

May 2000

# Contaminated GM Crops

## The 'accidental' release of GM oilseed rape into the UK countryside

On April 17, Advanta Seeds UK told the Government that GM contaminated oilseed rape seed had been sold to farmers across the UK<sup>1</sup>. It claimed that the GM contamination happened in Canada, when pollen from a GM 'Roundup' resistant crop was blown onto conventional oilseed rape being grown for seed<sup>2</sup>. This briefing outlines what is known to have happened so far, the possible threats to the UK environment and farming posed by these contaminated crops and what action the Government and industry must take.

### Introduction

Advanta Seeds has admitted that it sold GM contaminated seeds to the UK, Sweden, France and Germany. In a statement to the House of Commons, the Agriculture Minister Nick Brown stated that in the UK "9000 hectares were sown with affected stocks last year and about 4,700 were sown this spring" and that "about 1%" of this was GM. Sweden has ordered the crop to be destroyed and France is considering this option. But there is so far no sign of the UK Government taking this route, despite the fact that over 500 farmers have been affected.

### Contaminated Seed

Advanta Seeds claim that its conventional oilseed rape variety 'Hyola 38' was contaminated by pollen from GM oilseed rape resistant to the herbicide 'Roundup'. The GM oilseed rape was developed by Monsanto, and is a 'GT 73' type. The UK government has said that the rate of contamination was around 1%, but a company selling Advanta's seed to Swedish farmers has stated that "*parts of this year's imports from Canada of the same variety have been shown to contain some 2.6% of Roundup resistant seed*"<sup>3</sup>. Until there is independent testing, it is not certain what the real rate of contamination in the UK actually is.

### Illegal Seed

Before GM seed can be sold in the UK and Europe, it must have a EU wide marketing consent under the GM 'Deliberate Release' Directive 90/220. There is no marketing consent for 'GT73' GM oilseed rape varieties. In fact, it is not certain whether Monsanto have even made an application. Without a marketing consent, GM

oilseed rape crops cannot be sold for food or industrial purposes, or fed to livestock. It is possible that farmers attempting to sell their contaminated crops might find that they are breaking the law.

The Agriculture Minister has also stated that the genetic modification involved, known as 'GT73', "*is one that had previously been approved in the UK under our strict regulatory regime for food use*". It is true that refined oil from GT73 GM oilseed rape has permission to be sold in the EU and that this was given on the basis of a report by the UK's Advisory Committee on Novel Foods and Processes (ACNFP).

Oil from GT73 oilseed rape was authorised under the EU's 'fast track' procedure for GM foods which are considered to be 'substantially equivalent' to normal foods<sup>4</sup>. But the Italian government recently challenged the approval of GT73 oilseed rape oil, claiming that the oil is not actually the same as conventional oilseed rape oil. In fact, they claim that the approval, based on the UK report is "unlawful"<sup>5</sup>.

## No Risk?

The Government has stated that there is "*no risk to public health or the environment*"<sup>6</sup>. But there seems to be little support for this statement. The Advisory Committee on Releases to the Environment (ACRE) was not formally consulted before the Government made this statement, and nor was English Nature, the Government's wildlife advisor. In fact, rather than supporting the Government's position English Nature have called for the GM contaminated crops to be destroyed

In addition, ACRE has only considered the consequences of growing small experimental test sites of this type of GM oilseed rape. The current release is not on a small test site but over thousands of acres of the UK countryside.

The Agriculture Minister Nick Brown said in his statement to the House of Commons that "*it should also be remembered that oil produced from the crop is indistinguishable from conventional rape oil: no modified DNA will be present*". But the EU's top scientific committee on food safety, the Scientific

Committee on Food, considered all the evidence on this issue last year, and concluded that "*some refining processes used by industry today may ensure that DNA/protein are efficiently removed. There is no guarantee however that these processes are commonly applied*"<sup>7</sup>. How will the Government ensure that the oil from these affected crops is processed in a way to remove GM DNA and protein?

## Legal chaos

Several UK supermarkets have stated that they will not buy oil produced from this GM contaminated oilseed rape. So even if they can legally sell their produce, the farmers who unwittingly planted the GM seeds may well now find that they cannot sell their crop. If they plough the crop back in, they will lose the value of the crop and any subsidy they would normally receive. FOE has calculated that, at current prices, the value of the crop is around £1.6 million<sup>8</sup>. Advanta Seeds is saying that the GM contamination was not its fault. The Government has said that it will not help these farmers or give them compensation. This means that over 500 UK farmers have been left in the lurch by industry and the Government.

Unless the Government takes action, the only option for these farmers will be to take legal action. Courts around the country look set to fill up with lawyers acting for farmers and seed merchants. But what will happen to Advanta Seeds and Monsanto? This whole debacle confirms the urgent need for strong legislation on liability for GM crops. The GM Food and Producer Liability Bill has been presented to Parliament by Alan Simpson MP. If passed, this will place strict liability for harm caused by GMOs on the biotechnology industry, who profit from these crops.

## 'Sterile' Seeds

Agriculture Minister Nick Brown has stated that "*We believe that there is no threat to the environment because the GM variety is sterile. It is difficult to see how it could cross-pollinate with other plants*".

