April 2000

Aventis

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Why Aventis?

Despite its low profile, Aventis is dangerous. Formed only last December by the merger of Germany's Hoechst and Rhone-Poulenc of France, it is the company pushing hardest for GM crops to be grown on a large scale in Britain. It has more field trials of GM crops than any other company and has filed the first ever application for their commercial growing in this country. If successful, Aventis will be able to grow its GM herbicide resistant maize on a mass commercial scale in the UK once the government's farm-scale trials programme is complete in 2002/3.

Aventis supplies both the oil seed rape and forage maize for these trials. As this briefing goes to print, 31 farm-scale trial sites have already been announced by government ministers. If Aventis gets its way, at least 36 more will be announced in early April 2000.

Aventis is a massive transnational corporation with annual sales of 18 billion euro (approx £11bn) and around 90,000 employees in 120 countries worldwide. It is also the world's newest and largest life sciences company, having only come into existence on December 15 1999. Aventis CropScience, the division which produces its GM crops and agrochemicals, was formed by the combination of AgrEvo (formerly 60% owned by Hoechst) and Rhone-Poulenc Agro.

Aventis develops, markets and sells GM seeds, mostly genetically engineered to be resistant to its own herbicides. It also owns patents, which give it exclusive rights to use particular knowledge, genetic material and processes.

The engineered herbicide tolerance is called LibertyLink, and uses much the same approach as Monsanto's infamous Roundup Ready. Aventis also takes a similarly aggressive attitude to protestors, relying on injunctions and SLAPPs (strategic lawsuits against public participation) to silence dissent.

"In the future, only a few companies will be able to shape the developments in this industry - Aventis CropScience... will be one of them" - Jurgen Dormann, Aventis CEO.

This briefing aims to give campaigners an insight into this new biotech giant, and offer some pointers as to how it can be tackled.

Aventis is involved in the trials, not because it is interested in establishing scientific truths, but because they can be used to bring its GM crops to market quicker.

Farm scale trials

"The genetically modified crop farm-scale evaluations are the Government funded research to investigate whether there are differences in the diversity and abundance of wildlife associated with the management of genetically modified herbicide tolerant oil seed rape and maize compared with the management of equivalent non-GM crops." Department of the Environment, Transport and the Regions. [1]

The trials have been dismissed as a "scientific farce" by Friends of the Earth, because they "amount to 'creeping commercialisation' and [because] they themselves pose an environmental threat". [2] GM oilseed rape is particularly dangerous because of its ability to crosspollinate over distances of up to 2.5 km, and with wild members of the brassica family [3], potentially creating herbicide resistant weeds. GM maize can cross-pollinate with non-GM maize, posing a particular risk to organic farmers, whose crops could lose their organic status.

Oilseed rape is the crop to which commercial bee hives are most commonly moved [4] and is so loved by bees that they will travel unusually long distances get its sticky pollen. Bees are unable to discern between GM and non-GM pollen, potentially threatening the health of both bees and people who eat honey [5]. GM crops also have the potential to contaminate other organisms through horizontal gene transfer to soil bacteria. The effects of this on soil ecosystems are unknown and impossible to predict. One possible disturbing consequence of horizontal gene transfer in bacteria is the potential for antibiotic resistance and other traits to migrate from one type of bacterium to another. [6]

EC marketing approval for LibertyLink oilseed rape was granted in June 1997, but was blocked by the French government because of concerns about cross-pollination with wild relatives [7].

Aventis was the first company involved in the government's farm-scale trials. According to spokesperson Des D'Souza this is "because our crops are closest to commercialisation". Aventis is involved in the trials, not because it is interested in establishing scientific truths, but because they can be used to bring its GM crops to market quicker.

In 1999 herbicide-resistant crops of oilseed rape [8] and fodder maize [9], all Aventis crops, were planted at seven sites across the UK. The first year of farm-scale trials (1999) was to establish a methodology for the experiments. Now the trials begin in earnest, and whilst at the time of writing only 31 sites (17 of them Aventis crops) have been announced, the total for 2000 will probably rise to 67. [10]

The trials are funded by the taxpayer to the tune of £3.3 million over four years [11] and are in addition to the 140 smaller test-sites already polluting the countryside.

In the last year Aventis has covered a larger area with GM crops in the UK than any other company

Aventis aims to use a combination of size, financial brute force and greenwash to force the widespread take-up of GM crops.

Role in GM

Aventis is the largest company in the world involved in crop protection and crop production (agrochemicals and seeds, including GM seeds), [12] and in the last year covered a larger area of the UK with GM crops than any other company [13].

In spite of massive public opposition to the open release of GM crops into the environment and a business-government agreement not to plant GM crops commercially before the farm-scale trials are complete, Aventis has sneakily filed an application for the inclusion of its T25 fodder maize on the National Seed List. This is the first time a GM crop variety has been put forward for listing in the UK, the final step to commercialisation [14]. The maize is intended for cattle feed, yet no studies into the impact on animal and human health have been undertaken.

The application could have been blocked by the Welsh Assembly, as all the devolved parts of the UK have to agree to a seed before it is put on to the National List of permissible crops [15]. However, the Welsh Agriculture Secretary, Christine Gwyther has ignored a recommendation from the Assembly's Agriculture and Rural Affairs Committee and supported inclusion of GM maize on the National Seed List. Friends of the Earth has said it will "pursue every possible avenue" to overturn her decision. [16]

Strategy for GM crops

Aventis aims to use a combination of size, financial brute force and greenwash to force the widespread take-up of GM crops.

Herbicide tolerance gives the companies the double reward of a tighter grip on the food market, combined with increased profits from herbicide sales to farmers [17].

Aventis is focusing on staple crops, such as soya, maize and oilseed rape, and is hoping to add rice and cotton to the list. GM LibertyLink rice may be grown commercially as early as 2000 in the Americas [18]. In the near future most Aventis GM crops will be herbicide tolerant crops.

Aventis is "also investing in innovative solutions designed to enhance the quality of the foodstuffs produced, an aspect gaining in importance". [19] By this Aventis means GM 'functional foods', crops with added vitamins, minerals, pharmaceuticals or other supposed consumer benefits. Although some way from commercialisation, these products are intended to gain public acceptance of GM, which has so far been elusive due to its 'benefits' only being realised at the producer end of the supply chain. For more information on functional foods see the separate Corporate Watch briefing (published April 2000).

It is the company's economic progress, not social and ecological progress, that really lies at the heart of Aventis' involvement in GM crops

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Greenwash

Increasingly the GM industry is resorting to the tired 'GM will feed the world's starving' line to convince the public that the rich 'green lobby' in the Northern hemisphere is selfishly denying starving people access to technologically-enhanced food in the South. This argument fails to address the real reasons for poverty and starvation such as gross inequalities in the distribution of food and wealth as well as the exploitation of people and the environment by profit-oriented corporations (such as Aventis). Aventis is pushing this line as much as any of the other proponents of GM technology.

In a speech to shareholders on 26 October 1999, Jurgen Dormann, Aventis CEO, said that: "Rapid population growth, increasing life expectancy, and environmental protection requirements are increasing the need for more and improved products. This is the only way to achieve sustainable development that represents economic, social and ecological progress... In recent years, we have invested heavily in green biotechnology [sic]..." [20] It is the company's economic progress, not social and ecological progress, that really lies at the heart of Aventis' involvement in GM crops. Aventis hopes to profit from an ever-growing slice of the world food market. Jurgen the humanitarian again: "In the future, only a few companies will be able to shape the developments in this industry - Aventis CropScience... will be one of them." [21]

In addition to the heavy investment in 'green biotechnology' mentioned above, Aventis has also been investing substantial amounts in greenwash. Speaking about the "Life Counts" project on Feb 25 2000, Jurgen informed his audience that: "One of the foremost issues of tomorrow is: how can we make economic and social progress while ensuring the lasting protection of the natural environment?" [22] Or: how can Aventis convince the public that GM crops are good for people and the environment so they can profit from their unwanted introduction?

The Life Counts project is a book produced by Aventis that demonstrates their heartfelt commitment to protecting biodiversity. "For every copy of the book that is sold in the industrialized countries, Aventis will donate one to schools, libraries, or institutes in Africa, Asia or Latin America," - all key growing regions and markets for GM crops.

Misinformation for the book came from the "Global Biodiversity 2000" Report prepared by the World Conservation Monitoring Center, an organisation established by The World Conservation Union, the World Wide Fund for Nature (WWF) and the United Nations Environment Programme (UNEP). It claims to be an independent organisation, and to have become the planet's principal source of global biodiversity information. Sponsors include eminent environmental ambassadors such as BP Amoco, British Airways, the EU, Rio Tinto and Unilever [23]. This particular report was unsurprisingly promoted by Aventis [22].

Aventis is also a member of the World Business Council for Sustainable Development (WBCSD). This is another industry body, which "aims to develop closer co-operation between business, government and all other organizations concerned with the environment and sustainable development." Its has 125 corporate members, including GM villains Monsanto, Novartis and DuPont. Other members include BP Amoco, Shell International, Glaxo Wellcome, General Motors, ICI, Nestle, and Rio Tinto [24].

The WBCSD was formed through a merger of the Business Council on Sustainable Development (BCSD) and the World Industry Council for the Environment (a branch of the International Chamber of Commerce). The BCSD provided the business perspective at the Rio

CropGen is "helping to achieve a greater measure of realism and better balance in the UK public debate about crop biotechnology."

CropGen is sponsored by Aventis CropScience, Monsanto, Novartis Seeds and Dow AgroSciences (for contact details see page 19). Earth Summit in 1992. It had unparalleled access to the conference Secretariat and extraordinary influence in weakening key agreements, including the Biodiversity and Climate conventions and Agenda 21.

