



this is agriculture

CropLife
INTERNATIONAL 

ANNUAL REPORT 2006/2007

at CropLife International...

We reach out to our stakeholders, developing dialogue and forming partnerships for the common goal of achieving a more sustainable agriculture.

We work across the various technology solutions offered by the plant science industry, promoting their complementary nature in sustainable agriculture, and cooperate closely with other trade associations representing the plant science industry.

For us, sustainable agriculture refers to a system of agriculture that, over the long term, will:

- Satisfy human food and fibre needs,
- Enhance environmental quality and the natural resource base upon which the agricultural economy depends,
- Make the most efficient use of available technologies, non-renewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls,
- Sustain the economic viability of farm operations, and
- Enhance the quality of life for farmers and society as a whole.

CONTENTS

Benefits to the Environment	4
Benefits to Well-Being.....	6
Benefits to Productivity.....	8
Benefits of Biofuels.....	10
Benefits of New Products	12
Benefits to the Developing World	14
Highlights of our Year	16
Benefits of Stewardship.....	18
Benefits of Proper Regulation	20
Benefits of Outreach.....	22
Global Market Performance	24
Message	26

Agriculture is beautiful green fields; agriculture is bountiful vegetables; agriculture is ripe fruit – and agriculture is much more. It touches every aspect of daily life from the sheets on your bed, to your morning coffee, to the fibre-board panels in your car door. It is the meal on your table, the clothes on your back and the paint on your walls.

Modern plant science has increased the productivity of agriculture. Farms can grow more on each acre and can do it more safely and fuel efficiently than ever before. Biotechnology and crop protection products play a vital role in expanding our global capacity to produce renewable resources that are used to feed and create other useful products. This is a path to a green world – with space for forests and fields – that feeds, clothes and fuels; using resources responsibly so that growth continues.

this is agriculture

benefits to the environment

REDUCING THE ENVIRONMENTAL FOOTPRINT OF AGRICULTURE.

LIKE MILLIONS OF CARS OFF THE ROAD In 2005, fuel savings associated with the switch to no-till/reduced tillage farming systems, and less frequent pesticide applications made possible by biotech crops, has saved about 962 million kg of carbon dioxide – equivalent to removing nearly 0.43 million cars from the road.

Adding it up since 1996? That's equal to taking 2.05 million cars off the road for one year.



HELPING HABITAT “To protect biodiversity from the encroachment of agriculture, annual increases in agricultural productivity worldwide must exceed 1.4%. The difference between an average annual increase in agricultural productivity of 1% and 1.5% between 1993 and 2050 is “the difference between converting 368 million hectares of habitat (globally) to new cropland, or reducing cropland by 77 million hectares.”
– Indur Goklany

DEFENCE AGAINST INVADERS Natural habitat can thrive when pesticides are used to control invasive species of plants or non-native insects and other pests.



CONSERVING NATURAL RESOURCES Conservation agriculture techniques such as low or no-till agriculture have major environmental benefits – preventing wind and water erosion, loss of ground moisture, improving soil biodiversity, increasing soil fertility and reducing carbon emissions. In fact, herbicides used in combination with conservation tillage have reduced soil erosion by 50 to 98%.

FLOURISHING FORESTS It is not only food crops that are threatened by pests. Insect and disease damage threatens forests around the world. Ponderosa pines and other trees can be protected with plant science.

LESS GAS GUZZLING If farmers did not use herbicides the need for fuel in the U.S. alone would be 337 million gallons higher, since twice as many cultivation trips would be needed to replace herbicide spray trips and cultivators use four times more fuel per trip than herbicide sprayers. Even with the increased cultivation and hand weeding, crop yields would be 20% lower.

SINGING A PRETTY SONG Biotech crops have increased songbird populations. Since biotech cotton was introduced in the United States, songbird populations have increased 37% in Mississippi, 34% in Alabama and 10% in Texas. The Royal Society in the UK agrees noting, “Creative use of GM crops could bring back increasing numbers of endangered wildlife and birds such as skylarks and finches.”

INNOVATION FOR ECOLOGY

- Drought resistance genes that kick in only when water is limited; corn that can survive flooding; and rice which requires less water; will reduce demand for water.
- Salt-tolerant crops that can grow in saline soils will be particularly important for developing countries.

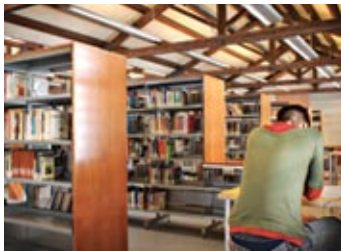


this is agriculture

benefits to well-being

HEALTHIER LIVES DEPEND ON BOUNTIFUL FOOD.

