

GM crops: the ethics debate

The organic farmer

Alan Gear, Organic cultivator:

Often people say to me that organics is just a question of muck and magic. And there is a degree obviously of a lot of wisdom from the past. We build on a tradition of humans cultivating the land for thousands of years. But certainly what we do here, and what's been happening for the last I suppose forty, fifty years, has been real technological and scientific developments.

Male (speaking at seminar):

...and there's also hints of common scab on that one which ...

Narrator

Organic growers have the same problems as conventional ones. Weeds and diseases can seriously threaten their crops. In this seminar they're hearing research which shows just how bad the losses can be.

Male (speaking at seminar):

...Eos tuber blight...forty per cent out grades on tuber blight

Narrator:

That's the very same disease that Jonathan's working on. But organic farmers reject the GM solution. Their approach is to search through all the existing varieties and grow the ones which will perform best in their particular soil and climatic conditions.

Male (speaking at seminar):

If the ones that are good down there I don't think we'll find anything thats better than we've got,

I mean, blight is just a big problem

Narrator:

Many organic techniques are taken directly from science.

Ecological sampling techniques allow growers to take stock of weeds.

Female (checking weeds):

...annual nettle...speedwell. I think we've got some field pansy, unless I said that one already...

Narrator:

If numbers of weeds are too high, the growers have a choice of weeding machines. They're organic status won't be threatened by brushes and sprockets.

Mechanical engineering is favoured over the genetic kind.

Alan Gear:

The purpose of genetic engineering certainly as applied in my field, is to obviously improve productivity. So that we can feed more people and so on. I believe that you can do that in different ways more effectively that do not mean that you have to tamper with the basic genetic nature of species. And I think that's what we should be doing.

Narrator:

Core sampling techniques keep tabs on the natural variations in nutrients, like nitrate. If this becomes depleted, the grower can enhance it with a nitrogen fixing plant, like clover. It's all part of a deep-rooted sense of stewardship of the land.

Alan Gear

Personally I'm a Christian, and I feel very strongly that we're put on this world by God to take care of it, both for the benefit of ourselves, and the other inhabitants, whether they be insects through to plants, through to whales, through to whatever.

Ruth Chadwick, Bioethicist:

Some people have argued that Christianity has been responsible for quite an exploitative attitude towards nature because it has emphasised the specialness of human beings but his position is that Christianity leads to the view that we have a stewardship relationship over nature which gives us responsibilities.