In 1997 the WBCSD was awarded a Greenwash award by Corporate Watch US, which noted that while it tried to "portray itself as the savior of the world's environment and the force that will eliminate poverty", its members continued to destroy the environment and commit abhorent human rights abuses. [25].

Here in the UK, Aventis has joined forces with other agri-biotech companies to launch CropGen, which will also be providing information for the general public. According to its mission statement: "CropGen's mission is to make the case for GM crops by helping to achieve a greater measure of realism and better balance in the UK public debate about crop biotechnology."[26]

Dealing with regulators

Aventis is making a major effort to influence the development of EU regulatory mechanisms to bring them in line with the WTO and 'free trade'. At a presentation in June 1998, AgrEvo's CEO Dr Gerhard Prante, now co-chairman of Aventis Agriculture,[29] complained to 100 high-level politicians and government officials that Europe's approval process for GMOs was too onerous and amounted to a barrier to trade. He urged them to seize the chance to "harmonise" regulatory frameworks internationally (presumably down to the US standard), before differences had time to solidify [30].

There was also some embarrassment in the UK government last August when Bob May and Alan Dewar of the Institute of Arable Crops Research, both already in the pay of AgrEvo, were appointed to 'independently' supervise AgrEvo's farm-scale trials [31].

A parliamentary question in March 1999 revealed that AgrEvo had had four meetings with civil servants on pesticides regulation, three meetings on research and an undisclosed number on plant breeding in the previous six months [32].

Aventis had hoped that the failed WTO negotiations last December would establish a common approach (in particular between North America and Europe) for the trade of GMOs . "Implementation of a regulatory framework and administrative procedures to ensure the protection of intellectual properties, are a benefit to developing countries as well, as they are a vital prerequisite for economic development through innovation." [33]

However, the UNDP's 1999 Human Development Report showed that industrialised countries hold 97% of all patents worldwide, often on plants taken from economically poor but biodiversity rich countries in the South. AgrEvo developed its best-selling herbicide, Basta, from a soil bacterium derived from the Cameroon. As the Rural Advancement Foundation International states: "Hoechst (AgrEvo's parent company before the formation of Aventis) has not offered any compensation to the donor country." [34]

There are many other examples of companies from the North stealing plants from the South and patenting their economically valuable traits. For more information on biopiracy see Christian Aid's report 'Selling Suicide' [35]

Aventis claims to be the world's top ranking firm in sales of both pharmaceuticals and agrochemicals.

Ultimate holding company: Aventis SA

Aventis SA Head office Espace-Européen de l'Entrepise 16 avenue de l'Europe F-67300 Schiltigheim, Strasbourg Tel: 0033 3 88 99 11 00

Aventis was formed through the merger of Hoechst of Germany and Rhone-Poulenc of France.

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What Aventis?

Company profile

Aventis claims to be the world's top ranking firm in sales of both pharmaceuticals [36] and agrochemicals, [37] with combined annual sales of euro 18 billion and around 90,000 employees across the globe [38]. However, since there have been several recent mergers in the pharmaceutical sector, it is likely that the pharmaceutical division will soon rank as low as fifth [39]. In crop protection too it may soon have to play second fiddle to Syngenta, the recently announced merger of the agricultural divisions of AstraZeneca and Novartis [40]

The research and development budget for Aventis CropScience is a staggering US\$408m - more than any other company producing GM crops [41].

Aventis merger

Aventis was formed through the merger of Hoechst of Germany and Rhone-Poulenc of France. The merger was cleared by EU competition authorities on 11 August 1999, and gave Hoechst shareholders 53% and Rhone-Poulenc shareholders the remaining 47% [42]. The whole process was finally completed on 15 December 1999 and shares were traded for the first time on the New York, Paris and Frankfurt stock exchanges on 20 December [43].

The company is split into several divisions, including Aventis CropSciences, which produces its GM crops and agrochemicals. Before the birth of Aventis, both Hoechst and Rhone-Poulenc had their own agrochemical and GM crop operations. Hoechst were majority owners of AgrEvo, and Rhone-Poulenc had a division called Rhone-Poulenc Agro. Aventis CropSciences is a marriage of these two companies, though it is AgrEvo which has brought most of the GM technology to the new company. Schering, which owned 40% of AgrEvo, has retained a 24% share of Aventis CropScience [44].

Up to 1400 jobs are expected to be lost in European agrochemicals as a result of the merger [45]. Stuart Ross, of the Manufacturing, Science & Finance Union, said: "We're disappointed because the companies haven't talked to the unions. There has been no consultation in a situation where hundreds of jobs are at risk. Staff have been kept in the dark." A statement from the merging companies admitted that 'synergies' would result in job reductions [46]. Similar sentiments in France led to the blockading of the entrance to Rhone-Poulenc's last ever shareholder meeting by union activists (see activism against Aventis below). Merchant Banks Rothschild and Lazards advised Rhone-Poulenc and Hoechst on the merger - this included advising on which bits of the companies to dispose of, and which to keep. [47]

UK operations

All UK-based companies have to register at Companies House, a part of the government. Aventis has two key UK operating companies registered that are involved in its agriculture business.

Aventis CropScience UK Ltd. This is registered at the Hauxton site, though the main office appears to be Ongar - see 'Where Aventis?', below.

Aventis Agriculture Ltd. This is registered at the Ongar site - see 'Where Aventis?, below.

The relationship between the two is explained in 'Corporate structure and commercial activites' on the next page.

Aventis is involved in pharmaceuticals and agricultural products

Aventis CropSciences Head office Postal address: La Dargoir-Siège Social, Centre de Recherche 14-20, Rue Pierre Baizet - B.P. 9163, 69263 Lyon Cedex 09, France

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Plant Genetic Systems NV, Ghent, Belgium Tel: (0032) 9 2358 440.

Nunhems Seeds East Winch Hall East Winch Kings Lynn Norfolk PE32 1HN Tel: 01553 842 588

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Corporate structure and commercial activities:

Aventis consists of two business areas: Aventis Pharma and Aventis Agriculture.

Aventis Pharma comprises the prescription drugs, vaccines, therapeutic proteins and diagnostics businesses. This is based in Frankfurt, and makes up 73% of Aventis' business [48].

Aventis Agriculture, with headquarters in Lyon, France, comprises the crop science and seeds, plant biotechnology, animal nutrition and animal health businesses.
[49]. It has 16,600 employees [44].

Aventis Agriculture is in turn divided into three areas:

- Aventis CropScience crop protection and crop production for agriculture, i.e. agrochemicals such as herbicides and pesticides as well as both GM and non-GM seeds. Within Aventis CropScience is Aventis Environmental Science which provides fungicides, insecticides, herbicides and growth promoters for golf courses, local authorities, forestry and ornamental plants. Aventis CropScience accounts for almost 90% of Aventis Agriculture's sales [44].
- **Aventis Animal Nutrition** develops, manufactures and markets feed additives for animals feed, including vitamins, amino acids and enzymes.
- **Merial** (50/50 joint venture with Merck of the US) develops, manufactures and markets veterinary medicines. [50]

Aventis also owns **Plant Genetic Systems NV**. The company was acquired by AgrEvo on 16 August 1996 for £340 million. It was then the largest ever biotechnology takeover - but PGS' portfolio of patents was a valuable asset. In November the same year, PGS/AgrEvo was granted US patent rights to plants engineered for resistance to its glufosinate herbicide. [51]

The Dutch-based **Nunza BV** is a subsidiary of Aventis CropScience which produces vegetables seeds. Nunza operates worldwide through the brands Nunhems in Europe, Middle East and Africa, Sunseeds in the Americas and Nunhems-Proagro in India. [52]. Its UK subsidiary, Nunhems Seeds, is currently located in a portacabin at the former AgrEvo site at East Winch, though they are due to move in May 2000, possibly to somewhere in the Kings Lynn area [53].

PlantTec is a Berlin-based subsidiary, which messes about with the carbohydrate metabolism of plants using GM technology. PlantTec was set up in 1996 by members of the staff of the former Berlin "Institut für Genbiologische Forschung GmbH", with the Max-Planck-Gesellschaft and AgrEvo as shareholders.

[52].

Herbicides

Isoxaflutole (Balance) Glufosinate (Basta) (Liberty) Fenoxaprop (Puma) HBN (Buctril)

Insecticides

Fipronil (Regent) Aldicarb (Temik)

Fungicides

Iprodione (Rovral)

Seeds and link products

Glufosinate (LibertyLink) [59]

Products for specific crops

Oilseed rape

<u>Disease control:</u> Derosal, Sportak, Sportak, Alpha

<u>Insect control:</u> Decis

<u>Seed treatment:</u> Foundation, Rovral Fusion, Galtak, Liberty

[60]

Soya

<u>Disease control:</u> Condor, Derosal, Gudor,

palisade

<u>Insect control:</u> Decis, Larvin, Thiodan

(Phaser)

Nematode control: Temik

<u>Seed treatment:</u> Derosal, Semevin <u>Weed control:</u> Cobra, Galtak, Podium

[61]

Maize

<u>Insect control:</u> Decis, Starlink <u>Seed treatment:</u> Alios, Cosmos,

Prelude SP, Regent,

Semevin

<u>Weed control:</u> Balance, Buctril, Liberty

[62]

Aventis CropScience key products

Liberty herbicide (glufosinate)

LibertyLink and SeedLink: LibertyLink™ is the brand name Aventis uses for seeds which are genetically modified to be tolerant to the Liberty herbicide. LibertyLink varieties of oilseed rape, maize, soya and sugar beet have been developed and LibertyLink rice and cotton are in the pipeline. SeedLink is a breeding system developed by Aventis subsidiary Plant Genetic Systems using genetic engineering to produce hybrid seeds. SeedLink canola hybrids are marketed in Canada under the tradename InVigor [54].

