

# Say NO to Genetically Engineered Seeds

## Corporate Targets

Syngenta, Bayer, Monsanto, Dow, DuPont and BASF

### The push for GE seeds

- The top agro biotech engines are: Syngenta, Bayer (which bought out Aventis' agribusiness unit in 2002), Monsanto, Dow, DuPont (includes Pioneer Hi-Bred) and BASF. Their combined seed and agrochemical sales in 2002 were more than \$24 billion (see table). These corporations have put money into biotech research and development since the early 1980s. They control 100 percent of the genetically engineered (GE) seed market, almost one quarter of the entire commercial seed market and 80 percent of the agrochemicals market.

- The agro biotech engines' main GE products are: herbicide resistant soybeans, corn and cotton seeds and their accompanying herbicide products. These seeds amount to 74 percent of commercial GE crops worldwide. Now the agro biotech engines are turning to herbicide resistant wheat. Monsanto has submitted Roundup Ready (RR) wheat (resistant to its herbicide Roundup) for government approval in Canada and the U.S. RR wheat could be approved for commercial growing by 2004. Meanwhile, many of the 70 countries to which Canada exports wheat have already stated that they will refuse RR wheat or any wheat supply contaminated by GE wheat. According to a study from the University of Saskatchewan growing GE wheat could cost Canadian farmers \$ (CAD) 185 million/year in lost sales.

- In North America, the agro biotech engines' key supporters are: governments. This is evident from policies that facilitate the speedy commercialization of GE products, rather than rigorous regulation and testing.

Governments provide hefty amounts of public money to the biotech industry and encourage the research and development of biotech at public institutions, including universities. The Canadian government contributed at least \$ (CAD) 500,000 for the development of Monsanto's RR wheat at Agriculture and Agri-Food Canada's Cereal Research Centre on the University of Manitoba campus. This was part of the government's Matching Investment Initiative (MII) Program, which is designed to increase

partnerships between the government and corporations. Governments provide funds in the form of public infrastructure, scientists or money to match contributions from corporations. In the U.S., cooperative research and development agreements (CRADAs) let corporations partner with Department of Agriculture research groups, and then get first crack at a license to market the resulting technology. Terminator Technology (i.e. GE sterile seeds) was developed under a CRADA.

- The agro biotech engines play a major role in shaping: global trade rules. Under the World Trade Organization, the Trade Related Aspects of Intellectual Property Rights (TRIPS)

agreement guarantees corporations monopoly sales rights for 20 years or more throughout much of the world. Several multinational pharmaceutical and agribusiness corporations, including DuPont and Monsanto, had a hand in drafting TRIPS. While most genetic resources for patented crop and pharmaceutical products come from the global South, most patents are held by corporations based in the North.

- The agro biotech engines are forcing GE seeds on: farmers in the global South through institutions like the World Bank and the International Service for the Acquisition of Agri-biotech Applications (ISAAA). ISAAA promotes

| Agro Biotech Engine | Total agrochemical sales 2002 [in billions, USD] | Total seed sales 2002 [in billions, USD] |
|---------------------|--|--|
| Syngenta            | \$5.3  | \$.937                                   |
| Bayer               | \$3.8  | \$.294                                   |
| Monsanto            | \$3.1  | \$1.6                                    |
| BASF                | \$2.8  | none                                     |
| Dow                 | \$2.5  | \$.190                                   |
| DuPont              | \$1.8  | \$2.0                                    |
| <b>Total</b>        | <b>\$19.3</b>                                    | <b>\$5.02</b>                            |

Source: Pesticide Action Network North America ([www.panna.org](http://www.panna.org)), corporations' Annual reports and communication with investor relations' departments.



biotech and creates deals between public institutions in the South and the agro biotech engines. ISAAA, for instance, helped establish a deal between Syngenta and Vietnam's Institute of Biotechnology and its Agricultural Science Institute for the development of *Bt* sweet potatoes (genetically engineered to be pest resistant). ISAAA also sets up biotech work in Kenya, Egypt, Zimbabwe, Indonesia, Malaysia, the Philippines, Thailand, Argentina, Brazil, Costa Rica and Mexico. ISAAA is financed by Bayer, DuPont, Monsanto, Syngenta, the World Bank, the Rockefeller Foundation and the United States Agency for International Development.