NOURISHING A GROWING WORLD Feeding a growing world requires balance between proper nourishment and sustaining our environment. Thanks to modern intensive agriculture using plant science, we have doubled the production of world food calories since 1960, tripled the output of resource-intensive foods such as cooking oils and meats and increased per-capita food supplies in the developing world by 25%. And, we've maintained a stable area of agricultural land since 1950, despite a population growth from 2.5 to 5.5 billion.



ENRICHING LIVES

Along with mechanisation, plant science has allowed productivity to increase with fewer farm workers. More farm families around the world now have the choice to pursue education and other opportunities in manufacturing or service industries leading to economic diversity, growth and a higher quality of life and living standards.

TOOLS TO STOP TOXINS

Through biotech-based diagnostics we can detect toxins such as aflatoxin, produced by fungi and moulds that grow on crops, or check if food has been inadvertently contaminated with peanuts, a potent allergen. New tools will be used to test for the harmful bacteria that cause food poisoning, including those responsible for the deadly disease botulism.

DISEASE DEFENCE Biotechnology is providing fruitful results when it comes to healthy minds and bodies:

- Fruit and vegetables fortified with extra vitamin C and E to protect against risks of cancer and heart disease.
- Strawberries with high ellagic acid, a cancer fighting agent.
- Potatoes that absorb less oil during processing. Also, potatoes with 30% more protein.
- Vegetable oils with low saturated fats and properly balanced essential fatty acids which are associated with reducing risk of heart disease and stroke, important for brain function and essential for growth and development of infants.
- Tomatoes with boosted lycopene, the antioxidant associated with reducing risk of cancer.



this is agriculture

benefits to productivity

GROWING MORE, RESPONSIBLY.

BIG RETURNS For every \$1 spent on herbicides, the grower gains \$3.20. A life without herbicides impacts net farm income by \$21 billion.



PROTECTING AGAINST PERILOUS LOSSES

Some 20-40% of the world's potential crop production is lost annually because of the effects of weeds, pests and diseases; however, crop losses would be doubled if existing pesticide uses were abandoned.

MAXIMISING OUTPUTS A lot has changed since the early 1960s, including yields. New technologies, crop protection products, hybrid seeds and biotech crops have allowed maize crop yields in developed countries to rise more than 160% and almost 130% in developing countries, and rice yields to climb by almost 95% in the developed world and around 27% in developing regions.

QUANTUM LEAPS IN COTTON In just three years since Bt cotton was first introduced to India, productivity has reached 460 kg of lint per hectare – exceeding the target of 320 kg by over 40%. Plus, farmers are realising an additional net profit of approximately US\$300 per hectare and 40-50% savings in pesticide use.

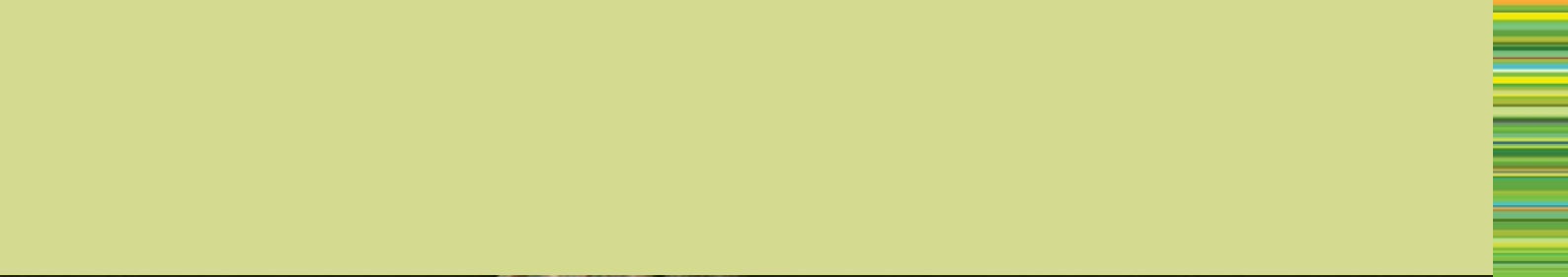
IMPROVING EFFICIENCY Since the introduction of pesticides, farmers have been able to produce bigger crops on less land, increasing crop productivity anywhere between 20 and 50%. In addition, pesticides allow farmers to maximise the benefits of other inputs, which include high quality seeds, fertilisers and precious water resources.



BILLIONS IN FARM INCOME BENEFITS Since 1996, farm incomes have benefited by over \$24 billion from the enhanced productivity and efficiency gains of adopting biotech crops. In 2005 alone, the direct farm income benefit was about \$5 billion – equivalent to having added 3.6% to the total value of global production of the four main crops of soybeans, maize, canola and cotton.



MINIMISING INPUTS Growers of organic vegetables in the U.S. spend close to \$1,000 per acre for weed control in comparison to the \$50 per acre spent by growers who use herbicides. From 50-100 hours of labour are required for each organic vegetable acre.



this is agriculture

benefits of biofuels

FUELLING A GREENER WORLD.