"Glufosinate is rapidly degraded in the soil and water so that leaching is not a problem," claimed AgrEvo in August 1999 [55]. However, the US Environment Protection Agency classifies glufosinate as persistent, mobile in soil and highly soluble in water. As a broad spectrum herbicide it is a threat to all plants, but it is also a danger to a number aquatic animals including some freshwater fish species.

Glufosinate is toxic to humans and ingestion of the herbicide can be fatal. It primarily targets the nervous system, and symptoms in laboratory animals have included trembling, irregular breathing and convulsions. There are also concerns that by-products formed through the interaction of glufosinate with resistant plants could also be dangerous to consumers eating foods produced from them. [56] The UK agriculture ministry MAFF has raised concerns about harmful levels of residues of glufosinate in crops that have been treated with it and in animals that have been fed with such crops.

Glufosinate is produced at Aventis' Frankfurt plant. In 1995 the plant expanded to double production in order to meet a projected increase in demand alongside the development of GM glufosinate-resistant crops. Aventis expects glufosinate to become its lynchpin product with annual sales of £420m by 2001-2 [57]. Trade names include Basta, a herbicide for which it has particularly high hopes [44], Rely, Finale and Challenge. In UK it is used mainly on oilseed rape and potatoes. In Canada, Liberty Link canola (oilseed rape) has been on sale since 1995 [57]. LibertyLink® corn is already being grown on a commercial scale in the United States, covering an area of 2 million acres (800,000 ha) in 1998 [58].

Financial details:

Turnover (euro)

% of sales (2000 estimated)

Aventis SA	18.4bn
Aventis Pharma	13.9bn
Aventis Agriculture	4.6bn
(CropScience)	4.1bn

[64]

NB: 1 euro = approx 6op.

Type of product

Aventis spent \$408m (approx euro 427m or £256m) on agricultural R&D in 1998 (10% of turnover) [65]. This presumably adds up the combined R&D budgets of AgrEvo and Rhone-Poulenc.

Aventis CropScience sales breakdown by product type

Type of product	70 of bares (2000 estimated)
Herbicides Insecticides Fungicides Growth Regulators/others	40 27.5 17.5 15
(this includes GM crops)	

[63]

Aventis operates in 120 countries across the world.

For a full list of countries where Aventis CropScience operates see http://www2.aventis.com/cropsc/about/co untries.htm

Aventis has plans for massive expansion, particularly in the South.

Countries of operation

Aventis employs 95,000 people around the globe [40], 16,600 being employed in the Agriculture division [44]. Of this total 25,000 are employed in France, 17,000 in the USA, 13,000 in Germany and 40,000 are employed in the rest of the world [40].

Aventis is making some bold claims about its bid for global domination in the crop protection and GM crops business and it is evident that there are plans for massive expansion, particularly in the Southern hemisphere. What follows is a summary of Aventis' plans in what it appears the company considers to be key countries. Although this list is split into 'plans for GMO's' and 'other plans', this does not mean that Aventis does not intend to introduce or expand production of GM crops in the latter list or in other countries. This is merely a summary of what the company has announced that we have been able to get hold of.

International plans for GM crops

Aventis expects to boost its overall sales across Latin America by more than 30 percent in 2000. According to regional director, Yves Ravinet, "Latin America accounts for 20 percent of Aventis' sales worldwide and it represented \$600 million in sales for us last year... We intend to reach a total of \$800 million in 2000." The company also has plans to begin commercial production of GM rice as early as 2000 in South America and the United States. [18]

In 1999, AgrEvo acquired Brazil's 'leading rice breeding programme' from Granja 4 Irmaos S.A., the country's largest rice seed producer. [66] Aventis aims to bring transgenic LibertyLink technology into rice - one of the world's most important crops. The company obtained permission from the Brazilian authorities in December 1998 to test LibertyLink rice in field trials [67].

In the Philippines Aventis is planning to increase market share in crop production this year (2000) to 25%. The local crop production industry is currently valued at P4.7 billion (approx £72.5m). Plans for this year include focus on the seedbusiness as well as introduction of genetically-mofidifed crops in the country, such as rice and corn. [68]

In Thailand the company aims for 10% growth in local sales this year to 4.3 billion baht (approx £70m). As a result of the merger, the company will close its nutrition and bio-chemical products plant in Navanakorn, Pathum Thani, and transfer the production lines to its crop science plant in Bang Poo [69].

In February 1999 Aventis expanded massively into India, acquiring the Proagro Group of seed companies (the second largest seed group in the country) which produces hybrid corn, rice, oilseed rape, cotton, sunflower, grain and fodder sorghum, millet and vegetables [70]. The group comprises Proagro seed company limited, Proagro-PGS India Limited, Hybrid Rice International (HRI), and Misr Hytech [71]. Proagro-PGS develops vegetable hybrids, including hybrids incorporating Aventis' controversial GM Bt resistance technology. The company is a joint venture founded in 1993 between Proagro Seed Company Ltd and Aventis subsidiary PGS. [52] Aventis is also now expanding aggressively elsewhere in Asia and the Middle East [70]. HRI is the market leader in India in hybrid rice and is active in other important South East Asian markets.

Aventis has equally ambitious plans for Eastern Europe. In Ukraine, for example, Aventis is involved in a project to 'modernise technology', for sugar beets and oil seed rape. It also plans to increase production of pesticides in the country to \$350 million over the next three years. According to Ukraine Deputy General Director Konstantin Sarnatsky the company plans to introduce two new chemicals to the Ukranian market every year. [72]

Other international plans

In Brazil Aventis intends to become the absolute market leader in 2000 in insecticides, with a 16% market share. "We consider the Brazilian market for insecticides to be the most important of all, with enormous growth potential," said Cesar Rojas, general director of the company in the country. [73].

In 1999, whilst still AgrEvo, the company expanded its Brazilian interests, with the purchase of three seed companies. These were Sementes Ribeiral Ltda and Sementes Fartura Ltda, as well as the corn research company Mitla Pesquisa Agricola Ltda. All are now 100% owned by Aventis, and were purchased for 'an undisclosed amount'. Aventis is pushing into the hybrid corn seed market (of which these companies control 8% in Brazil) worldwide.

In Poland, the company hopes to have seven different companies operating in the not-too-distant future. Aventis CropScience has a 23 percent share in the Polish market, with sales at \$50m (approx £31.5m) [74]

Aventis has tried to force the introduction of GM crops in the UK by underhand and dishonest means - even to the extent of breaking the law.

More Aventis?

Corporate criminals

GMO crimes

In 1999 AgrEvo conducted a secret trial of GM forage maize near Wellington in Shropshire. The trial was for the National Seed List, authorised under Part C of EU directive 90/220, (which covers marketing authorisation), meaning AgrEvo could legally get away without notifying the public of the trial. When local vicar Reverend Paul Cawthorne approached the company and government officials to raise his concerns about the trial he was given the run-around. AgrEvo lied and denied that the site existed, and it was only after months of badgering that Mr Dick Stayward of the MAFF Plant Variety Rights Office, Cambridge, finally confirmed that there was a GM crop site in the area. [75]

Government / Aventis collusion on farm-scale trials was found illegal in late 1999, when the government decided to allow Aventis (then AgrEvo) to change the GM crop (from spring oilseed rape to winter oilseed rape) on some of its farm-scale trial sites without submitting a new application. A letter from the company to the regulators at the DETR stated: "I have discussed the option of submitting a completely new application... but a more efficient route would appear to be a small variation to add the new sowing dates to... the current consent". Friends of the Earth challenged the government in the High Court. Eventually the government backed down, but the crops remained in the ground. Furthermore, AgrEvo asked to increase the number of sites for each crop from 25 to 50 sites a year [76].

Although Aventis is pushing forward with the commercialisation of its unwanted crops, the company is unwilling to accept responsibility for any damage to health and the environment that may result from the inadequately tested mutant plants. In February 2000 NFU Mutual, the UK's leading farm insurer, announced that it does not offer cover for GM crop contamination risks and recommends that farmers taking part in GM trials ensure the company takes full responsibility for the crop and any liability claims. Reuters news agency asked Aventis whether or not they took such responsibility. Their response was: "Aventis do not believe that this technology will cause harm to people, other crops or the environment and therefore this does not give rise to a question of liability." [77]

AgrEvo and its subsidiary Plant Genetic Systems were both among six companies "named and shamed" by the government's Advisory Committee on Releases to the Environment (ACRE) in 1998, for failing to comply with conditions of its consents for GMO tests. AgrEvo failed to implement measures to limit escape of pollen on its herbicide-resistant wheat site, while PGS failed to notify conservation officials or the public about its trial of herbicide-resistant rape [78].

On planting oilseed rape for a farm-scale trial at Lushill Farm near Swindon, AgrEvo failed to meet the requirement to publicise the trial in the local newspaper. Instead, the company advertised it in the Gloucestershire Echo, which did not cover an area within 15 miles of the farm. When local campaigners brought the omission to light, AgrEvo was forced to re-advertise in the Swindon Evening Advertiser [79].

Aventis' constituent companies have a history of causing severe pollution with scant regard for public health and the environment.

Rhone-Poulenc developed the herbicide bromoxynil (Buctril) for use on BXN cotton, genetically modified by Calgene Inc to be resistant to it. The two companies sell seed and chemical as a "package". This was the first commercialisation of a GM herbicide-resistant crop. According to Pesticide Action Network (PAN), bromoxynil causes developmental abnormalities in mammals, is highly toxic to fish, and is carcinogenic and can cause birth defects in humans. It is banned in Britain [80].

In April 1999, Brazil's National Biosecurity Technical Committee (CTNBio) ordered that AgrEvo's experimental herbicide-resistant transgenic rice be burned. The company had failed to take compulsory biosecurity measures [81].

