

The Ecologist

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Campaigns & News

Campaigns ...

Battle Lines Drawn Over Labelling of Genetically Engineered Foods

On May 27th, attorneys from the International Centre for Technology Assessment (ICTA) filed a comprehensive lawsuit on behalf of consumers, scientists, environmentalists, chefs and religious groups to force the Food and Drug Administration (FDA) to require mandatory labelling and adequate safety testing of all genetically engineered foods and crops.

"The FDA has placed the interests of a handful of biotechnology companies ahead of their responsibility to protect public health" stated Andrew Kimbrell, Executive Director of the ICTA, and co-counsel on the case. "By failing to require testing and labelling of genetically engineered foods, the agency has made consumers unknowing guinea pigs for potentially harmful, unregulated food substances."

According to attorney Joseph Mendelson of the ICTA, current FDA labelling policies ignore public surveys that show 90% of American consumers want mandatory labelling of genetically engineered foods. They also blatantly contradict federal laws – such as the Food, Drug, and Cosmetic Act – which mandate the labelling of "materially altered" foods such as those which have been subjected to nuclear irradiation. In addition, the ICTA lawsuit calls attention to the fact that current "no labelling" policies constitute a violation of many Americans' spiritual and religious beliefs. The ICTA point out that in addition to serious human health concerns and environmental damage, unlabelled gene foods

pose a significant threat to religious freedom and ethical choice. They state that "a considerable portion of the population is religiously motivated to avoid all genetically engineered foods because they view the production of these foods to be incompatible with proper stewardship of the integrity of God's creation."

Both the industry and the government worry that mandatory labelling could bring about the death of agricultural biotechnology. The head of Asgrow seed company (a Monsanto subsidiary) candidly admitted to the press several years ago that it did pose problems. "Labelling is the key issue", he confirmed. "If you put a label on genetically engineered food, you might as well put a skull and crossbones on it."

The transnational food and biotech giants realize that regulatory bodies must continue to suppress information if they are to further industrialize and globalize food and fibre production. Just as mandatory labelling of irradiated food has reduced its commercialization, labelling would almost certainly impact the profitability of biotech foods and may even drive controversial products out of the marketplace.

Over the past two years, US authorities have repeatedly threatened under the new GATT rules to sue the EU for "restraint of trade" if they require mandatory segregation and labelling of US agricultural exports containing gene-altered substances. Despite these threats, on May 26th EU farm ministers passed a long-awaited bill requiring mandatory labelling of genetically engineered corn and soybean products.

However, the US – backed by Canada, Australia, New Zealand, Brazil and a number of other Latin American countries – is still arguing for labelling only where there is an obvious and proven health hazard or a basic change in nutritional composition. This position is being challenged by Consumers International (CI), a network of 235 consumer organizations in 109 nations. The director of CI, Julian Edwards, stated at a conference in Ottawa on May 27th that "one of the ironies of this issue is the contrast between the enthusiasm of food producers to claim that their biologically engineered products are different and unique when they seek to patent them and their similar enthusiasm for claiming that they are just the same as other foods when asked to label them." He went on to say that "the argument that ordinary people are not – or should not be – concerned about this issue is completely wrong."

Worldwide, people are increasingly insisting on their right to exercise their informed freedom of choice, while calling for greater accountability from the US government and the multinationals who manufacture genetically engineered produce. The lawsuit against the FDA is a sign that this international campaign is now gathering enough momentum and support to seriously challenge the global giants of genetic engineering.

For information on the conference:
Tammy Shea, Tel: 314 458 5026 or
Mark Queros, Tel: 314 772 6463.
E-mail: fitzdon@aol.com or T4shea@aol.com

Protesters Occupy Genetic Release Site

Campaigners opposing the testing of genetically engineered crops occupied a genetic release site at Kirkby Bedouin near Norwich in Norfolk at the end of May. The site is being used to test genetically engineered soya beet plants of the type being developed by Monsanto, Novartis and Hilleshog. Of the 300 release sites in the UK, 141 are in Norfolk.

The campaigners moved onto the site in the early hours of the morning and established a camp and gardens. The occupation – the first of its kind in the UK – lasted a month. The campaigners included both local people and members of numerous action groups. Chris Cooper, a member of Action Against Genetic Engineering (one of the

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The Ecologist Campaigns & News

This section highlights current campaigns, reports activist news, and provides brief updates on topical issues. Compiled by Julian Oram and Janey Francis. Send news items and/or campaigns to:

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Norfolk groups) explained the group's goals:

"By seizing this land, our aim is to establish a working demonstration of the alternatives to the genetic engineering of crops. Now is a crucial time to act against these crops – whilst they are still being grown in small, licensed test sites only and not yet on a commercial scale.... We have displays, gardens and workshops looking at the current crises in world agriculture and global food supply and discussing ways of dealing with these sustainably and without genetic engineering."