GREEN POWER Biofuels offer a sustainable, cleaner source of power. Grain-based ethanol results in life-cycle greenhouse gas emission reductions of 30-40% compared to gasoline, and biodiesel made from oil seeds results in life-cycle greenhouse gas emission reductions of over 60% compared to conventional diesel.

Plus, biofuels are renewable and consume carbon dioxide as they are grown, offsetting that produced when burnt as fuel.

Advancing economies

Protecting farmers

BOOSTING ECONOMIES AROUND THE WORLD Brazil, a world leader in the development and use of biofuels, supports approximately 700,000 agricultural sector jobs in the ethanol industry. In Wesselsbron, South Africa, a biodiesel plant with a 5,000 litre/day capacity operates on locally-grown sunflower seeds. China just finished building the world's largest biofuel plant and has another in the works. Biofuels provide a much needed boost to rural economies around the world.



A SAFER OPTION Biodiesel is significantly safer than petroleum-derived diesel: it has a higher flashpoint so it does not ignite easily, it does not produce explosive vapours, it has a low degree of toxicity to animals and humans if ingested and it is biodegradable.

Sustainable sources

Energy independence

Cleaner air

A SECURE SUPPLY With petroleum production expected to peak sometime before 2020, and oil prices skyrocketing, plant-derived biofuels offer renewable energy that someday may be "grown" wherever crops are cultivated. That means less dependence on foreign oil sources.

FOOD AND FUEL Farmers could supply the world with about 10% of its gasoline needs by 2025, according to the International Energy Agency. Meeting food, fibre and fuel needs is achievable with increased productivity and improved biofuels. Agriculture can provide bountiful food and renewable energy.

WASTE WANTED Biodiesel can be produced from local, renewable resources – either agricultural products or agro-industry residues such as slaughterhouse waste, recycled cooking oil, non-food-grade virgin oil or agricultural surplus. This can provide new value for products that were once destined for a landfill site, creating new markets for local industries and reducing government's and industry's disposal costs.



this is agriculture

benefits of new products

CROP-DERIVED MATERIALS ARE SUSTAINABLE, BIODEGRADABLE AND VARIED.

PLASTICS FROM PLANTS Plant sugars may soon be used to create everything from plastic films and fibres to adhesives and thermoplastic materials. Bioplastics are biodegradable and offer a renewal and environmentally friendly alternative to petroleum-based plastics.



IN THIS BROCHURE The main attraction of using vegetable oils in printing inks is that they are less damaging to the environment, less toxic and easier to remove than traditional vehicles. These features (notably ease of de-inking) are becoming increasingly important, as more paper is recycled.

IN THE CAR Many car parts are now made with crops. Door panels using flax or sisal plant fibres are used in some cars. Hemp and flax fibres are being used for injection mouldings in other car parts, while corn is being used to make the carpeting. Using plant materials means a remarkable weight reduction of about 20% in some models, helping reduce fuel consumption.

GROWING BUSINESS

The global market for industrial crop-derived materials is now approximately 71 million tonnes, valued at \$28 billion.

IN THE LAUNDRY Environmental issues have led to an increasing interest in starch-derived products for the detergent industry. Plant derived carbohydrates can now be used to provide the water-soluble portion of surfactants, the primary cleaning agents within detergents.



This swimsuit is made from polymers derived from corn.

IN THE HOME Plant fibres are replacing glass fibres in insulation, creating health, energy and environmental benefits.

CARPETS TO SWIMSUITS Corn is now being used to make everything from textiles to detergents. Using corn sugar instead of petroleum-based feedstocks to create polymers consumes 40% less energy and reduces greenhouse gas emissions by 20%.

BENEFITS OF INDUSTRIAL BIOPRODUCTS

Environment, climate change, health, economy

- Products and by-products that are less persistent and less toxic
- Products and processes that reduce greenhouse gas emissions
- Prevention of occupational health risks
- Greater use of all parts of plants
- Improved use of renewable resources
- Increased sustainability of resource processing industries
- Reduced production costs for manufacturers



this is agriculture



benefits to the developing world

IMPROVING AGRICULTURE IMPROVES LIVES.

OPPORTUNITIES FOR BETTER LIVING Herbicides have removed the hardship of hand weeding, a major boon for sub-Saharan Africa where HIV/AIDS has resulted in labour shortages. More families now have the option to pursue education and other opportunities for their children and lead a higher quality of life.



EXPANDING OPTIONS In Zimbabwe, tomatoes can be grown in the rainy season only by using fungicides to prevent blight – without them, there is usually total crop failure. Rainy season production is also extremely lucrative, with tomato prices being ten times dry season prices.

In Ethiopia, fungicides prevent total crop loss in potatoes due to late blight and allow returns ranging from 104 to 487%.