Friedrich Magge, an organic cabbage farmer in Gehdren-Niedersachen in Germany, has taken the Robert-Koch Institute (the agency responsible for giving permission for field trials) to court, along with 3 other farmers. His sales have dropped since an AgrEvo trial began 2km from his farm [82].

Other eco-crimes (AgrEvo, Hoechst, Rhone-Poulenc)

6.45am, 27 January 1996: An explosion at an AgrEvo pesticide plant in Griesheim in Germany contaminated at least 50 hectares of a residential district with hazardous levels of herbicide. AgrEvo took until 8.30am to warn residents of the leak. People were told not to eat locally grown produce and to stay indoors with the windows shut. Schools were also closed [83].

In 1997 Rhone-Poulenc supplied the Swedish state-owned railroad company Banverket with "Rhoca-Gil" to fix a leak in a tunnel under construction at the time. Unfortunately the company failed to tell Banverket that Rhoca-Gil was a highly toxic chemical, acting as a nerve toxin. The company even lied about the concentrations of the toxic ingredients in the product. Because of leaching into ground water, fish and cows started dying in the area. Today, three years after the "accident", the local water is still undrinkable. [84]

AgrEvo was fined £4400 for polluting the River Riddy with iron oxides from the Hauxton site in 1997 [85]. One resident said, "To us locals this seems a strange set of priorities. We also feel that AgrEvo was given a ridiculously easy ride by the EA [Environment Agency], which seems terrified of tangling with powerful chemical companies." [86]

Between 1976 and 1994, an American Hoechst subsidiary admitted that it had kept secret 200 studies showing adverse health impacts from its chemicals [87]. Hoechst's pharmaceutical subsidiary, Hoechst Marion Roussel, markets the contraceptive Norplant, which consists of silicone rods implanted in the upper arm which then release hormones into the bloodstream. Norplant has severe side effects, including irregular vaginal bleeding (one woman had to wear a nappy), hair loss, nausea, depression and mood swings. In March 1996, 45,000 women gathered at an open meeting about the contraceptive and to consider suing Hoechst for compensation under the Consumer Protection Act [88].

In November 1997, a huge explosion occurred at a Hoechst chemical factory in Madagascar, spreading pollution in residential and agricultural areas and contaminating the water supply. The company had insufficient water on site to deal with a fire, and did not cooperate with local health and environmental authorities in supplying a list of substances involved in the accident [89]. Hoechst was listed by Greenpeace in 1996 as a major producer of the phthalate DEHP, a hormone disrupting chemical used in PVC manufacture [90].

AgrEvo was also sued by cattle ranchers in Australia after their cattle were contaminated by the company's cotton pesticide endosulfan. Furthermore, a doctor who specialises in cancer treatment is claiming that the chemical is carcinogenic and can cause birth defects in humans. AgrEvo's response was to pass the blame onto users of the company's product: "When our products are used as directed there is no problem to the consumer, the environment or the user. Any substance, if used inappropriately, can produce some effects." [91]

Also according to PAN, Rhone-Poulenc has applied to have its name removed from transcripts of US shipping records for pesticide exports. Many pesticides are exported to developing countries, where they are not safely used, stored or transported [92]. According to Greenpeace, Rhone-Poulenc was one of the main companies involved in Eurochlor, which lobbied "to try to prevent legislation being introduced to phase out hazardous substances, and to encourage voluntary agreements" [93].

In the UK, Rhone-Poulenc companies were fined £50,000 for release of acid mist from a suplphuric acid plant in Derbyshire in 1996 and £12,000 for release of 10kg of ammonia from a Gloucester site in 1994 [94]. In 1995, the Dagenham site was served a prohibition notice after a leak of 12 tonnes of hydrochloric acid, and an enforcement notice after release of 1.2 tonnes of odious chemicals [95].

Hoechst and Rhone-Poulenc have both been fined for their part in a vitamins cartel which controlled the world market and fixed prices for nine years.

...and another thing

Hoechst and Rhone-Poulenc have both been fined for their part in a vitamins cartel which controlled the world market and fixed prices for nine years. Both companies pleaded guilty to criminal charges that they and five other companies held secret annual meetings to divide world markets. The companies fined a total of \$242m, though the final figure is expected to be much higher as some of the original plaintiffs in the case are pursuing their own claims [96].

In total Aventis (including PGS) suffered at least 18 GM test sites damaged or destroyed in 1999.

Activism against Aventis

"We could have had commercial crops of spring oilseed rape in the ground this year. Now these crops may be delayed beyond 2001. The destruction of some farm-scale crop trials means we have lost a substantial, and maybe crucial, amount of valuable data. We don't yet know how bad the situation is but delays are inevitable." - Aventis spokesman Des D'Souza, in 1999 [97].

Aventis' rush to get its LibertyLink crops approved in Europe have led to an extensive testing programme in Britain - with crops being trialled both by Aventis and by Plant Genetics Systems, which Aventis owns.

1998: In spring 1998 activists decontaminated oilseed rape trials belonging to AgrEvo and PGS in Cupar, Fife, and Aberdeenshire respectively. That was just the beginning. In May AgrEvo's own East Winch site, at its corporate headquarters near King's Lynn, Norfolk was hit, with GM oilseed rape destroyed. PGS was next in June, when an oilseed rape trial near Cirencester was decontaminated. Oilseed rape was also removed over the summer from sites in Nottinghamshire, North Yorkshire, Dundee and Lincolnshire, and sugar beet from Exening Estate, Suffolk in July. [98]

1999: Activist decontaminations really took off in 1999. At least eight PGS sites were partially or totally destroyed during the year until August, in Cambridgeshire, Glouscestershire, Norfolk, Yorkshire, Nottinghamshire and near Edinburgh. All were oilseed rape. AgrEvo itself had sites targeted (excluding farm-scale trials) in Norfolk, Aberdeenshire, Yorkshire, Lincolnshire and Hertfordshire - a total of seven sites, including oilseed rape and sugar beet. At least two of these were National Seed List trials, hampering the company's efforts to commercialise GM.

Farm-scale trials: The biggest success for activists was the neartotal destruction of AgrEvo's farm-scale trial of oilseed rape at Model Farm, Watlington, Oxfordshire, by a mass rally of around 600 people on 18 July 1999. This followed the week-long occupation of an empty farm adjacent to the test site, which was squatted, renamed 'The Alternative Model Farm' and planted with organic and permaculture plants. A farm-scale trial of GM maize at Lyng, Norfolk, was about a quarter destroyed by Greenpeace a week later on 26 July. Another farm-scale trial at Lushill Farm near Swindon was earlier ploughed up by the farmer on the instructions of his estate owners.

In total Aventis (including PGS) suffered at least 18 GM test sites damaged or destroyed in 1999. Activists focused particularly on National Seed List trials, and managed to decontaminate - partially or totally - nine NSL trials belonging to AgrEvo and PGS during the year.

Union Activism

Rhone-Poulenc's last ever shareholders meeting was delayed as unions, protesting against job cuts linked to the Aventis merger, blocked the entrance to the conference hall in Paris. Rhone-Poulenc Chairman Jean-Rene Fourtou told the shareholders that had managed to get into the hall that they would have to wait until the situation had been resolved.

Several unions presented a statement to shareholders claiming that 11,000 job cuts were planned as part of the merger and that two plants in the Paris region were under threat. Unions said they wanted to meet Fourtou personally to award him a "diploma of shame". [99]

French unions are also battling with Aventis over plans to implement a 35 hour working week. Only one union is in favour of the plans and even this one doubts the intentions of the employers association (UIC). With scant regard for its workers, Aventis has broken off talks, preferring a fine to conforming to the law [100].

"the only way to ensure their [GM test sites] security would be a 24-hour guard. For most companies that's not practicable, especially if you have a number of sites"

Attitude to activists

SLAPP injunctions: 'Strategic lawsuits against public participation'

In April 1999, AgrEvo successfully applied for an injunction against six Genetix Snowball activists, restraining them from trespassing on its land, uprooting plants at release sites, and procuring / encouraging / instructing / inciting / inducing or conspiring with others to do the same. This was an attempt to intimidate activists out of challenging the company - an approach which has been called SLAPP - a strategic lawsuit against public participation.

Worse, the activists were "sued on their own behalf and on behalf of all members of Genetix Snowball", meaning that if someone ELSE broke the injunction and was deemed to be a "member", then the named defendants would be prosecuted for it, and face up to two years in prison. AgrEvo defined "member" as anyone on any mailing list, including e-mail (and the court accepted this definition). The court ordered Genetix Snowball to give AgrEvo its mailing lists. One of the defendants was the group's press officer - making this a clear case of trying to silence the critics [101].

Aventis is now lobbying (along with other biotech companies) to have the location of test sites kept secret, though the UK government last year rejected the idea. Says Aventis' Des D'Souza: "The tests have been conducted with complete openness up to now, but we are discussing with the Government why the public needs to know the exact location of trial sites" [102]. He explains, "the only way to ensure their security would be a 24-hour guard. For most companies that's not practicable, especially if you have a number of sites", although he did hint that Aventis' security had been increased [103].

Schering (various company listings) The Brow Burgess Hill West Sussex RH15 9NE 01444 232323 / 247761

There is also a non-trading company called Schering Limited registered at Aventis' Hauxton site [110]

http://www.schering.de

Allianz companies based in the UK:

AGF Insurance Limited London Underwriting Centre (L.U.C.) Suite 2 2nd Floor - 3 Minster Court London EC3R 7DD Phone: 0171 617 4500

Allianz Cornhill International 27 Leadenhall Street London EC3A 1AA Phone: 0171 488 1882

UK contact: Kuwait Petroleum International Ltd. 80 New Bond St, London, W1Y 9DA Phone: 0171 491 4000

UK contact: Wellington Underwriting Holdings Ltd. 2 Minster Court, Mincing Lane London, EC3R 7FB Telephone: 0171 - 929 2811

UK contact: Templeton Investment Management Ltd St Michaels Place George Yard Moorgate / Fenchurch London EC3V 9DH Phone: 0171 208 7000

Whose Aventis?