For further information: Genetic Engineering Network, Tel: 0181 3749516, Fax: 0171 5619146, e-mail: genetics@gn.acp.org

Love thy Neighbours?

Philadelphia, the "city of brotherly love", has come under fire for refusing to clean up the mess caused when 4,000 tons of the city's toxic waste was dumped on a beach in Haiti twelve years ago. The waste, in the form of incinerated ash, was deposited by the ship *Khian Sea* near the city Gonaives, after Haitian authorities granted an import permit for what it thought to be fertilizer. Upon realizing the nature of the shipment, the Haitian authorities quickly cancelled the permit. But the vessel slipped off in the night, leaving behind its lethal cargo. In recent months, the firm involved in hiring the ship – now keen to improve its image to attract further business – has offered to pay \$100,000 to retrieve the ash and bury it at one of their incineration sites in Pennsylvania. But a further \$200,000 is needed to transport the waste from Haiti, and Philadelphia (which saved \$640,000 from the original deal) is being asked for the money. Although the city had a budget surplus of \$130 million last year, Mayor Ed Rendell claims Philadelphia is unable to take financial responsibility for its waste.

Haiti is the poorest country in the Western hemisphere, and its entire GDP is less than Philadelphia's annual budget. The average per capita income in the Caribbean nation is about 1/7th that of the average citizen of the "city of brotherly love". Though recent international agreements such as the Basel and Bamako conventions have greatly limited the transfer of toxic wastes, conventional market logic still proclaims that shipping problematic waste to poor countries makes "economic sense". Thus, while Philadelphia shrugs its shoulders and Haitians suffer with the waste, similar experiences are being repeated worldwide.

Source: Rachel's Environment and Health Weekly #595. To help Haiti get rid of Philadelphia's toxic ash, write Mayor Ed Rendell at: City Hall, Room 215, Broad and Market Streets, Philadelphia, PA. 19107, USA.

Terminating Tradition

The food security of more than a billion people is under threat from a newly patented biotech product. The "Terminator technology", developed jointly by the US Department of Agriculture (USDA) and the Mississippi-based Delta and Pine Land seed company, has caused a furore amongst development and biotech activists. The Terminator technology controls a plant's reproductive system so that harvested seed will be sterile if farmers attempt to replant it.

If widely adopted, the new biotech product would mean that farmers would have to purchase seed every year, ending the tradition of replanting seeds which has been practiced by cultivators for thousands of years. This is potentially catastrophic for poor farmers who cannot afford to buy seed every growing season. Hope Shand, Research Director of the Canadian-based group RAFI, states that "poor farmers grow 15-20% of the world's food and they directly feed 1.4 billion people... These farmers depend upon saved seed and their own breeding skills in adapting other varieties for use on their (often marginal) lands."

Proponents of the Terminator say that such farmers will remain unaffected by the technology, while more affluent farmers will be given the choice of buying the new product or sticking with standard varieties. But critics say this will not be the case. "Public breeders wanting access to patented genes and traits will be forced to adopt the Terminator as a licensing requirement," warns Net Daño of SEARICE in the Philippines. "The better-off farmers in the valleys will be forced to pay. Their poor neighbours on the hill-sides will no longer be able to exchange breeding material with their counterparts in the valleys". Far from improving plant breeding, she warns that the Terminator

technology could drive millions of small farmers out of plant breeding, and therefore out of agriculture.

Crop scientists also warn that the pollen from crops carrying the Terminator trait would be likely to spread to neighbouring fields, resulting in a subsequent harvest in which some of their seeds are sterile. Although the sterility trait leads biotech experts to claim that the Terminator gene increases the safety of using biotech products, the fact remains that cross-pollination could drastically affect yields, and lead to irregular harvests and a decline in food security amongst vulnerable farming communities.

Fears about the extent of the Terminator's application have recently been heightened by the purchase of Delta and Pine by Monsanto, the giant agricultural and bio-tech company which works extensively in the less-industrialized world. Anti-biotech activists are working to dispel the myths about the Terminator technology, and are campaigning for a global ban on its use. "Farmers and governments everywhere should declare use of the technology as contrary to public order and national security," says Camila Montecinos of the group CET, which works with a network of farm and rural development organizations in Latin America. "This is the neutron bomb of agriculture."