BIOTECH CORN BENEFITS Bt corn in the Philippines is providing 41-60% higher yields than conventional varieties; and while the seed costs more, it still increases net income by about 34%. It also makes both food and feed safer by minimising insect damage and lowering levels of harmful mycotoxins.



SECURING WHAT'S IN STORAGE Even after the crop is in, it can be subject to attack by pests. Bugs, moulds, and rodents can harm precious grains. Pesticides used in stored products can prolong the viable life of the produce, prevent huge post-harvest losses from pests and diseases and protect the grain so it is safe to eat.

GOLDEN RICE “Golden rice” contains higher amounts of beta-carotene and iron, with potential benefits for 250 million children who suffer from blindness due to Vitamin A deficiency and 1.4 billion women who suffer from anemia due to iron deficiency.

ONE FAMILY AT A TIME “This has improved my lifestyle at home. We’re earning a lot of money – really. It’s very easy to plant cotton now. My children are able to go to school because they don’t have to walk the fields. They have more time to focus on their school work.”

– Thandiwe Myeni, 46-year-old widow and mother of five, knows first-hand how biotech cotton has helped improve her life and the lives of many other South African mothers. The increased earnings from the 10 hectares of cotton she farms have allowed her to buy a tractor and a van, and she is planning to expand her cotton farming operation. She earns more money from farming than from her other job as a school principal.

BIOTECH COTTON BENEFITS Chinese farmers planting Bt cotton realised a 3-year average yield increase of 24% and net income returns of \$332/hectare.



this is agriculture



highlights of our year

CropLife International goals

1. To achieve recognition for plant science technology and stewardship as a central pillar of sustainable agriculture.
2. To be a visible, communicative industry ambassador, highlighting the benefits of plant science products and technologies.
3. To achieve science and risk-based practical regulations, international conventions, policies and standards.
4. To achieve business-enabling policies for intellectual property, liability and trade.

BENEFITS The benefits of plant biotechnology and crop protection products have been compiled in robust reports on each sector. Some of those benefits have been highlighted throughout this year's annual report. A major resource on crop protection benefits was the publication of the report "*Pesticides and Humanity: the Benefits of Using Pesticides*," written by the Natural Resources Institute, UK and based on an extensive bibliographic database developed by the CropLife Foundation and NRI. Scientific studies on the global benefits of plant biotechnology can be accessed through CropLife's searchable database at www.croplife.org/biotechdatabase. For more details and more benefits please visit www.croplife.org. (see the benefits section on the left hand side of the home page)



HIGHLIGHTS FROM NEW STUDIES:

- In 2006, India, the largest cotton growing country in the world, almost tripled its Bt cotton area to 3.8 million hectares. (Source: IMRB)
- If Brazil had commercialised biotech soybeans earlier, its farmers could have benefited by US\$4.6 billion in the last decade alone. (Source: CIB Brazil)
- During the decade 1996-2005, biotechnology in Argentina created 1 million jobs and returned a \$20 billion profit to the country. (Source: ArgenBio)
- In 2005, herbicides increased the value of U.S. agricultural productivity by \$26 billion.
- U.S. growers gain \$12.8 billion in increased production value from the control of plant diseases with fungicides per year. Without fungicides, yields of most fruit and vegetable crops would decline by 50-90%.

CARING ABOUT PEOPLE AND THE

ENVIRONMENT CropLife International members are committed to promoting stewardship – the responsible and ethical management of products throughout their life cycle – from research and development, through use to eventual disposal of any waste. This underlies our visible commitment to adhere to the UN Food and Agriculture Organization International Code of Conduct on the Distribution and Use of Pesticides. Our stewardship programmes are providing important training for people around the globe. Focussed on four key areas, the programme continues to grow, improving the lives of farm families and reducing the environmental footprint of agriculture.

The four key areas are:

- Implementation of the FAO Code of Conduct
- Responsible use, including safety and Integrated Pest Management
- Management of Empty Pesticide Containers
- Prevention and Disposal of Obsolete Pesticide Stocks

For more information on the scope of these programmes, please see following pages.

IP CONFERENCE To continue industry's important dialogue on intellectual property and innovation, CropLife International and CropLife America hosted a conference entitled "*Intellectual Property: a hindrance or boost to innovation?*" Nearly 100 business leaders, academics, government officials, and NGO representatives gathered in Washington, DC to examine current challenges such as counterfeiting and the impact of IP protection on agriculture, development and future innovation.