Company Ownership

Aventis CropSciences is the agrochemical division of Aventis SA, which owns 76% of the company. The other 24% is owned by Schering AG, a German pharmaceutical company.

[104]

Schering AG:

Schering currently owns 24% of Aventis CropScience. No relation to the US-based Schering-Plough, Schering AG is a Berlin-based pharmaceuticals corporation, with annual sales of £2.1 billion. Many of the company's products involve fertility treatment and the care of pregnant women - its portfolio includes X-ray, ultrasound, oral contraceptives, homone replacement medication and drugs to combat disabling diseases [106]. Its best-selling drugs in 1998 include Betaferon, a treatment for multiple sclerosis, and its magnetic resonance imaging preparation Magnevist.

In 1991, in Peru, Schering promoted its drug Dopergin (lysuride), which inhibits breast milk production, with an advertisement showing five slim women. According to Health Action International, the implicit message was that to have a slim figure women should stop breast-feeding, bearing little regard to reality or to the health benefits that come from breast-feeding [107].

In 1992 Schering Agrochemicals appeared on Greenpeace's Humber & Wash dirty companies list. It was legally allowed to discharge 87 million gallons of chemical waste every year but still broke the law 22 times in 1991 by exceeding its pollution limits. Data also showed that the company discharged 24 chemicals without a permit, including 16 listed as dangerous by the Paris Commission [108].

Over half of Schering's shareholders are based in Germany, but the largest foreign-held proportion are actually in the UK. The largest single Schering investor (with 10% of equity) is the Allianz Group (insurance), also based in Germany but with a significant presence in the UK [109].

Aventis shareholders

The list below is of the 4 largest shareholders of Aventis SA. For more on Aventis shareholders and GM finance generally, see the Corporate Watch briefing 'Cash crops and bull markets? - the finance behind GM crops' [105]

GALLUS (PETROCHEMICAL RESOURCES HOLDING BV PAYS BA) 13.88%

Holding company owned by KPC International NV, Netherlands Antilles (Kuwait Petroleum, the state-owned oil company).

WELLINGTON USA 5% Holding company, USA.

SALARIES DE LA STE RHONE POULENC 3.8% Top management of Rhone Poulenc

FRANKLIN RESOURCES INC USA 2.89% Investment company, USA. British subsidiaries: Templeton Global Investors Ltd, Templeton Investment Management Ltd. IACR Rothamsted Experimental Station Harpenden Hertfordshire AL5 2HQ Tel 01582 712610 http://www.iacr.bbsrc.ac.uk/iacr/tiacrhome.html

Agrinomics LLC 16160 Upper Boones Ferry Road Portland, Oregon 97224-7744 USA Tel (001) 503.670.7702 Fax (001) 503.670.7703 http://www.agrinomics.com/

DLO Bornsesteeg 53 NL-6708 PD Wageningen, Netherlands / P.O. Box 59 NL-6700 AB Wageningen, Netherlands Tel: (0031) 317 47 40 00 Fax: (0031) 317 42 40 60 E-mail: infodesk@co.dlo.nl http://www.dlo.nl/

Gene Logic 708 Quince Orchard Road Gaithersburg, MD 20878, USA. Phone: (001) 301 987 1700 Fax: (001) 301 987 1701 Contact Person: Mark Gessler Email: mgessler@genelogic.com www.genelogic.com

Crop Enhancement Systems Ltd. Eco-tech Centre Castle Acre Road Swaffham, Norfolk PE37 7HT

Contact Dr. Murree Groom Tel: 01760 726 120 Fax: 01760 726 121 Email: cropenhancement-ecos@groom.fsbusiness.co.uk http://www.envirologix.com/contact.html

Lonza UK Ltd Imperial House, Lypiatt Road Cheltenham, Glos. GL50 2QJ Phone 01242 51 32 11 Fax 01242 22 22 94 E-mail: contact.uk@lonza.com www.lonza.com/s

Who else and Aventis?

Links with other companies

GM partnerships:

Aventis CropScience and the **Institute of Arable Crops Research**, **Rothamsted** have established an industrial- academic laboratory in plant science called the 'Labo Mixte'. It aims to focus on understanding fundamental processes involved in the uptake, transport and compartmentalisation of chemicals in plants. The laboratory is based at Ongar. [111].

Agrinomics LLC, based in the US, is 50/50 joint venture between Aventis CropScience and Agritope. The company conducts a research, development and commercialization program in the field of plantfunctional genomics [112]. Agrinomics has a multi-year research agreement with Seeds company Vilmorin Clause et Cie and Israel's Hazera. The partners will invest \$7.5m over five years in identifying plant genes resistant to viruses and parasites [113]

Aventis and **Stichting Dienst Landbouwkundig Onderzoek** (DLO) have a 'Research Alliance Framework' in plant functional genomics. CPRO (Center for Plant Breeding and Reproductive Research, Wageningen, The Netherlands) and PGS (Plant Genetic Systems) represent DLO and Aventis respectively. The alliance focuses on the functional analysis of genes in several important plant species. The Research director of CPRO, Dr Arjen J van Tunen explained "This research will enable the development of high added value traits such as pest- and disease resistance, salt and drought tolerance, food quality, nutritional value and consumer health promotion." [114]

Aventis is a partner of **Gene Logic**, with whom it works in a strategic alliance to discover genes for developing crop protection products [115].

EnviroLogix Inc. has a licensing agreement with Aventis CropSciences to develop, manufacture and distribute tests for the detection of certain traits in GM seeds, plants and crops. The agreement allows EnviroLogix access to Aventis' BAR, PAT and Cry9C proteins and/or antibodies. The BAR and PAT proteins are produced in herbicide resistant LibertyLink GM plants and Cry9C is a protein produced in plants expressing the insect resistance StarLink trait. EnviroLogix is a supplier of immunoassay-based test kits for detecting transgenic traits for the food, feed and seed industries. [116]

EnviroLogix products are distributed in countries outside the United States by independent dealers. In the UK this company is **Crop Enhancement Systems Ltd.**

Other partnerships

Aventis CropScience has a 25% stake in Novance, a company specialising in the research and development and marketing of vegetable oils and proteins for use in industry. Aventis said it had acquired the stake because it wanted to be a "major player" in "vegetable production applications in both the food and non-food sectors" [117]. Novance is based in Compiegne, 70 kms north of Paris, France.

Aventis CropScience and Lonza have a partnership which is to include a new herbicide. The product will be manufactured at Lonza's expanded facility in Visp (Switzerland). The partners are currently in negotiations regarding a further product [118]. Lonza is to continue to make the sulfonylurea active ingredients for herbicides for Aventis CropScience that it made for AgrEvo. Lonza is to use a new phosgenation plant on its site at Viege to make a new sulfonylurea herbicide [119]

BioFocus plc, Sittingbourne Research Centre Sittingbourne Kent Chief Executive UK Dr. David Stone. Tel 01795-412300 Fax 01795-471123 email: info@biofocus.co.uk www.biofocus.co.uk

Molecular Simulations Ltd. 240/250 The Quorum Barnwell Road Cambridge, CB5 8RE Tel: 01223 413300 http://www.msi.com/

Network Design Consultants 11a Covent Garden Cambridge Tel: 01223 355611

121 Consulting
Holly Grange
Holly Lane
Balsall Common
Coventry
CV7 7EB
0121 717 2121
http://www.121consulting.co.uk/

GPT Communications Systems Ltd Turnells Mill Lane Wellingborough NN8 2RB Tel: 01933 225000

EuropaBio Avenue de l'Armée 6 1040 Brussels Belgium Tel: 0032 2 735 0313 http://www.europa-bio.be

Biotechnology Industry Organization (BIO) 1625 K Street, NW Suite 1100 Washington, DC 20006 202-857-0244

British Agrochemicals Association 4 Lincoln Court Lincoln Road Peterborough PE1 2RP. Tel: 01733 349225 http://www.baa.org.uk

Chemical Industries Association Kings Buildings Smith Square London SW1P 3JJ. Tel. 0171 834 3399. http://www.cia.org.uk

Other contractors:

BioFocus plc designs and supplies compounds for Aventis Cropscience's R&D programmes. The company has taken over the former AgrEvo site at Chesterford Park, Cambridge. BioFocus has its headquarters and laboratories in Sittingbourne, Kent. [120]

Molecular Simulations Inc (MSI) a "long-term partner", supplied molecular modelling software for AgrEvo's agrochemical research at Frankfurt and Chesterford Park. MSI is subsidiary of Pharmacopeia Inc, and has lots of agrochemical work. European headquarters are at Cambridge. [121]. We are not certain that this contract has continued with Aventis CropScience.

Network Design Consultants, based in Cambridge , had a major contract for marketing of AgrEvo's crop production products. Ann O'Brien is contact at Network. [122] We are not certain that this contract has continued with Aventis CropScience.

121 Consulting (specialist IT and Business Consultancy) has worked for AgrEvo [123].

GPT Communication Systems Ltd (based in Luton, employing 1400) provided communication systems in four of AgrEvo's UK offices [124]. We are not certain that this contract has continued with Aventis CropScience.

Lobbying

Aventis is a member of various lobbying organisations, including EuropaBio, Biotechnology Industry Organization (BIO), the British Agrochemicals Association and the Chemical Industries Association. These are all trade associations whose principal aim is to help their members maximise their profits. They do this by lobbying governments and international policy making bodies such as the World Trade Organisation (WTO), doing public relations for their industry and by supplying business information.