For further information about the Terminator technology and the threat it poses to global food security, contact:

RAFI, 110 Osborne Street, Suite 202, Winnipeg MB, R3L 1Y5, Canada, Tel: +1 (204) 453 5259, Fax: +1 (204) 925 8034, e-mail: rafi@rafi.org; or

SEARICE, 83 Madasalin Street, Sikatuna Village, 1101 Quezon City, the Philippines, Tel: +63 2 433 7182, Fax: +63 2 921 7563, e-mail: searice@philonline.com.ph

Gold-mining Poisoning Land of Indonesian Borneo

Indigenous people from East Kalimantan, Indonesian Borneo, whose lives have been devastated by the gold-mining operations of the British mining company Rio Tinto, sent a representative to demand their rights at the Rio Tinto Annual General Meeting in London in May. The Kelian mine, which is in indigenous lands in the rainforested interior of the island, is South-east Asia's second largest gold mine. It is jointly owned by Rio Tinto (90%) and the Indonesian company PT KEM (10%). The open pit operation produces around 400,000 ounces of gold through a cyanide leaching process.

Although the company initially claimed that the mine would cover only 700 hectares, 1,200 hectares of forest have already been cleared. The company

has admitted that it cannot rehabilitate three-quarters of this land because the soil is too contaminated with heavy metals leached from the ore. PT KEM has agreed to replant degraded forest, but in an area several hundred kilometres away which has nothing to do with the mine.

Rio Tinto claims that their environmental monitoring indicates no impact on aquatic life, but villagers complain that the water is badly polluted and that fish populations are dwindling: "Before the Kelian, the river was clear, bathing was fine. Now you can't find a place to bathe because the water is dirty. There is lots of rubbish and it smells bad. There is a problem with the fish, there are none left alive." Water from the PT KEM site dumped cyanide into the River Kelian in

1996, raising serious concerns for the health of the many communities living along the river.

The mine site has other environmental effects as well. Last September, villagers blocked the road which links the mine to the river post at Jalamuk to protest the choking dust churned up day and night by company trucks. PT KEM says it can-

not afford to surface the road.

Local people are angry not only about the mine's pollution, but more importantly about the seizure of their land, from which some 400 families have been displaced since 1990. The police mobile brigade and army have been used to enforce evictions and suppress compensation disputes. Recently, however, Rio

Tinto representatives in Indonesia have begun to discuss the demands of the local community, after years of ignoring their complaints and hiding behind the Indonesian government.

For further information: Down to Earth,
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Tel/fax: +44 171 739 7984.
E-mail: dta@gn.apc.org

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DNA Gets Under the Skin

Scientists have warned that naked DNA may be an unexpected laboratory hazard. Genetic engineering researchers and others with heavy exposure to genetically engineered products – such as farm workers, food processors, and produce handlers – run the risk that DNA will

“infect” their bodies by direct uptake through the skin or via the intestinal tract. Until recently, it was thought that DNA could neither penetrate skin intact nor survive passage through the gut. Recent developments, however, show that both are possible: foreign DNA can persist and function in the body, and spread to cells via the blood stream. Cancer researchers have known since 1990 that human oncogenes applied to the back of mice resulted in tumours. It is now known that non-oncogenic naked DNA can also “infect” cells. Scientists point out that regulatory measures are lagging far behind these laboratory findings. They warn that exposure to DNA will become a significant source of hazard for genetic engineering workers and the public at large, if novel viral and bacterial DNA sequences continue to be introduced into transgenic food crops and animal feed.

Scientist Wins Award for Tackling “Cell from Hell”

A pioneering scientist, Dr. JoAnn Burkholder, has received the “Scientific Freedom and Responsibility Award” from the American Association for the Advancement of Science (AAAS). She received the award earlier this year for her investigative research into a new microbe linked to a rash of fish kills on the US Atlantic coast.

Dr. Burkholder began her research when an outbreak of fish deaths occurred in the North Carolina waterways in 1990. She discovered that, under the right conditions, the microbe *Pfiesteria* rises from sediment to attack fish and other aquatic organisms. The mysterious killer (dubbed “the cell from hell”) unleashes a poison one thousand times as toxic as cyanide, and is responsible for billions of fish deaths from the waters of Delaware to the Gulf of Mexico.