REGULATORY APPROVAL HIGHLIGHTS:

- Brazil's National Biosafety Technical Commission gave the green light to herbicide tolerant maize. Before commercial planting can occur, the decision will need to be ratified by the National Committee of Biotechnology.
- The Colombian Institute of Agriculture has authorised controlled planting of two Bt maize varieties. Biotech varieties have been approved for human and animal consumption, and for food processing, following biosafety, health and food safety and socio-economic studies carried out by the Colombian Technical Committee on Biosafety (CTNBio).
- In India, the Genetic Engineering Approval Committee will now follow an "event-based" instead of a case-by-case system for approving biotech crops, and the Supreme Court has allowed field trials of approved biotech crops to proceed under certain conditions.
- South Africa, the developing country leading the way with biotechnology, has approved combined trait cotton and maize crops containing genes for both herbicide tolerance and insect resistance. Field trials with biotech potatoes, as well as for drought tolerant crops, are also being carried out.
- In Kenya, several government-sponsored field trials of Bt maize, Bt cotton and cassava are ongoing.
- China's National Biosafety Committee has recommended commercialising virus-resistant papaya.

ACCEPTANCE

Biotech crops are now:

- Planted on over 100 million hectares
- Grown by more than 10 million farmers
- Grown in 22 countries, with Slovakia planting Bt maize for the first time in 2006
- The fastest adopted crop technology in recent history, with accumulated planted hectares from 1996-2006 representing an unprecedented 60-fold increase
- An essential tool for farmers in the developing world, the largest group using this technology

For other great highlights, visit the International Service for the Acquisition of Agri-Biotech Applications website at www.isaaa.org.

benefits of stewardship

SAFE USE TRAINING Training on the responsible use of pesticides and integrated pest management techniques was conducted with **OVER 350,000 FARMERS, 5,000 EXTENSION WORKERS, AS WELL AS 75,000 OTHER STAKEHOLDERS, INCLUDING RETAILERS, IN 2006.**

Programmes in more than 40 countries are delivered by regional associations in Asia, Latin America, Africa and the Middle East. CropLife International provides information, training modules and seed funds to support these stewardship programmes in the field.



A great example of the meaningful difference made by these programmes was verified by a recent study in China. Rural farmers were able to reduce their costs of production, while more effectively controlling pests and better protecting themselves and their farms. Impacts of stewardship training include:

- Improper waste disposal of pesticide containers was cut by more than half
- More farmers are seeking expert advice in choosing correct and good quality pesticides, reading product labels and following safety instructions
- 61% of farmers cut their pesticide bills by an average of 17%
- Improved knowledge in distinguishing quality pesticides from fake products

BIOTECH BEST PRACTICES CropLife is committed to enhance the continued adoption of best practices and standards during research, development and commercialisation of biotechnology products.

This year the guidance document "*Compliance Management of Confined Field Trials of Genetically Engineered Plants*" was made available in French and Spanish. Workshops have been held in Mexico and South Africa to educate involved parties. More workshops are planned for China and Africa.



FAO CODE OF CONDUCT (CoC) The FAO CoC is used by CropLife International member companies and governments as the primary guidance tool for responsible management of pesticides. Establishment or improvement of national regulations, compliance with international conventions and all stewardship initiatives in areas such as responsible use, container management and obsolete stocks further observance with the Code of Conduct. CropLife has collaborated with FAO on development of several guidelines that provide essential information on CoC observance. Also, to help industry fully understand our responsibilities under the CoC, an e-learning tool has been developed, which will be used to inform company and association employees of their obligations under the CoC.



BRINGING SAFE USE HOME Stewardship projects in China provide training on the responsible use of products. The bright yellow lock boxes mean safe storage of crop protection products in rural homes.

ADDRESSING OBSOLETE STOCKS Many thousands of tonnes of obsolete pesticides have accumulated throughout the African continent and elsewhere over the last four decades. The Africa Stockpiles Programme (ASP) aims to clear all obsolete pesticide stocks from Africa and put in place measures to prevent their recurrence. CropLife International is working with a wide range of organisations in this long-term partnership, including African Governments, the FAO, the Pesticide Action Network (PAN), the WWF and the World Bank, to provide technical and management assistance as well as financial support.

Six of the seven Phase 1 countries are now in receipt of World Bank ASP funds and project work is underway:

- CropLife-funded technical assistance has been agreed for South Africa and is being progressed in the remaining countries;
- Inventories have been completed in Tunisia and Mali and started in Nigeria; and
- Collection of farmer stocks has started in South Africa.

CropLife has identified priority Phase 2 countries to commence risk assessment and 'safeguarding' of hazardous stocks.

CONTAINER MANAGEMENT

Car battery cases, fuel, strengthener for concrete: these are some of the creative products generated by recycling used crop protection containers. The CropLife container management programme has proven very cost effective and operates in 28 countries. **RECYCLING RATES ARE OVER 90% IN SOME COUNTRIES.** Most of the programmes run in North and Latin America, Europe and Australia, plus pilot programmes are starting in Asia and Africa.

benefits of proper regulation

PLANT BIOTECHNOLOGY

DETECTION METHODS We are committed to ensuring greater global harmonisation in the regulatory laws, regulations or policies regarding detection methods for biotech seed. CropLife works to define and specify the distribution and use of reference materials for the validation of methodologies to help the detection of biotech traits in plants and food. CropLife also continues its engagement with BIPM – the international bureau of weights and measures – and other selected national measurement institutes to drive development of harmonised standards and measurements linked to a standard.