CropGen information line 0845 602 1793 (local rate) during normal office hours. http://www.cropgen.org/

Countrywide Porter Novelli Bowater House East 68 Knightsbridge London SW1X 7LH Tel: 0207584 0122 http://www.countrywidepn.co.uk/

CPN also has offices in Glasgow, Edinburgh, Leeds and Banbury (Oxon)

Shandwick International Aldermary House 15 Queen Street London EC4N 1TX Tel: 0171-950 2000

Hammond Suddards 7 Devonshire Square Cutlers Gardens London EC2M 4YH. Tel: 0171 655 1000

Public relations

Along with Dow AgroSciences, Monsanto and Novartis Seeds, Aventis CropScience sponsors CropGen, an industry initiative which "will make the case for crop biotechnology and help achieve a more balanced debate about genetically modified (GM) crops in the UK." Its PR says: "CropGen comprises an independent panel of scientists and specialists on agriculture, plantscience, microbiology, ecology and consumer affairs. Its aim is to provide information for the public, interest groups and the media." [125]

A CropGen release states that it "... will make the case for crop biotechnology, not the biotechnology industry." CropGen also makes the rather unlikely claim that its panel of scientists will be independent, pointing out that the companies have signed an undertaking that they cannot veto any of the scientific positions taken by the panel.

Three of CropGen's 'independent' panel members, Dr Nigel Halford, Dr Peter Lutman and Dr Guy Poppy, work for the Institute of Arable Crops Research (IACR)[126]. IACR are part of the research consortium which has contracts worth £3.3 million with the Government to conduct ecological monitoring of the farm-scale trials [127]. It also has a research partnership with none other than Aventis CropScience as well as partnerships with AstraZeneca, Novartis and DuPont [128]. In total CropGen is investing £500,000 in this year's campaign [129].

All communications for CropGen are being handled by Countrywide Porter Novelli (CPN). CPN's work includes manning phone lines for members of the public who have questions, overseeing the launch the CropGen web site (www.cropgen.org), and distributing literature [129].

AgrEvo Deutschland has used Shandwick for public relations consultancy - a firm whose other clients include Shell Oils and the Meat and Livestock Commission [130].

Lawyers

Hammond Suddards was being used by AgrEvo to obtain injunctions against protesters.

GM-related work

There is no preliminary GMO research carried out in the UK - lab work (eg gene splicing) takes place in Frankfurt, Germany, the largest Aventis CropScience site [132].

Nor is there any GM-related production, as GM varieties are not yet commercialised. Seeds for field trials are imported from outside Europe - mainly Canada for oilseed rape [133]. We assume they are stored in barns on Aventis' experimental farms.

The only GMO handling carried out in the UK are the field trials. These take place at Aventis' own experimental farms in Chishill and Shelford (see below) and on various other farms and test stations around the country.

Aventis CropScience / Agriculture Limited Fyfield Road Ongar Essex CM5 oHW Tel: 01277 301 301

Managing Director (UK), John Drinkwater

Where Aventis?

Key Aventis sites in the UK

Since the merger there have been some closures of AgrEvo and Rhone-Poulenc sites. As Aventis is such a new company and the result of a merger, even people within the company itself are not clear about the changes of locations that might arise once things have settled down.

There is also some confusion about the difference between Aventis CropScience Ltd and Aventis CropScience UK Ltd. The former is registered at Companies House (the government's official company registry) as a non-trading company based at Ongar. However, according to 192enquiries.com, the company is based at Manningtree. When phoning any of the sites below you are likely to be told you are talking to Aventis CropScience.

Ongar - UK commercial headquarters, research & development activities, environmental science business and one of the four global supply centres.

After Ongar, the 3 other main sites in the UK are:

Hauxton - Active ingredient manufacture, formulation & packaging and the majority of the finance, legal, information services and human resources activities.

Norwich - Active ingredient manufacture, formulation & packaging.

Widnes - Active ingredient manufacture. [131]

Company locations

The list below only contains addresses of agriculture-related sites.

On top of this, its products are tested at farms owned by individual farmers and companies.

Details of all known sites are given below. Note that you may be able to arrange a guided tour of the sites if you have a good reason - for example, you're a student, a researcher or perhaps a tourist. Generally you should speak to the communications department about this.

Ongar

Ongar is Aventis' UK headquarters and one of four global centres for research and development [132] with a particular focus on herbicide research [134]. Over 300 people are employed there. It is a large site with one large, fairly new, 2/3 storey red-brick building housing offices surrounded by smaller buildings, many pre-fabricated. There are farm buildings at the rear of the site within a couple of hundred metres of a public footpath. To one side there are field trial plots (probably not GM) next to a car park, which has a CCTV camera. There is only one entrance to the site, which is where the reception / security guard are located.

Cambridge Rd Hauxton Cambridge Cambridgeshire CB2 5HU Tel: 01223 870 312 Fax: 01223 872 142

Sweet Briar Rd Norwich Norfolk NR6 5AP Tel: 01603 242424 Manager David Jones

Whiffen Works Gorsey Lane Widnes Cheshire WA8 ORN Tel: 0151 424 5681 Fax: 0151 420 4355

Aldhams Farm Dead Lane Lawford Manningtree Essex CO11 2NF Tel: 01206 281777

Chishill Orchard Farm Heydon Road Great Chishill Royston Herts SG8 8SS

Cliffe Rd North Newbald York North Yorkshire YO43 4TY Tel: 01430 827747

Hauxton

Massive chemical plant at back, behind 3-4 storey office block fronting onto road.

Chemical production. Labs "for certain things" too (mainly process testing we assume).

Norwich

Production facility for agrochemicals.

Widnes

2-storey reception building at front, with chemical plant at rear. 2 manufacturing plants here, one for herbicide, one for fungicide. Fungicide is all computer-controlled; very little manual work. One or two separations, odd pH test, send samples to lab, analytical sampling etc, but this isn't very much. Herbicide plant is not totally computer-controlled. They just make active ingredient here, which is then sent to Hauxton site and another in Germany for blending into a final product [135].

Manningtree

Experimental farm handling 'experimental' seed. Laboratory and test plots. This may be a site where GM seed is handled and possibly stored. Manningtree is near both Harwich and Felixsotwe ports.

Chishill

No obvious offices or farmhouse, but barn for storage. Small farm with a range of trials. Mainly herbicides, fungicides and insecticides and some GM crops.

Shelford

Address not known, though it is in one of two villages, Great Shelford or Little Shelford a couple of miles east of Hauxton. A field station where trials are conducted as at Chishill, though there are probably no GM crops grown here as there is no current deliberate release consent for the area.

Newbald

Small purpose-built laboratory and office.

Farm-scale trial locations for Spring 2000

Crop	Grower	Address	Telephone	Grid Reference	OS map
Forage Maize	IACR	Rothamsted Harpenden Herts AL5 2JQ		TL 118 130	F
Forage Maize	E.S Cole,	Park Rd, Winfarthing, Diss, Norfolk	01379 642269 / 640722	TM 100 879	144
Forage Maize	Advanta Seeds	Castle Lane Boothby Graffoe Lincoln Lincs, LN5 0LF		SK 971 586	121
Forage Maize	Adam Duguid and Son	Home Farm Spital in the Street, Glentham Lincs, LN8 2AX	,	SK 979 907	
Forage Maize	Richard Caley	Grange Farm East Newton Humberside	01964 527 303	TA 263 382	107
Oil seed rape	F.I Watkins & Sons	Stone House Farm Kempley, Dymock Gloucestershire GL18 2AT	01531 660 224	S0 675 313	149
Oil seed rape	R.C Beldam	East Lodge Farm, Cheltenham Rd Stanton Broadway Worcestershire WR12 7NH	01386 584478	SP 069 360	150
Oil seed rape	William & Liz Hodges	Aston Road Chipping Campden, Gloucestershire		SP 154 403	151
Oil seed rape		Tithe Farm, Alderminster, Warwickshire		SP 241 486	151
Oil seed rape		Compton Farm Upper Tysoe, Warwickshire DETAILS NOT CONFIRMED		SP 327 437	151
Oil seed rape	Bob Fidderman	Wood Farm Dodds Lane Piccots End Hemel Hempstead Herts HP2 6JJ		TL 068 115	

Crop	Grower	Address	Telephone	Grid Reference	OS map
Oil seed rape	Guy Smith	St Osyth / Seawick, Wigboro Wick, Essex, DETAILS NOT CONFIRMED.	01255 820564	TM 119 138	168
Oil seed rape (also growing Sugar Beet)	Ivan Baker,	Church Farm, Horningtoft, Norfolk		TF 932 243	133 / 142
Oil seed rape	Advanta Seeds	Castle Lane Boothby Graffoe Lincoln Lincs, LN5 0LF		SK 959 592	121
Oil seed rape		North Kelsey, Lincolnshire DETAILS NOT CONFIRMED		TA 012 006	112
Oil seed rape	Richard Caley	Grange Farm East Newton Humberside	01964 527 303	TA 265 382	
Oil seed rape	John Richardson	Hutton Fields Hutton Magna North Yorks DL11 7HG		NZ 137 115	92
Oil Seed Rape	Shirley Harrison	New Craig farm Old Meldrum Aberdeen		NJ 745 298	

Home Farm, Spital in the Street, Glentham, Lincolnshire, LN8 2AX Grid ref: SK 97 90

Wood Farm, Dodds Lane, Piccots End, Hemel Hempstead, Hertfordshire, HP2 6JJ Grid ref: TL 06 11

The Old Rectory, Croxby, Market Rasen, Lincolnshire, LN7 6BW Grid ref: TF 19 96

Farm-scale trials planted Autumn 1999

Opposite are the sites of winter oilseed rape that were planted last autumn. Four sites were originally planned but one farmer pulled out soon after the locations were announced. The trial at Hemel Hempstead has failed to grow properly, raising serious doubts about Aventis' claims that herbicide tolerant crops produce higher yields than their conventional counterparts.

