

## A flight of fancy

**Agricultural biotechnology isn't the first promising new technology to become ensnared in trade politics. The same fate buried supersonic commercial air travel — but that time, the boot was on the other foot.**

**W**ith the breakdown of consultations between the parties last week, it is now clear that the United States will pursue a formal complaint at the World Trade Organization (WTO) against the European Union, over trade in genetically modified crops.

But as transgenic food shudders on the runway amid increasingly heated rhetoric, it is worth taking a look at another promising technology whose commercial life has just met a premature end.

Last month, an Air France Concorde took its final flight to Washington's Dulles Airport, where it will form a prized exhibit at a new Smithsonian aircraft museum. Just in case the curators at the Smithsonian omit to do so, let's recall the role that American protectionism played in Concorde's rise and fall.

When Concorde's working prototype was making its first, awe-inspiring flights 35 years ago, the plane represented a rare technological triumph for the publicly funded, Anglo-French consortium that built it. Boeing had dropped out of supersonic airliner development, scared by its high development costs. The European success wasn't exactly welcomed in the United States with open arms.

American politicians instead fermented public fears about the noise — the supersonic boom — that the aircraft left in its wake as it passed overhead. Environmental regulators ruled that supersonic flight wouldn't be permitted there — killing Concorde's prospects of such lucrative routes as London to Los Angeles. Faced with these rules, no US airlines ordered the jet. The dearth of orders meant vital economies of scale were never realized, in either production or maintenance.

Many factors influenced the demise of the airliner, which British Airways will finally withdraw from service this autumn. And Concorde's noisiness and thirst for fuel hardly commend it in today's environmentally preoccupied world. Nonetheless, there is greater

demand today for fast, relatively expensive air travel than its architects could ever have imagined. Supersonic civil aviation is dying this year, in part because US protectionism nearly strangled it at birth.

Move on 35 years, and see how much — or how little — has changed. "Countries shouldn't be able to erect [trade] barriers for non-scientific reasons," Don Lipton, a spokesman for the American Farm Bureau Federation, said last week. "That's a very important principle in international trade." Tell that to Concorde's engineers, to Mexican sugar-growers, Brazilian steel-makers or anyone else trying to trade freely in what America doesn't want to buy.

The WTO fight comes at a time when European governments are trying to take steps that will allow the cultivation of transgenic crops in the face of public hostility. The Bush administration considers these steps inadequate, and it may be right. But by raising the stakes now, the administration makes it even less likely that European consumers will accept the technology. The administration probably knows this, but values the short-term political gain to be had from 'taking a stand' on the issue above the longer-term benefits that might accrue from letting Europe accept the technology at a pace that public opinion can bear.

The corporations that own the technology can't afford to wait, of course. Monsanto's hopes of building a multi-billion-dollar life-sciences business on it have already flopped, and there is a sense that unless Europe eats its transgenic dinner soon, nervous farmers in other food-exporting countries, notably China and Brazil, will balk at the technology and bring it to its knees.

In that unfortunate event, London's Natural History Museum could perhaps build a memorial exhibit for it featuring a plinth that might equally adorn the Smithsonian's Concorde display. "This technology wasn't bad," it would read. "It died of political hypocrisy." ■

## Building bridges

**Science and technology agreements between the European Union and Arab countries are a small, but welcome step.**

**T**he European Union's (EU's) freshly signed science and technology cooperation agreements with Morocco and Tunisia — soon to be followed by another one with Egypt (see page 906) — are to be welcomed on several grounds.

Research in the Arab world is in a bad way, and the agreements send a hopeful message to those who want to turn the situation around and use science and technology to improve society and spur economic growth (see *Nature* 416, 120–122; 2002). Also, with immigration from North Africa a hot political subject in Europe, the EU is acting in its own interests if it helps economies in the region to prosper in peace.

In Morocco, researchers are already involved in some 200 EU projects. Most of these are in areas close to the nation's pressing needs, such as management of water resources, transport and agriculture. The EU hopes now to encourage more of the same, by helping researchers to identify potential partners in Europe, and to work through the European Commission's legendary paperwork.

Another potential benefit of the agreements is that they can only assist in building political dialogue in the Middle East. Joint, practical

projects, such as developing methods for the treatment of waste water from the olive-oil industry, can surely improve relations in the region, as can purely scientific ones, such as SESAME, the synchrotron being built in Jordan. In the words of Said Assaf, a scientist from Ramallah in Palestine who is involved in SESAME: "This project is a bridge to peace though science. As Arabs, we realize that acquiring technology is very important for the advancement of our people."

Indeed, science is one of the few areas where constructive dialogue can be maintained between peoples in conflict. The EU–Arab agreements follow on from a renewal of Israel's participation in the EU's sixth Framework research programme earlier this month, and Philippe Busquin, the European research commissioner, hopes these "will pave the way to enhanced dialogue between Arabs and Israelis".

Such dialogue will take time. Israel shares some problems — such as desertification — with its Arab neighbours, but in its research capacity is closer to Switzerland or Sweden than to Egypt or Jordan. And as long as Palestinian scientists work in the shadow of an occupying army, scientific collaboration will remain more of a cherished ideal than a reality. ■