Burkholder traced its toxic transformation from a benign bacteria into a fish-eating killer to high-level river pollution, in the form of excessive nutrient load. The saturation of nutrients arose from a variety of sources; including sewage, soil erosion from property development, fertilizer run-off from farms and, most notably, massive amount of waste generated by industrial livestock operations. Dr. Burkholder was the first to recognize the

human health risks posed by the microbe. During the course of lab and field work, both she and her assistant were exposed to the potent neurotoxins emitted by the organism. They suffered severe nausea, memory loss, disorientation, and other debilitating ailments. Her assistant was hospitalized and forced to retire.

Burkholder has encountered much resistance to her research, not just from industries with a vested interest in fighting pollution controls, such as the state's factory farms, but also from politically-controlled regulatory agencies. State health and environmental officials, worried about harm to North Carolina's economy and tourism, launched a vicious “shoot the messenger” campaign. Among other tactics, they tried to cut Burkholder's research funding and to discredit her findings. Undeterred by the smear campaign, Burkholder continued to alert scientists and citizens to the *Pfiesteria* threat and her work has received praise from colleagues, fishermen and environmentalists. The AAAS award adds the validation of the scientific community and recognizes “her struggle ... to pursue scientific truth and maintain integrity” at great personal and professional risk to herself.

Monsanto Monitor

- Monsanto has withdrawn five genetically engineered cotton seed varieties from commercial sales because of sub-standard seed quality. The withdrawal is the latest blow to Roundup Ready cotton, which contains a synthetic gene designed to make the plants tolerate Monsanto's Roundup herbicide. Last year, some farmers in the Mississippi Delta complained that the cotton was not growing properly and Monsanto has paid them millions in compensation for lost crops.

- It appears that Monsanto are becoming more willing to admit their mistakes – or at least their public relations gaffes. The corporation has now apologized publicly for the heavy-handed way it introduced genetically modified soya beans into Europe last year. Monsanto Europe senior director, Carlos Joly, admitted “Monsanto made a mistake and we acknowledge it. We are not farmers, food manufacturers or food retailers, so we didn't think through to the ultimate consumer.” But rather than accept the wave of protest in Europe as a signal to decontaminate the food supply of genetically engineered foods, Monsanto has chosen to respond by blanketing Europe with slick advertisements for biotechnology.

- Monsanto's PR department was also working overtime to counter Prince Charles' warning regarding genetically engineered crops, which made front page headlines in June. Prince Charles called for a moratorium on genetically altered crops in Britain, claiming that they could devastate local wildlife. The Prince wrote: “If something does go badly wrong we will be faced with the problem of clearing up a kind of pollution which is self-perpetuating. I am not convinced that anyone has the first idea of how this could be done, or indeed who would have to pay.” While Monsanto dismissed Charles's questioning as “a complete over-reaction”, the National Consumer Council supported the Prince, saying that his concerns were in tune with those of the public.

- While opposition to genetically-engineered foods is mounting in Europe, Monsanto is setting its sights on Africa, inviting African leaders to sign a public statement entitled “Let the Harvest Begin.” Couched in emotive language that disguises a hard-sell on biotech crops, the statement has now received signatures from some of Africa's prominent acade-

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mics and politicians with Monsanto's name in such small print as to be easily overlooked.

However, the profits for Monsanto would not be so small. Monsanto's president announced "The opportunity is just enormous. We see the value that we can create as several billion dollars." Much of Africa's fertile territory is ideal for growing maize fodder to supply the ever-increasing consumption of meat, eggs and dairy produce in the industrialized world. Despite the claim in the public statement that "with these advances, we prosper, without them we cannot survive", feed production will actually increase food shortage for humans, as land previously cultivated to meet local people's needs is expropriated to supply the tastes of wealthy consumers.

Old Tool Brings New Life in Malaysia

In Sabah, Malaysia, most of the population are indigenous peoples who practice subsistence farming in rural areas. Although many studies have been done on crop improvement and pest management, very little attention has been paid to indigenous peoples' own agricultural innovations. One exception is a project initiated by Tonnibong, a Kadazandusan youth group. The purpose of this project is to maintain and improve indigenous traditions of rice-growing. Tonnibong has modified the *suud*, a traditional tool for levelling rice fields. By levelling the ground a bit at a time, rather than all at once, the new *suud* helps preserve the topsoil. While the previous technology

requires that the ground be left fallow for four years to recover its fertility, the modified *suud* allows rice to be planted in just three years and other crops such as maize to be planted in the meantime.

