippines; with the balance in the other developing countries where biotech crops were planted in 2005.

The global number and proportion of small farmers from developing countries growing biotech crops are expected to increase dramatically early in the next decade (2006-2015). A similar trend will apply to the less affluent and more agriculturally based countries of Eastern Europe such as Czechia, which has recently joined the European Union; and those expected to join in 2007 and beyond, such as Romania.

WORKSHOP HIGHLIGHTS BIOTECH IN AFRICA

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A five-day international workshop on biotechnology and bio-safety was recently concluded in Accra, Ghana. The workshop was organized by the United Nations Economic Commission for Africa (UNECA), in collaboration from the Ministry of Environment and Science. Present were over 40 participants from Ghana, Nigeria, Burkina Faso, Togo, Liberia, and South Africa.

Ms. Christine Churcher, Ghana's Minister of Environment & Science, opened the workshop. "Ghana, specifically and indeed Africa as a whole [needs] to take advantage of the progress that has been made in modern biotechnology to be able to meet the Millennium Development Goals (MDGs)," she told the participants during her opening remarks. She also added that the progress biotechnology had made in agriculture, health, energy, and industry could go a long way to help Ghana to meet the targets set in the MDGs.

Also present at the conference was Professor Walter Sandow Alhassan, West African Coordinator for the Program for Bio-Safety Systems (PBS), who expressed regret that no West African country had yet put in place a biosafety law.

BRAZILIAN PRESIDENT TOURS AFRICA

<http://news.bbc.co.uk/2/hi/africa/4431417.stm>.

President Lula da Silva is currently on an a five-day (Feb 8-12, 2006) official visit to Algeria, Benin, Botswana, and South Africa, in the fifth official tour of Africa by the Brazilian President during his term of office. Lula aims improve to trade and increase cooperation between Brazil and the African continent. Priorities of the trip are likely to be the strengthening of ties between Brazil and Africa to advance the Doha round of trade talks and to raise representation of developing countries in the United Nations (UN). Lula will also seek to secure political support for Brazil's bid for a permanent seat in the UN Security Council.

Brazil is to offer Algeria and Benin agricultural technical assistance for the development of biotech cotton, and will provide Botswana with antiviral HIV treatment and advice for the fight against AIDS.

AFRICA JOURNALISTS ATTEND BIOTECH WORKSHOP

<http://www.uneca.org/>

A regional workshop for journalists of West and Central Africa took place in Addis Ababa, Ethiopia from 7-9 February, 2006. The workshop tackled biotechnology and agriculture, and was organized by The International Service for the Acquisition of Agri-biotech Applications (ISAAA), in collaboration with the United Nations Economic Commission for Africa (UNECA).

The event, in which 20 reporters took part, aimed to improve press coverage and public understanding of agricultural biotechnology issues in West and Central Africa.

Josué Dione, Director of UNECA's Sustainable Development Division, said in his opening speech that Africa cannot remain on the margin of this technological revolution and should aim for a central role in the global biotechnology debate. Dione added that the workshop testifies to the significant role the media plays in the whole biotech debate, and to the responsibility of journalists in shaping public opinion.

Although aimed at journalists of Central and West Africa, Dione said: "Outcomes of this workshop will resonate throughout Africa, helping to clarify issues in a manner that will help our governments and leaders make the best decisions for themselves."

BIOFUELS COULD SUPPLY 30% OF GLOBAL ENERGY DEMAND

<http://www.sciencemag.org/cgi/reprint/311/5760/484.pdf>

Energy demand is projected to grow by 50% by 2025, with much of the increase in demand predicted to originate from developing countries with fast rates of economic growth. The vast majority of energy is currently derived from fossil fuels, a limited, nonrenewable and polluting resource. Biofuels produced from dedicated, tailored energy crops have the potential to play an important role in addressing future energy demands.

"We can readily address, with research, 3% of current transportation fuel needs" said Dr. Arthur Ragauskas, from the Georgia Institute of Technology. Dr. Ragauskas and his colleagues highlight future challenges to converting biofuels into a practical, cost efficient alternative to petroleum in the review article "The Path Forward for Biofuels and Biomaterials", published in the journal Science. The authors recommend a multidisciplinary approach, where the activities of biologists, agronomists, engineers, energy experts and policy specialists are integrated to achieve the transition from nonrenewable carbon resources to renewable bioresources.

Bioresources result in zero net greenhouse gas emission as the carbon dioxide they release upon combustion is initially extracted from the atmosphere during biomass production. Several countries have set goals for increasing the proportion of biofuels used for transport:

- the US plans to replace 30% of the liquid petroleum with biomass-derived products by 2025;
- India has a target to increase the proportion of biofuels from 5% to 20% by 2012; and
- The European Union targets close to 6% of fuels to be derived from biomass.
- Brazil is the world's leader in biofuels, with 30% of transport fuel currently derived from biomass.

Biofuels in the US and Brazil are primarily derived from fermentation of starch derived from maize and sugar cane. In their study, the authors recommend increasing the range of material used in biofuel production to include low cost agricultural waste products, fast growing trees, and perennial energy crops, such as switchgrass. "The grand challenge for biomass production is to develop crops with a suite of desirable physical and chemical traits while increasing biomass yields by a factor of 2 or more" say Dr. Ragauskas and co-workers. Their proposed "research road plan" includes a combination of modern breeding and transgenic techniques to improve photosynthesis efficiency, crop chemical composition, confer resistance to pests and diseases, and to reduce agricultural inputs.

NOTICEBOARD

CGIAR OPENS FELLOWSHIP PROGRAM

The CGIAR Gender & Diversity Program (G&D) is now inviting applications from qualified women scientists in East Africa for a two-year fellowship. With support from the Rockefeller Foundation, these fellowships are open to women scientists from national agricultural research institutes (NARIs) and universities in Kenya, Uganda, and Tanzania who have at least an MSc degree, and are working in crop sciences. The overall goal is to increase women's skills, visibility and contributions to science and development. The dead line for applications is February 28, 2006. For more details on the Fellowship, see:

http://www.genderdiversity.cgiar.org/resource/women_fellowships.asp

BRAZIL TO HOLD BIOTECH CONFERENCE

A Biotechnology and Brazil Conference will be held in São Paulo, Brazil, from March 8-9, 2006. Biotechnology and Brazil will focus on the country's recently approved seed legislation for genetically modified (GM) seed and the effect it will have on the prospects in Brazil itself and over the world. The conference will examine the implications of biotechnology regarding the cost of production of soybeans and future GM crops, and it will discuss the

stance and policies that Europe has taken with regard to GM soybeans, cotton, and corn, and consumer concerns surrounding GM labelling. The conference will be conducted in English and Portuguese with simultaneous interpretation. For more information, visit <http://www.agra-net.com/biotech06>.

UNEP-GEF BCH TEAM WISHES TO RECRUIT NEW REGIONAL ADVISORS

The UNEP/GEF BCH Team wishes to identify new regional advisors who are experts in Information Technology (IT). In this respect, they would like to invite experts to send to Yenny@unep.ch by Friday, 3 March 2006 a copy of a completed P11 form and a competency-based CV. Both these forms can be accessed through the following websites:

http://www.unep.ch/biosafety/bch/experts/files/CV_for_RE_151004final.doc

<http://www.unep.ch/biosafety/bch/experts/files/P11.doc>

For more information please visit www.unep.ch/biosafety/bch/experts.