## Ideas for action

Identify and challenge the agro biotech engines. Expose how the agro biotech engines are present in your community -- as headquarters or regional offices, labs, universities, partner biotech companies, lobby groups, corporate sponsored farmer and consumer groups, community programs, government bodies, industry associations, industry conferences and conventions, etc. Join or form a group that could start a campaign to expose the agro biotech engines. Organize community education forums, including information sessions, teach-ins, roundtable discussion groups, and develop educational tools.

Support farmers in or near your community. Educate yourself on farmers' issues and make links with farmers and farmers' groups. Support farmers' concerns about genetic engineering. Export farmers have lost, and continue to lose, sales because many countries are restricting the import of GE or GE contaminated crops. In 1999, several farmer groups in the U.S. established the "Farmer to Farmer Campaign on Genetic Engineering" to further educate themselves and other farmers on the impacts of genetic engineering (see [www.nffc.net/bio4.htm](http://www.nffc.net/bio4.htm)). In Saskatchewan, over 1,000 of the province's organic canola farmers have filed for a class action lawsuit against Monsanto and Bayer. Monsanto and Bayer's GE canola has polluted organic farmers' fields and farmers have consequently lost organic canola. The farmers are seeking compensation from the two corporations, and are pushing for an injunction that would prevent Monsanto from getting approval for its GE wheat (see [www.saskorganic.com](http://www.saskorganic.com)).

Support farmers in the global South. Find out about movements in the global South. Farmers, peasants and indigenous communities in the global South have actively been protesting the imperialist presence of agribusiness corporations and foreign governments for many years. Support these groups. Organize solidarity actions (e.g. direct actions, educational events, protests) within your local community. Dispel the myth that biotech is the solution to 'world hunger.' In the Philippines, hundreds of thousands of peasants and farmers, through organizations like *Kilusang Magbubukid ng Pilipinas* (KMP, aka the Philippines Peasant Movement, [www.geocities.com/kmp\\_ph](http://www.geocities.com/kmp_ph)) and Resistance and Solidarity Against Agrochemical TNCs (see [www.geocities.com/resist\\_agtncs/index.html](http://www.geocities.com/resist_agtncs/index.html)), taken action against the testing and commercialization of Monsanto and Pioneer's *Bt* corn. They say that *Bt* corn will not help them since it is intended for feeding animals for the meat industry and not for direct human consumption. They also say that in the southern Philippines, where field trials occurred, and peasants have been able to manage corn crop pests on their own.

## Polaris resources

"Unpacking the Agro Biotech Engines; How the leading seed and agrochemical corporations are driving the biotech agenda," by Kimiko Inouye, July 2003.

"Galloping Gene Giants; How big corporations are re-organizing their push for a biotech future and what can be done to challenge this agenda," by Tony Clarke with Brenda (Kimiko) Inouye, February 2002.

"Regulating Genetic Engineering ...for Profit," by Lucy Sharratt, February 2002.

## More resources

Third World Network, "Biotechnology/Biopiracy" webpage. [www.twinside.org.sg/bio.htm](http://www.twinside.org.sg/bio.htm)

*The Ram's Horn: a monthly journal of food systems analysis.* [www.ramshorn.bc.ca](http://www.ramshorn.bc.ca)

"Globalization, Inc.," *Communique*, Issue #71, Sept. 5, 2001. [www.rafi.org/documents/com\\_globilization.pdf](http://www.rafi.org/documents/com_globilization.pdf)

Corporate Watch UK, "Genetics" webpage [www.corporatewatch.org.uk/genetics/genetics.htm](http://www.corporatewatch.org.uk/genetics/genetics.htm)