ENVIRONMENTAL RISK ASSESSMENTS

For new plant biotech products, CropLife has been working towards a framework which will help ensure that the local testing requirements for environmental risk assessments are adequate, and tries to limit the proliferation of tests which do not provide meaningful insights.

BIOSAFETY PROTOCOL Working with the Global Industry Coalition (GIC), CropLife has been seeking clarity of regulatory requirements for import approvals of Living Modified Organisms (LMOs) and global harmonisation of national biosafety regulations in the implementation of the Cartagena Protocol on Biosafety. A key focus of the current work is achieving an acceptable, realistic and manageable approach to the liability question.

PROVENANCE CERTIFICATES CropLife representatives participated in the Convention on Biodiversity ad hoc technical meeting on certificates of provenance for the use of genetic resources. Our organisation represented many industry bodies and expressed views about possible use of provenance certificates as an international tool to scrutinise transit of genetic resources.

COMBINED TRAITS CropLife seeks workable policies to address plant biotechnology products containing two or more traits. We offer our knowledge and experience to contribute to this goal.



ADVENTITIOUS PRESENCE There are many ways to reach out to others. Building coalitions is an important one – like the Global AP Coalition.

Sensible policies for dealing with low-level presence of plant biotech traits in food and feed that have been approved in the country of cultivation but are not approved in the importing country are essential. The lack of such policies significantly disrupts trade, increases costs and impacts the industry's freedom to operate. These issues are addressed by the Global AP Coalition (GAPC) of which CropLife is an active member along with BIO and other important organisations. Together, a concerted effort has brought the issue of adventitious presence to Codex for discussion, offering the first real forum to negotiate an international solution to the issue.

The GAPC has developed positions and supporting data which have been used to aid discussions at the Codex AP Working Group on the draft “*Annex to the Codex Guideline for the Conduct of Food Safety Assessment of Foods Derived from Recombinant-DNA Plants: Assessment of Food Safety Arising from Low-level Presence of Recombinant-DNA Plant Material in Food.*” Work is now progressing on the development of:

- an additional annex on food safety assessments
- a database to facilitate data and information sharing
- a transparent mechanism for the timely sharing of data and detection methods with importing countries performing an AP assessment

CROP PROTECTION

OECD AND CODEX The plant science industry supports the work of the OECD Working Group on Pesticides. Based on the benefits of improved cost-effectiveness for regulators and shorter time to market for industry, work-share activities are progressing well. Virtually all regulatory study endpoints have been harmonised, and the development of test guidelines concerning residues and guidance on dietary risk assessment are well advanced. Some issues concerning data protection remain to be resolved.

Training programmes in the CropLife regions on Maximum Residue Limits (MRLs) and dietary risk assessment accompany this effort. Members of CropLife also support the work of the Codex Committee on Pesticide Residues designed to set globally acceptable MRLs and thus facilitate international trade in agricultural commodities.



DATA PROTECTION The U.S. signed Free Trade Agreements with Panama, Peru, Colombia and South Korea including data protection provisions granting 10 years of protection. The CropLife International network actively advocated this position throughout the process.

A working structure was put in place to follow up on the implementation of trade agreements and influence the upcoming negotiations led by the EU.

SCIENCE- AND RISK-BASED DECISIONS Regulation of plant science technologies needs to be science- and risk-based. A communication and advocacy programme on the benefits of pesticides is under development, which aims at regulations that are more efficient, predictable and based on benefit-risk considerations. Recognising that more regulations are not needed but existing ones better used, the focus is getting registration schemes to be applied equitably, with principles and practices well characterized for users. That is the base for effective regulations.

INTERNATIONAL CONVENTIONS AND INSTRUMENTS Focused on three conventions, the Rotterdam and Stockholm Conventions on Prior Informed Consent (PIC) and Persistent Organic Pollutants (POPs), and UNEP's Strategic Approach to International Chemicals Management (SAICM), the plant science industry continues to address the key concerns about the interpretation and application of articles and annexes:

- For PIC, key issues relate to 'risk evaluation', 'intentional misuse' and the definition of 'severely restricted'.
- With POPs, the concern is about a 'more flexible and precautionary approach' being adopted rather than strictly adhering to the Convention's text.
- Concerning SAICM, we advocate the FAO CoC as the appropriate means for the implementation of the SAICM Global Action Plan in order to avoid duplication or worse, inconsistency of approach.

benefits of outreach

RESPONSIBLE PARTNER As a global network, CropLife International acts as an ambassador for the plant science industry, encouraging understanding and dialogue whilst promoting agricultural technology in the context of sustainable development.