Tonnibong is now teaching communities how to integrate the new *suud* into indigenous traditions of rice-growing such as the use of a lunar calendar. According to Tonnibong, the adaptation of traditional knowledge provides real opportunities for crop improvement, without the high costs and negative side effects that high technology strategies have had for farm communities and the land. It also reinforces cultural integrity and solidarity.

Clinton's Call for Caution Falls on Deaf Ears

At the end of May, a *Washington Post* editorial commented on an apparent major shift in US administration policy which had passed the media by unnoticed ("Globalism with a Human Face", May 29th, page A27). The article, by Post columnist E. J. Dionne Jr., remarked on a speech by Bill Clinton, made in Geneva at a meeting of the World Trade Organization (WTO). In his address, the President signified a distinct change in attitude on the issue of free trade.

Calling on the WTO to work more closely with environmentalists and labour representatives, President Clinton warned that ever-increasing competition could lead to a "race to the bottom", and insisted that "we should be levelling up, not levelling down." He also suggested that without sufficient safety mechanisms, the majority of the public would remain suspicious of large international financial and trade institutions; who have been widely accused of bowing to the

demands of powerful transnational corporations. Clinton specifically criticized the secrecy of the WTO, and proposed that all hearings by the WTO be open to the public, and even that private citizens be able to express their concerns before the organization.

Clinton's change of attitude seems to have been prompted by the failure of the US administration's "fast track" policy – an attempt to rush through international trade deals which faltered due to misjudged public mood over the trade issue and opposition by the US Congress.

More shocking than Clinton's message, though, was the lack of reaction to it in the media. Dionne notes that there "was a time when the address would have been front-page news". He attributes the lack of coverage to more scandalous news which continues to grab the headlines, combined with the reduced significance of the trade issue in national politics following the failure of "fast track".

The approach being counselled by the president's economic advisers now seems to be "globalization plus civility": an attempt to marry international equity objectives to the goal of continued global growth. Dionne suggests that judging by the "resounding silence" which greeted the president's speech, there is still a long way to go. More significantly, Dionne suggests that there may be limits to Clinton's capacity to achieve this dream. Unfortunately, Dionne is probably correct in his assessment. International "growth" demands continued extraction of natural resources, an ever-ready supply of cheap labour, and an increase in financial transactions and international trade at all costs. Experience shows us that these processes are incompatible with objectives of international equity. While growth continues to be the overriding global dream of the world's economic and political leaders, people and the environment will continue to fall below the financial bottom-line.

"Day of Reckoning" for Chemical Industries

A television documentary that aired on June 2nd on American public television has brought mainstream attention to some of the major health effects of chemical toxins in the environment. "Fooling With Nature", based on research carried out by PBS/Frontline and the Centre for Investigative Reporting, explored the alarming implications of the "endocrine disruption hypothesis", which was the basis for the 1996 book *Our Stolen Future*. Both the book and the documentary challenge government and chemical industry assurances that the cocktail of chemicals being released into the environment has little effect on human health.

World Wildlife Fund scientist Theo Colborn, who co-authored *Our Stolen Future*, says that people living in modern societies now carry measurable levels of

some 500 industrial chemicals in their bodies. Colborn states that there is significant evidence to suggest that these stored chemicals are contributing to reduced fertility rates, genital deformities, abnormalities within the immune system, and other serious conditions. According to one former insider, the chemical industry has been badly shaken by the endocrine disruption hypothesis. "Everything is at stake for the industry on this one", says Dawn Forsythe. "It was a day of reckoning they didn't want to see."

For more information on the documentary contact PBS press enquiries: Tel: +1 (617) 783 3500. For more information on endocrine disruption and links between environmental toxicity and health problems see the book *Our Stolen Future*; or contact the Environmental Research Foundation, PO. Box 5036, Annapolis MD. 21403, USA. Fax: +1 (410) 263 8944.

And Finally ...

The International Society of Petroleum Engineers, acting on behalf of the world's oil and gas industry, held "The Fourth International Conference on Health, Safety and Environment in Oil and Gas Exploration and Production" in Venezuela at the beginning of June. The event was billed as "a unique opportunity to learn, discuss and debate the current and future issues of the oil industry". On the agenda were some thought-provoking items:

- sexual behaviour and condom acceptance amongst field-based oil workers
- are there some minimum standards that should be applied globally to the gas and petroleum industry?
- are there some ecosystems that are too environmentally sensitive to allow gas and oil operations?
- should access to national parks and tribal lands be restricted?

It is nice to see the industry care.