Estate office, Svalof Weibull Ltd, Abbotts Ripton, Huntingdon, Cambs, PE17 2PQ TL 25 78.

New Farm, Whittlesford, Cambridge, CB2 4PF TL 44 54.

NIAB, Huntingdon Road, Cambridge, Cambridgeshire, CB3 OLE TL 43 62.

Laverton Meadows, Stanton, nr Broadway, Glocs SP 04 36.

ADAS Bridgets, Martyr Worthy, Winchester, Hants, SO12 1AR SU 52 34 (2 releases down for this).

50 52 34 (2 releases down for this).

Summerhouse Farm, Melbourn, Royston, Herts, SG8 6DL

TL 38 43; TL 39 43.

Wood Farm, Dodds Lane, Piccots End, Hemel Hempsted, Herts, HP2 6JJ TL 06 11 (2 releases, 1 farm-scale).

Chishill Orchard Farm, Heydon Road, Great Chishill, Royston, Herts, HP2 6JJ TL 43 39.

Tilekiln Farm, Albury, Bishops Stortford, Herts, SG11 $_{
m 2HP}$ TL 42 23.

Dalby Farms Ltd, Brigsley, Lincs, PE23 4PN TA 25 02.

Plant Breeding Station, Boothby Graffoe, Lincoln, LN5 OLF SK 96 58.

Glebe farm, Bracebridge Heath, Lincoln, LN2 2HZ TF o8 69.

Raynham Farms, East Raynam, Fakenham, Norfolk TF 86 25.

University of Leeds, Headley Hall, Tadcaster, N. Yorks, LS24 9NT SE 44 41.

Hutton Fields, Hutton Magna, North Yorks, DL11 7HG NZ 13 10.

Home Farm, Screveton, nr Bingham, Notts, NG13 8JN SK 74 47.

ADAS Gleadthorpe, Meden Vale, Mansfield, Notts, NG20 9PF SK 58 70.

Hall Farm, Stoke Ash, nr Eye, Suffolk, IP23 7ET - TM

SAC, Agronomy Department, Ferguson Building, Craibstone Estate, Bucksburn, Aberdeenshire NJ 896 114 (97/R15/18).

SAC, Tillycorthie Farm, Udny, Aberdeenshire AB41

NJ 913 242; 910 236; 91 22; 90 22; 90 23 (98/R19/18).

Boghall Farm, Biggar Road, Hillend, Edinburgh - NT251 651 (98/R15/24); 247 653; 24 65 (98/R19/18).

The Biotechnology Safety Unit 3/G9 Ashdown House 123 Victoria Street London SW1E 6DE E-mail: biotech@detr.gsi.gov.uk Tel 0171 944 3409.

Smaller test sites and NSL trials English / Welsh sites planted Autumn 1999

Opposite are English test sites for winter oilseed rape (the only winter crop being trialled by Aventis in the UK) for Aventis and its subsidiary Plant Genetic Systems (PGS). They are alphabetical by county (NB North Yorks is under 'N', not 'Y'). There are no test sites in Wales. The list is taken from the AgrEvo / PGS injunction against Genetix Snowball, winter sites to avoid.

Scottish sites

Genetix Snowball's injunction does not cover Scotland; therefore the sites below are taken from DETR's list of GMO release site locations (update 16/8/99). We have included all oilseed rape locations, which fall under three consent numbers. It is not totally clear which consents are just for spring and which for winter oilseed rape, although it seems that 97R15/18 (PGS) is spring, 98/R15/24 (PGS) is winter, and 98/R19/18 (AgrEvo) is both. So some of the sites opposite will not have trials over the winter. Furthermore, the grid references given may relate to the spring crop, so do not rely on them to give the exact location of the trial, which may have moved to a different field on the same farm.

For a full list of GM trial locations see http://www.environment.detr.gov.uk/acre/trials.htm (currently being reviewed at the time of going to press) or contact the biotech unit of the Department of the Environment, Transport and the Regions (DETR).

Who Aventis?

Key Personnel

Senior staff working in GM-related areas

All of the people mentioned below are based at Ongar, except for those that have a question mark next to their name. In these cases we are not sure where they are based. We have checked that those who used to work for AgrEvo still work for Aventis by ringing the company.

Aventis has a policy of not giving out direct line phone numbers for any of its staff. In ANY inquiry about GM, whoever you ask for, you'll probably end up with one of the PR guys, Clive Rainbird or Des D'Souza. So the list below is not definitively the people in Aventis who we think are most important in relation to GM crops; it's those who are important to some degree and whose names we managed to get!

John Drinkwater UK Managing Director [136] Is also chairman of the British Agrochemical Association [137]

Dr Paul Rylott, Commercial Seed Manager [138]. He signs agreements with farmers on test crops. He once argued that "We are following Ministry of Agriculture guidelines and have all the correct barriers, so there is no danger of cross-contamination." The Health & Safety Executive announced just the day before that AgrEvo subsidiary PGS had an "inadequate pollen barrier" at one of its sites [139].

?John Hammond, Head of seed crop improvement. [136]

Judith K Jordan, not sure of her exact role, but she has signed agreements with farmers re. test crops. She also wrote in defence of AgrEvo and GM in the Guardian, 18/8/99.

John C Hammond, Head of Development [140], responsible for safety of GMO releases [141]

Mike Reid, Field trials group manager. He produced the most substantial affidavit against Genetix Snowball protesters [142]. He has dismissed studies by Ohio University scientists which showed risk of 'superweed' growth as "rubbish", and claims they ignore basic facts of biology and farming practice. He added: "We are required by the Government to consider any risks, and we are also subject to market forces. It's not in our interests to create weed problems for farmers". [143] He is also happy to arrange visits to field stations for student groups. Direct line 01277 301274. Mobile 07971 11 99 20

?Dr Bill Lankford, described as Development Manager. We do not know his exact role [144].

Companies House contact is Frank Woolley Tel: 01245 248254

Directors

Aventis Agriculture Limited

Frank Woolley John Edward Drinkwater Ian Daniel McManus Peter Sargent

Aventis CropScience Limited

Frank Woolley Martyn Hargreaves Peter Sargent - Finance Director

Aventis CropScience UK Limited

Martyn Hargreaves John Edward Drinkwater Ian McManus Peter Sargent Hans-Wilhelm Von Olfers

[145]

E-mail addresses take standard form: firstname.surname@aventis.com

PR slimers

Clive Rainbird, biotechnology communications manager [146] - he deals with press and public enquiries; he also does talks e.g. for sixth forms.

Desmond D'Souza, biotechnology communication manager [97]. Our impression is that he is more experienced than Clive, but less competent, and seems to have a knack for winding people up. He's the person you're most likely to speak to if you have a GMO enquiry.

Footnotes

- 1. DETR, www.environment.detr.gov.uk/fse/index.htm
- 2. FoE, press release, 9/8/99
- 3. see www.gn.apc.org/pmhp/gs/aug3rd/osr.htm for more on Aventis' oilseed rape
- Aventis' oilseed rape
 4. FoE briefing "Bees, Honey and genetically modified crops 1999, citing Williamson, I. 1996 "Aspects of bee diversity and
 crop pollination in the European Union" in A Matheson, SL
 Buchmann, C O'Toole, P Westrich and I Williams (eds) The
 Conservation of Bees Academic Press.
 5. FoE briefing "Bees, Honey and genetically modified crops 1999 citing Wilkinson, JE, D Twell and K Lindsey. 1997
 "Activities of CaMV 35S and nos promoters in pollen:
 implications for field release of transgenic plants" Journal of
 Experimental Botany Vol 48 (307) pp 265-275.
 6. Biotech Activists, 04/02/00: In search of horizontal gene
 transfer http://www.sustain.org/biotech/

- 7. ENDS Report #285, Oct '98, p.34
 8. Consent no. 98/R19/18
 9. Has approval for marketing in Europe, so doesn't require consent, but doesn't have plant variety listing in UK so can't be sold to farmers
- 10. Financial Times; 18-Mar-2000. Meacher plea for GM trials.

 11. GeneWatch, 'Farm scale trials: answering the safety questions about GM crops?', July 1999, citing Parliamentary Question (PQ) #85272, 8/6/99.
- 12. http://www2.aventis.com/cropsc/about/facts.htm 13. Calculation based on estimates of size of trials. Aventis have by far the greatest number of deliberate release sites in the UK.
- 14. FoE press release Wednesday 9 February 2000 GM Crops: Government to give go ahead to commercial licensing
- 15. The Mirror 01/03/2000 16. FoE press release 29 March 2000. 17. ENDS Report #283, Aug '98, p.20 18. Reuters, Bogota, March 1 2000.

- http://www.cropscience.aventis.com/crop/presentation/crops/index/0,1524,35-EN,00.html
 20. Speech by Jürgen Dormann Aventis Chief Executive Officer,
- Frankfurt 26/10/99.
- http://www2.aventis.com/introduce/19991026_jdor.htm
- http://www.aventis.com/com/introducing/agro_2_1/0,1226,100 1-EN,00.html
- 22. Speech: Protecting global biodiversity through the Life Counts project. Jürgen Dormann.
- http://www2.aventis.com/introduce/20000225_jdor.htm 23. http://www.wcmc.org.uk/reception/whoare.htm 24. http://www.wbcsd.ch/memlist.htm
- 24. http://www.wbcsd.ch/memist.ntm 25. http://www.corpwatch.org/trac/greenwash/wbcsd.html 26. CropGen mission statement. www.cropgen.org 27. http://www.aventis.co.uk/farm_study/introduction.asp 28. http://www.aventis.co.uk/farm_study/farm.asp 29. Le Monde 08-02-00.

