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Scientists cry foul as Europe plays politics with GM crops

In an unprecedented action, the European umbrella organization representing scientists working on biotechnologies took direct action late last year to oppose what it sees as unscientific decision-making in Europe over the use of genetically modified (GM) organisms (GMOs) in agriculture.

On 28 November, a small delegation from the European Federation of Biotechnology (EFB; Barcelona, Spain) arrived at the European Commission (EC) to hand over an open letter to Stavros Dimas, the European Commissioner for the Environment. The letter provided a preliminary response to two draft decisions that Commissioner Dimas had made public a week earlier; if those decisions are backed by the rest of the EC, they will block marketing approval for Syngenta's Bt11 maize and Pioneer Hi-Bred International's 1507 maize—products that express the *Bacillus thuringiensis* (*Bt*) CryIF toxin and are tolerant of the herbicide glufosinate.

The EFB's move comes at a crucial time in the GM debate in Europe. Approval of the two *Bt* maize varieties would, in effect, have freed the log-jam of GMO plant products in Europe after a period of several years with no new approvals. With additional pressures rising on a number of fronts, it appears that politicians and lobbyists on both sides of the GM debate (including Greenpeace—see **Box 1**) are upping their game. This is happening not only on the European level but also on the national level (see **Box 2**).

The decisions on Bt11 and 1507 maize were long overdue: the EC received reports on the two products from its scientific advisory body,



Greenpeace went on the PR offensive at the European Commission, caricaturing the European biotech association EuropaBio as 'EuropaGMO'.

the European Food Safety Authority (EFSA) in Parma, Italy, in April 2005 (subsequently updated in November 2006). The reports determined that neither GM product was likely to have "an adverse effect on human and animal health or the environment."

Directly contradicting this advice, in November a draft decision circulated inside the EC saying that both crops should be deferred on the grounds that 11 papers published since

November 2006 cast doubt on the long-term environmental safety of *Bt* crops (*Nature* **450**, 928–929, 2007). This decision came without consultation with the EFSA or its advisory system—a move the EFB's president, Marc Van Montagu, claims allowed the commission to cherry-pick publications claiming possible dangers.

The deferral of these approvals against scientific advice backs Europe into an increasingly

Box 1 Greenpeace changes targets

The EFB's sortie to the EC was timed to coincide with the arrival of another deputation—a group of Greenpeace protestors, who posed as "EuropaGMO," a shot at the European biotech industry lobby group, EuropaBio. Greenpeace's own media briefing outlined the legal basis supporting Commissioner Dimas' rejection of the *Bt* maize products, and its spokespeople have been endeavoring to undermine the perception of the EFB's independence. "The EFB is a front for companies like Monsanto," says Marco Contiero, policy director of GMOs at Greenpeace. "This lobby group is obviously trying to mask commercial interest with dubious scientific credentials." In support of its claim, Greenpeace produced a number of links between EFB members and the biotech industry, including Van Montagu.

Greenpeace is turning its attention to the EFB and EuropaBio, says Johan Vanhemelrijck, secretary general of EuropaBio, because "the field is progressing scientifically, and we are making progress in presenting it to the politicians. So now [Greenpeace can] play the player instead of playing the ball."

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Box 2 France says “Non!”

In January, citing concerns about biotech crops, French president Nicholas Sarkozy invoked the ‘safeguard clause,’ which allows European member states to block GM approvals. Sarkozy’s move in effect challenges the European Commission to rule on whether national moratoria are legal. The move prompted anti-globalization activist Jose Bové and 15 other anti-GMO protestors to stop their hunger strike launched on January 3.

The decision went against 12 of 15 members of the French provisional High Authority on GMOs, which advises the government. The High Authority has publicly criticized the wording of a published version of the committee’s decision regarding extending approval of MON810 maize: the decision speaks of “serious doubts” about the product’s impact on the environment, words that were not included in the versions they drafted.

The French government’s decision prompted widespread condemnation from industry groups. In the US, Washington, DC-based Biotechnology Industry Organization (BIO) president and CEO Jim Greenwood criticized the ban as lacking “any scientific basis,” adding that “without new and valid scientific support, this ban is a violation of European Union and international trade laws.” Nathalie Moll, executive director of EuropaBio, was also quoted as having “serious doubts about the process that has led to this decision.” Meanwhile, Spain’s general secretary of agriculture, Josep Puxeu, said the safety of GMOs approved by the European Food Safety Authority is not in doubt.

Anti-GM drift in France contrasts markedly with moves in Australia. On 27 November, the governments of New South Wales and Victoria announced their plans to lift bans on GM canola in 2008. Until that point, Australia in effect had a national ban on GM food crops. *JH*

isolated position, which could pose difficulties as other countries ramp up adoption of GM products.

Earlier in the year, Agriculture Commissioner Mariann Fischer Boel published a report examining the prospects for European livestock farming under a scenario in which countries such as Brazil and Argentina adopt GM varieties more widely (*Nat. Biotechnol.* 25, 1065–1066, 2007). Such a move would represent a significant narrowing of the pool from which Europe currently imports grain, either pushing European feed and meat prices higher still or, according to the report, causing Europe’s animal husbandry industry to migrate to locations outside Europe with lower grain prices.

Nathalie Moll, executive director, Green Biotech Europe, at the European biotech industry association EuropaBio (Brussels, Belgium), says that further pressure comes from the decision made by US sugar processors, such as American Crystal in Moorhead, Minnesota, and Battle Creek, Michigan-based Kellogg’s, to accept GM sugar varieties this year for the first time. That in turn leaves farmers free to grow the crop and will make it more difficult for Europeans to avoid eating GM-derived products. Moll also points out that there was a 77% increase in the acreage given over to GM crops in Europe in 2007, albeit from a small base. “The only way that the trend will continue,” says Moll, “is if national regulators start

approving new products.” Europe’s 110,000 hectares of GM crops are all accounted for by Monsanto’s MON810 maize, compared with 55 million hectares and around 200 different crops in the US.

To make matters worse, the past year has seen a meteoric rise in European cereal prices. In a year, maize prices rose from just over €180 (\$267) per ton to more than €372 (\$446) per ton. In response to these record prices, on 26 November Fischer Boel proposed the suspension of import duties on cereals, a move that was approved by the European member states on 20 December.

Although the EFB didn’t actually speak to Commissioner Dimas in November, it was due to return for a formal meeting as *Nature Biotechnology* went to press. The EFB’s Van Montagu says the association’s involvement is due to plants “increasingly becoming source of raw material for the industry” and because misconceptions about the environmental consequences of GMO release are making Europe rather isolated in its policies as other countries adopt wider use.

Van Montagu hopes that Dimas can be persuaded to look at all the risk in the GM debate. “The non-use of GM is dangerous for society,” he says. “[Dimas] is willing to discuss the arguments that the environment needs GMOs, and that the economy needs these GMOs.”

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