

## Green Shoots

The stale and illogical debate around genetically modified crops must not be allowed to inhibit exciting new technologies

The debate around genetically modified crops would almost certainly puzzle an alien. “I don’t get it,” he’d beep, arriving for his first tour of Earth. “You’ve found a way to boost crop yields and reduce your reliance on pesticides. Repeated, peer-reviewed scientific studies have shown there is no downside. It could be the answer to a pending crisis of global hunger, and vast swathes of the world do it already, with no ill-effect. Yet it still makes lots of people very angry, and many governments avoid it in horror. Why?”

Humanity’s representative, whoever it should be, could only grimace. This year, member states of the European Union become free to choose, individually, whether to ban or permit GM crops. This month, the Scottish government announced that it would ban them. Even before this, the EU GM industry was hardly thriving. One maize crop, permitted in the EU since 1998, has been grown in Spain, Portugal and elsewhere, but sporadically, largely due to the red tape involved in farming it.

None of this is about science. Yet GM foods remain a contentious business partly out of pure mumbo-jumbo suspicion and partly out of pure political cowardice by governments in areas of the world where there’s enough to eat already.

As *The Times* reports today, all of this could be about to change. Sprays which deploy a phenomenon known as RNA interference, or RNAi, promise to unleash many of the benefits of genetic modification without actually modifying anything. Most simply, they affect the behaviour of DNA without changing it, creating all the effects of modified crops without modification being required. Thus, nothing “unnatural” enters the food chain and, most of all, the risk of a modified crop replacing that which went before — negligible as it was — disappears.

Early uses have seen RNAi sprays deployed both to enhance the defences against parasites and to weaken invasive weeds. One scientist, who published the results of a pioneering trial last month (Jeffrey Scott, the professor of entomology at Cornell University) believes the technology could render many conventional pesticides, which have side effects for other insect life, obsolete.

With the best will in the world, the benefits of RNAi’s will be years away. It would be a tragedy, however, if they were decades away. As with any new

technology, rigorous testing for both safety and efficacy is of course essential. The nature of RNAi technology should mean that established concerns about GM crops simply do not apply.

Even mention biotechnology, however, and regulators panic. EU procedures for greenlighting new crops are desperately slow. Some crops, originally developed in UK laboratories, already have to be grown and researched elsewhere. Last year, Owen Paterson, then the environment secretary, warned that Europe would become “the museum of world farming” if the EU continued to force companies abroad. He was quite right.

By any metric, Europe missed the boat on GM technology. While North America, in particular, has revolutionised new, pest-resistant and cheaper forms of farming, Europe has shielded its own industry by means of a mix of superstition and protectionism. This is not a mistake we should make again. If European regulators still lack the courage to move faster on GM crops, they should at least recognise that not all areas where biotechnology meets farming are equal. There is no reason at all, beyond unthinking squeamishness and political cowardice, why Europe and Britain should not be at the forefront of RNAi research. Those who have loudly opposed GM in the past, meanwhile, seem resistant — perhaps by DNA — to persuasion that their fears were illogical. They should have the grace to realise that this new technology sweeps their fears away, and support it. Although they probably won't.

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<http://www.thetimes.co.uk/tto/opinion/leaders/article4529220.ece>