This GM variety is NOT sterile. In fact, the Government has stated that the GM plants will be 'male sterile', which only means that they can't produce any pollen

themselves. But the 'female' part of these plants is fully functional - they are perfectly capable of producing seed if they are pollinated by other oilseed rape plants. The GM plants are mixed up in fields of normal oilseed rape, which produces masses of pollen. As a result, the GM seed produced will get into food and animal feed.

Investigations by FOE have found that the 'sterility' claimed for these GM plants will break down in their offspring. A leading seed scientist has told FOE that, if Advanta Seed's claims about these GM plants are correct, **half of their offspring will be GM** and resistant to the herbicide Roundup and **one quarter of the total will be fully fertile**<sup>9</sup>. These rogue plants will be able to produce pollen, which could contaminate crops or spread to wild plants, as well as producing seeds.

Oilseed rape seeds are easily dropped on the ground during harvest - research has found that as many as 10,000 oilseed rape seeds can be dropped per square metre<sup>10</sup>. Oilseed rape seeds can survive in the soil and later grow as weeds ('volunteers') in other crops. If they are dropped on to open ground or alongside roads, they can also survive and reproduce outside agricultural areas<sup>11</sup>.

How many GM seeds were dropped last year in fields and along roads? How many survived to grow as weeds this year? How many GM seeds from this year's crop will be dropped around the UK countryside this autumn if these GM contaminated crops are not destroyed? Advanta Seeds and the Government must take action to trace the fields where contaminated oilseed rape was grown in 1999, and control any GM volunteers that are growing in the fields or on roadsides.

## Protecting UK crops

Advanta Seeds has claimed that the contamination of its seed occurred in Canada "*Despite being produced to standards well in excess of regulatory requirements*"<sup>12</sup>. Seed crops in Canada must be at least 800 metres from any other oilseed rape. But in the UK, 'certified seed' crops of oilseed rape only have to be 200 metres from other crops, including GM trials.

Last year, the Chief Executive of the British Society of Plant Breeders admitted that UK 'certified' oilseed rape

seed can have impurities of up to 2% due to cross pollination over the 200 m separation distances currently used<sup>13</sup>. The fact is, the separation distances for GM crops in this country are clearly inadequate.

The Government has stated that separation distances for the GM crops, including the farm scale trials, will be reviewed "*in the light of experience*"<sup>14</sup>. Will the Government now take into account the experience of hundreds of farmers around the country who, thanks to GM contamination, have suddenly found that they are growing crops they may not be able to sell?

## Action Required by Government

FOE believes that the Government must take the following steps to ensure the safety of the UK environment and the livelihoods of those farmers affected by this contamination:

1. Order farmers to destroy their contaminated crops. The Swedish government is prepared to do this, so why not the UK?
2. Ensure that Advanta Seeds UK fully compensates those farmers who have been affected.
3. Mount a criminal investigation into how this contamination was allowed to occur.
4. Trace those farms where the contaminated crop was grown in 1999 and destroy any oilseed rape growing as volunteers in the field or along transport routes from the farms.
5. End the farm scale trials of GM crops pending a full review of separation distances around GM test sites.
6. Introduce strict liability on the biotechnology industry for harm caused by the release of GMOs into the environment and food chain.

## Further Information

Further information on the issues and events surrounding GM crops is available on our website: [www.foe.co.uk](http://www.foe.co.uk)

For posted copies of briefings and information packs, call Friends of the Earth on 020 7490 1555 or write to us at:

The Real Food Campaign  
Friends of the Earth  
26-28 Underwood Street  
London  
N1 7JQ

## REFERENCES

1. Nick Brown. Statement on GMOs in Conventional Crops. 18 May 2000
2. "Technical Note by the Ministry of Agriculture Fisheries and Food on Male sterile hybridity"
3. Information from Swedish Board of Agriculture. Translation of order issued to the company Svaloff Weibull on May 16, No 22-2728/00. *Genetically Modified rape seed in spring oilseed rape*
4. Article 5 of the Novel Food Regulation 258/97 allows for notification of foods "derived from, but not containing, GMOs" which are "substantially equivalent" to conventional foods.
5. Italian Ministry of Health, Superior Health Council. Notes from General Meeting held on 16<sup>th</sup> December 1999.
6. Response to parliamentary question to the Ministry of Agriculture Fisheries and Food. 17 May 2000
7. Opinion of the Scientific Committee on Food concerning the Scientific basis for determining whether food products, derived from genetically modified soya and from genetically modified maize, could be included in a list of food products which do not require labelling because they do not contain (detectable) traces of DNA or protein. 17 June 1999.
8. Based on predicted July 2000 prices for oilseed rape of £111/tonne
9. Personal Communication
10. Lutman, PJW. 1993. "The occurrence and persistence of volunteer oilseed rape (*Brassica napus*)" *Aspects of Applied Biology* 35 29-36
11. DETR, 1999. GMO Research Report No 12. *Investigation of Feral Oilseed Rape Populations*
12. Statement by Advanta Seeds UK. 15 May 2000
13. House of Commons Agriculture Committee, Session 1999-2000, Third Report. "The segregation of Genetically Modified Foods" Volume II. Minutes of Evidence and Appendices - paras 24-29.
14. Reply by the Government to the Third Report from the Agriculture Committee, Session 1999-2000, "The Segregation of Genetically Modified Foods" (HC 71). Para 5. 9 May 2000