- 30. presentation at Ceres Forum of Food and Products from Plant Biotechnology II, 8/6/98, Berlin, www.agrevo.com/visions/vision12.htm#bio. Viewed September
- 1999. 31. Guardian 4/8/99.
- 32. Independent, 19/3/99; PQ no. 70555.
- 32. http://www2.aventis.com/cropsc/position/position.htm
 33. http://www2.aventis.com/cropsc/position/position.htm
 34. Pat Mooney, The Parts of Life, Agriculture Biodiversity,
 Indigenous Knowledge, and the Role of the Third System,
 Development Dialogue 1996:1-2, p 15, November 1997.
 35. http://www.christian-aid.org.uk/f_reports.htm. or contact

- 35. http://www.christian-aid.org.uk/1_reports.html. or contact Christian Aid on 0171 620 4444. 36. http://www2.aventis.com/pharma/about/keyfigures.htm 37. http://www2.aventis.com/cropsc/about/facts.htm 38. Aventis press release 3 Feb 2000. 39. Financial Times; 27-Mar-2000. Companies & Finance: International: Aventis suffers merger malaise. 40. Chemical Business Newsbase, La Tribuen Desfosses
- 41. http://www2.aventis.com/introduce/rddia_2.htm
- 42. Chemistry In Britain, 5/7/99, 'Aventis Terms Altered'

- 42. Chemisty in Britain, 3///99, Avenus Terms Alered 43. PR Newswire 20/12/1999. 44. Investext Broker Reports 16/12/1999. 45. Chemie Hebdo, 26/7/99, p.29. 46. Eastern Daily Press, 2/12/98, p.23. 47. Financial News 22/02/99, 'Trust, not range, is issue for clients'.

- 48. Financial Times, 13/7/99, p.32.
 49. http://www2.aventis.com/introduce/orga01.htm
 50. http://www2.aventis.com/introduce/orga02.htm
 51. Biotech Patent News, vol.10, no.10.
 52. http://www2.aventis.com/cropsc/about/companies.htm
 53. Phone call to the company.
- 53. None can to the company. 54. www.agrevo.com/is%5FAgrEvo/biotech/ps/ps_sl_bh1.htm for SeedLink; www.agrevo.com/is%5FAgrEvo/biotech/ps/ps_ll_id.htm for
- LibertyLink viewed Sep'99
 55. Judith Jordan, Guardian 18/8/99
 56. Topsy Jewell, 'Glufosinate and Genetic Engineering', Nov '96.
- 50. Topsy Jewen, Guidsmate and Genetic Engineering, Nov 90. www.greenpeace.org/~geneng/reports/gmo/gmo008.htm 57. Pesticides Trust, Glufosinate Ammonium fact sheet, 1998, on www.gn.apc.org/pesticidestrust/aifacts/glufosin.htm 58. AgrEvo 1998 Annual Report. 59. Aventis press release 03-02-00.

- 60. http://www2.aventis.com/cropsc/crops/oilseed.htm
 61. http://www2.aventis.com/cropsc/crops/soybean.htm
 62. http://www2.aventis.com/cropsc/crops/corn.htm
 63. Source: Company data, Credit Suisse First Boston estimates.
 Investext Broker Reports 16/12/1999.
- 64. Chemical Business Newsbase, Chemie Hebdo 07/02/2000 P11.
- 65. converted using FT.com's currency converter 02 April 2000. \$1= 65. converted using FT.com's currency converter 02 April 2000. £0.62798 / euro 1.04679. 66. AgrEvo press release, 20/5/99. 67. AgrEvo press release 22/12/98. 68. Business World (Philippines) 02/02/2000 P6. 69. Bangkok Post 12/01/2000. 70. AgrEvo press release 24/2/99. 71. Hindustan Times - India, 14-Dec-1999. 72. Interfax News Agency, Weekly Business Report 22/02/2000. 73. Gazeta Mercantil - English Summary 04/02/2000. 74. Polish News Bulletin Company 21/12/1909.

- 74. Polish News Bulletin Company 21/12/1999
- http://members.tripod.com/~ngin/agrevodiary.htm#AgrEvo/Aventis
- in secret GM trials.
- 76. FoE press release, 20/8/99.
 77. Reuters News Service, Feb 17 2000
 78. New Scientist, 4/4/98, p.2.
 79. Independent 10/04/99 p13.

- 80. Global Pesticide Campaigner, 1/9/95, cited in EC #54, Aug / Sept
- 1998, res. supp. p. 16. 81. Gazeta Mercantil Online, 20/4/99, 'Genetically engineered rice set to burn

- 82. GenEthics News #21, 1/12/97, p.12.
 83. Global Pesticide Campaigner, June '96, p.20.
 84. 'Article series in Dagens Nyheter, 5/10/97 5/11-97. Tre Byar http://www.tunnel.nu Bjäre Naturskyddsförening http://www.bjare.sn/yel.

- http://www.bjare.snf.se
 85. Farmers Weekly, Vol.128,#13, 21/4/98, 'AgrEvo admits pollution'.
 86. Daily Telegraph 02/05/98 p.10.
 87. Ecologist 28/2, March/April 1998, p.60.
 88. Ecologist Mar/Apr '96, p.C3.
 89. Pesticides News, 1/12/97, p.3.
 90. Greenpeace International 'Taking back our stolen future -hormone disruption', 1/4/96.
 91. Courier Mail (Brisbane), 02/03/99, 'Cotton chemical `causes mutations Global Pesticide Campaigner, 1/7/96, cited in ibid.
 92. Greenpeace Business, 1/6/95, cited in ibid.
 93. Successful Prosecutions under the EPA 1990, and ENDS Report 1/12/94, both cited in ibid.

- 93. olicecistal Toosettlons indeed the ETA 1990, and EADS Report 1/12/94, both cited in ibid.
 94. ENDS Report, 1/12/95, cited in ibid.
 95. Financial Times, 29-Mar-2000.
 96. Farmers Weekly, 16/7/99, 'Companies hang fire with GM seed in
- 97. Genetic Engineering Network.
- 99. Reuters News Service, Paris, December 15 1999.
 99. Chemical Business Newsbase, Chemie Hebdo 10/01/2000 P1.
 100. Genetix Snowball press releases, 13/4/99 and 16/4/99.

- 100. Genetix Snowball press releases, 13/4/99 and 16/4/99.
 101. Times, 22/6/98, p.10.
 102. Independent, 18/6/98, p.8.
 103. AFX Europe; 08-Feb-2000.
 104. List of shareholders compiled by ORT, a French information company. It is assembled through collecting various information from public and private sources, and is not 100% complete.
- 105. FT company brief, www.ft.com.
 106. Problem Drugs (1/9/93) p.18, by Health Action International.
 107. Filthy 50 (1/9/92) p.2, by Greenpeace.
 108. Schering 1998 Annual Report.

- 109. Companies House search
- 110. http://www.iacr.bbsrc.ac.uk/corporate/partners/tpartners.html 111. Business Wire 28/02/2000. 112. Les Echos 06/03/2000 P18.

- 113. The Bowditch Group Electronic AgBiotech Newsletter 191.
- 114. Business Wire 10/9/98, 'Gene Logic Names Stephen Push'. 115. Business Wire March 2, 2000.

- 116. Les Echos 29/02/2000 P12. 117. Chemische Rundschau, Vol. 53, No. 3, p10.
- 118. Chimie Hebdo, No. 73, p8.
- 119. PRNewswire March 9 2000
- 120. PR Newswire, 11/1/99, 'MSI, AgrEvo sign software agreement'. 121. Cambridge Evening News 11/2/99 'Agrochemicals giant gives contract to Network Design'.
- 122. M2 Presswire, 11/9/97, '121 Consulting win £250,000 contract to supply NatWest'.
- 123. M2 Presswire 30/9/96, 'AgrEvo outsources telecommunications to GPT'
- 124. Times of India 26/02/2000.
- 125. http://www.cropgen.org/ 126. FoE press release 16 March 2000.
- 127. http://www.iacr.bbsrc.ac.uk/corporate/partners/tpartners.html 128. PR Week 25/02/2000 P1. 129. Shandwick International plc, Final results, 11/2/98. 130. http://www.aventis.co.uk/about/about.asp 131. http://www2.aventis.com/cropsc/about/central.htm

- 132. Alan Simpson MP, PQ to Secretary of State (DETR), #85948, 5/7/99.
- 133. Essex Chronicle 06/01/2000. 134. Independent, 19/3/99; PQ no. 70555. 135. Farming News 18/02/2000 P13.
- 136. Phone call to BAA, April 2000. In May 2000 a new chairman will be elected.
- 137. letter from Paul Rylott to Annette Smith, 18/6/99; field trials
- agreement with Mr R Duguid of Home Farm, Lincs, 30/4/99.
 138. Aberdeen Press & Journal, 16/2/99, 'Government accused of GM industry links'.
- 139. Yorkshire Post 10/3/97 P6, 'Scientists hope 'genetic' seeds will beat herbicide'
- 140. public register 98/R19/18. 141. Affidavit of MA Read in the High Court of Justice, AgrEvo UK Ltd and Plant Genetic Systems NV vs Jo Hamilton et al, 1999 A.No.300.
- 142. Cambridge Evening News 08/08/98 Crop firms dismiss 'superweed' claims.

- 143. Farming News 21/01/2000 P15. 144. All directors from Companies House appointments search. 145. Aberdeen Press & Journal, 16/6/99, 'German firm plans third plot of GM rape'.

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