We work with a broad range of groups to improve agriculture. From environmental groups to development groups, United Nations organisations to national governments, CropLife seeks to be an engaged partner.

On behalf of its members, CropLife participates in many different fora to monitor international policies and programmes that have the potential to either help or hinder the effective registration and safe use of biotechnology and crop protection products.

YOU Members of CropLife and our partners are part of the outreach programme. Every employee of every member company can be an ambassador for our industry. We encourage you to speak up about the importance of agriculture and the positive contribution of plant science to it.

NEW WEB SITE www.croplife.org has been completely revised, exhibiting a content-driven approach and dedicated resources for both crop protection chemicals and plant biotechnology.



www.croplife.org is a great source of more information on plant science and the industry.

INFORMATION RESOURCES Publications have been produced on:

- Safe and Effective Use of Crop Protection – stewardship guidelines
- Safe Transportation of Crop Protection – stewardship guidelines
- Persistent Organic Pollutants (POPs) – informational brochure
- Benefits of Crop Protection – fact sheet and banner
- Pesticides and Humanity: the Benefits of Using Pesticides – report by the UK Natural Resources Institute
- Resistance Management for Sustainable Agriculture and Improved Public Health – by the Insecticide Resistance Action Committee (IRAC)

The German campaign *Food for Life* utilises a 'hands-on' approach through a travelling road show that continues to attract thousands of visitors at various events.



OUTREACH PROGRAMMES CropLife's Crop Protection Outreach programmes in France, Germany and Canada continue the important task of communicating the benefits of crop protection products to the general public. The campaign in France employs widespread print advertising and an informative public website soliciting online feedback (www.info-pesticides.org). Canada's *Food for Thought* campaign now includes an interactive website for female consumers, focusing on opinion leaders in that category.

The tools developed through these campaigns are being used to create modules, so other network members may easily adapt and use the work that has been tested in these pilots.

Canada's Frank the Farmer computer game is a fun way to test farming skills for the agricultural novice. The UK is using the same technology to launch the interactive tool on their website.



global market performance

GLOBAL CROP PROTECTION MARKET GROWTH BY PRODUCT SECTOR 2006

\$ million	2006	2005	Growth 2006/2005 %
Herbicides	14,805	14,863	-0.4
Insecticides	7,380	7,763	-4.9
Fungicides	7,180	7,491	-4.2
Others	1,060	1,073	-1.2
TOTAL	30,425	31,190	-2.5

In 2006 the global market value for conventional crop protection products fell by 2.5% in nominal US dollar value to reach \$30,425 million.

GLOBAL CROP PROTECTION MARKET GROWTH BY REGION 2006

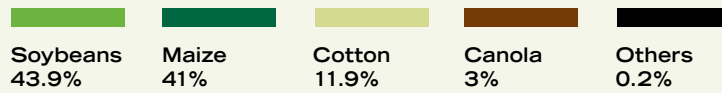
	2006	2005	Growth 2006/2005 %
NAFTA	7,379	7,792	-5.3
Latin America	5,203	5,348	-2.7
Asia	7,405	7,722	-4.1
Europe	9,217	9,119	1.1
Middle East/Africa	1,221	1,209	1.0
TOTAL	30,425	31,190	-2.5

At the regional level, the most significant reduction in crop protection sales was seen in the NAFTA region, predominantly due to a weaker farm economy, a further increase in the area of biotech crops and dry weather conditions following a good start to the season.

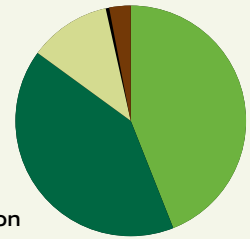
CROP PROTECTION

One of the major reasons for the market decline in 2006 was adverse weather conditions in Brazil, North America, Northern Europe, India and Australia. In addition, many of the negative factors that affected market performance in 2005 were repeated or exacerbated in 2006. Generally agricultural commodity prices were low at the start of the year depressing the farm economy in developed markets, whilst the strength of the Real in Brazil significantly depressed farm incomes in local currency terms, reducing purchasing capability for crop protection products.

