

Interview of Marc Van Montagu to [Science Business](#), 19 January 2006

Biotech: the Greens won't stop it

Thomas Lau

Marc Van Montagu, Europe's founding father of genetically modified crops and a powerful advocate for their acceptance in Europe, speaks to Science|Business News Editor Thomas Lau. Here he reflects on the latest global figures for planting of GM crops, the continued economic damage caused by Europe's refusal to accept the technology, and his views of the Green movement, which has done so much to take the shine off his achievements.

Related article: [Biotech crop growth in 2005 slowest ever, ISAAA reports](#). The International Service for the Acquisition of Agri-Biotech Applications (ISAAA), a lobby group that promotes the planting of genetically modified crops, announced last week that the global year-on-year acreage growth of 11 per cent in 2005, down from a 20 per cent growth rate in 2004, and the 15 per cent increase seen in 2003.

Portrait of a pioneer Van Montagu is the founder and scientific advisor of the Institute for Plant Biotechnology for Developing Countries. He is also a full-professor and director of the Laboratory of Genetics at the Faculty of Sciences, Ghent University and scientific director of the Genetics Department of the Flanders Interuniversity Institute for Biotechnology. He was Scientific Director and member of the board of Directors of Plant Genetic Systems Inc. (Belgium). With his colleague Jeff Schell, Van Montagu uncovered the gene transfer mechanism between Agrobacterium and plants, a discovery that led to the development of precise methods of modifying Agrobacterium, turning it into an efficient system for inserting transgenes into plants. He is credited also with significant advances in plant molecular genetics, in particular elucidating molecular mechanisms for cell proliferation and differentiation and response to abiotic stresses such as light intensity, ozone levels, cold, salinity and drought). He has developed transgenic tobacco, rape seed and corn plants that are resistant to insect pests and tolerant to herbicides. Van Montagu's work with poplar trees resulted in the development of low lignin varieties with improved pulping qualities.

What do you think of them the latest figures from the ISAAA?

I think it's very satisfactory: things are progressing well despite all the actions of the Green movement, which in my view have paralysed decision-making in Europe.

But the year-on year hectare growth was only 11 percent, among the lowest for the past decade; does that still sound satisfactory to you?

Don't forget that in Europe the Green movement has virtually blocked planting. So yes, I still think this is a good result. Though less than last year, it's still a two digit increase. It shows increasing acceptance of the technology. You should bear in mind some of the pressure being put on farmers who are told if they grow these plants they will not be able to sell them.

France, Portugal planted GM crops this past year; what other European countries are likely to follow?

I think maybe Germany will follow suit. One factor that I think may open up the market is the economic pressure of higher oil prices and the push towards developing biofuels. Europe wants to move ahead in green energy and biofuels. It would be ridiculous if the biomass to do this was imported, rather than grown in Europe.

As you said the Green movement has generated strong resistance to GM crops in Europe - do you see any signs of public attitudes changing?

Public attitudes will change if there is an attempt to communicate the benefits. At the moment the [European] Commission is putting in effort on that front and I would say attitudes have improved in the Netherlands. I would say also that there are signs of a shift in Belgium, the UK and even Denmark, and Spain is very positive.

This change of heart may be slow in coming, but in the end there is no rational argument against GM crops. Politicians, of course will have to decide, but remember they are under economic pressure from industries. Scientists also are becoming more vocal in their lobbying, both because

they believe progress is being blocked by irrational argument, and because they can see the benefits GM crops could offer in developing countries in particular.

But surely people are entitled to their opinions? What is it about the arguments of the Green movement that you find irrational?

For a start they are not prepared to argue the case directly. Then they make unsubstantiated claims - for example saying that GM crops are bad for health - when there is no evidence to support this assertion. And don't forget, this argument has been going on for more than ten years, GM crops have been planted for ten years, and yet there is still no sign of any harmful impact either to human or animal health or to the environment.

I also think frankly, that members of the Green movement have been downright dishonest in some of the things they have said in developing countries - for example telling people in Zimbabwe that if they are HIV positive - and thus more prone to disease - that GM crops are even more dangerous to them than they are to Europeans. I think it's criminal to say such a thing.

The only argument that still has traction is to say you can't prove that it's not dangerous. It is of course hard to prove a negative, but we now have ten year's experience in planting GM crops to point to.

Why do you think the companies that sell GM crops trigger so much negativity?

I think in some cases the companies' approach has been a bit obnoxious and overconfident. But mainly I think, it's just another manifestation of the fact the people neither like or trust large corporations in general, no matter what they are selling. Of course, at present there is a general political sentiment against American companies in developing countries particularly.

But again this is all one big mix along an anti globalisation theme, rather than a specific argument against GM crops.

You just have to remember that GM crops have the power to feed the poor and save the resources of the planet.