BIOTECH SEED MARKET BY CROP

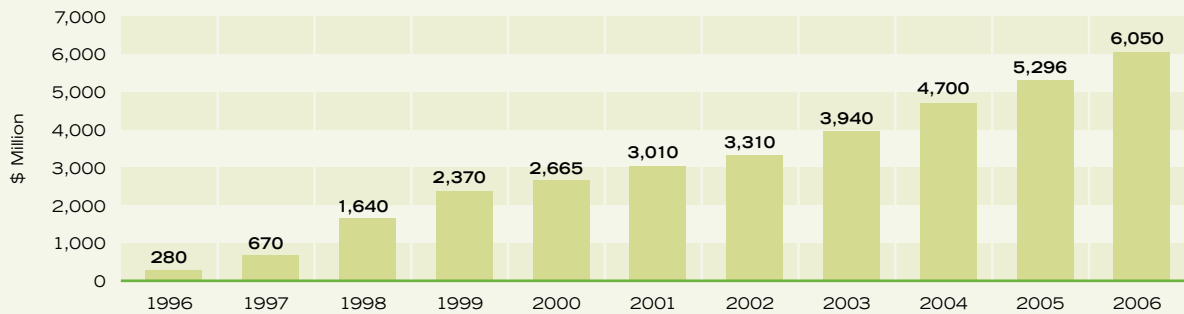


TOTAL = \$6,050 Million



Currently the largest share of the biotech crop sector is attributable to herbicide tolerant crop varieties that represented over 57% of the value of the sector in 2006.

GROWTH OF THE BIOTECH SEED MARKET



In 2006 the value of the market for plant biotechnology-based products, comprising sales of seed of herbicide tolerant (HT) and insect resistant (IR) crops, continued to advance by 14.2% to \$6,050 million.

PLANT BIOTECHNOLOGY

The overall planted area of herbicide tolerant and insect resistant crops in 2006 rose by 12% to reach 249.1 million acres (100.8 million hectares). The growth in the market was driven by acceptance of recently introduced traits, particularly in combined trait seeds of maize and cotton. Geographic expansion was also a factor, with further uptake in Latin America and Asia.

In 2006, the 22 countries growing biotech crops comprised 11 developing countries and 11 industrial countries; they were, in order of hectareage, USA, Argentina, Brazil, Canada, India, China, Paraguay, South Africa, Uruguay, Philippines, Australia, Romania, Mexico, Spain, Colombia, France, Iran, Honduras, Czech Republic, Portugal, Germany and Slovakia. Notably, the first eight of these countries grew more than 1 million hectares each – providing a broad and stable foundation for future global growth of biotech crops. (Source: ISAAA, 2006)

message

This is agriculture; and the plant science sector is a vibrant part of its success. Now, more than ever before, it is vital to make the most of our agricultural resources. They:

- Feed and clothe a growing world
- Provide the vitamins and nutrients that make people healthy
- Provide renewable sources of fuels, starches and plastics
- Touch every part of our daily lives, from the food we eat, to the medicine we take, and right down to the ink on this page

Growth of a bio-based economy is the environmentally-sound, socially-responsible way to support a global population. It means renewable resources and environmental benefits, but the bio-economy must also be responsible. We cannot level forests and wildlife habitat in favour of fields. We cannot miss the benefits of carbon sequestration for our atmosphere. We cannot choose fuels over feeding people.

The plant science industry helps farmers rise to these challenges. From the creation of new crop varieties that are more drought tolerant to the support for reduced tillage practices, we play a vital role in reducing the labour and fossil fuels required to grow crops. On top of that, the protection from pests and diseases offered by our products increases per acre productivity by as much as 50%. Biotechnology and crop protection combined have put more money in farmers' pockets through increased yields and yet almost halved the percentage of people in our world who are malnourished.

This has come by promoting the responsible use of our products around the world; and there is more to be done. This is not an industry that has advocated "use more, use more". This is an industry that has encouraged people to choose its products when they want them, use them only when needed and use only as much as needed. We will continue to dedicate ourselves to *sustainability, safety and stewardship* – the three "S's" that have driven the efforts of CropLife globally for years.

These three pillars remain just as relevant in the bio-economy. In fact, even more so. As agriculture strives to meet the growing nutritive needs of the world, it will require even more innovation to increase production to meet fuel, fibre and starch needs. In the past half century, we have fed twice as many people on virtually the same total agricultural land. To feed them, meet their energy needs and provide them with biodegradable plastics, will take even greater productivity gains. Many estimates suggest double the annual average production gains will be needed in the coming 30 years as compared to the past 30.

That's no small task, but the plant science sector stands ready to do its part. Creating crops with greater growth potential and protecting them before and after harvest is what we do. Our members are also on the leading edge of developing alternate uses for agricultural commodities. The creation of exciting new products for manufacturing will allow our collective dependence on fossil fuels to drop. Plant science is part of the solution to a greener, renewable resource base.

Farming will continue to drive our future just as it has shaped our past. The power to grow is the power to provide. That is agriculture.



Erik J. Fyrwald
Chairman of the Board
CropLife International



Howard L. Minigh
President & CEO
CropLife International



Christian Verschueren
Director-General
CropLife International



this is agriculture

CropLife International aisbl

Avenue Louise 143
1050 Brussels, Belgium
tel +32 2 542 04 10
fax +32 2 542 04 19
croplife@croplife.org
www.croplife.org

