

# Monsanto's Domination: A New Twist to 'Playing God'

by Richard Higginson



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**In this disturbing article, Richard Higginson draws attention to a range of controversial practices by the agricultural biotechnology company Monsanto. One aspect of their business is the prevention of farmers saving the seed they have bought from Monsanto for replanting next season. Richard develops a biblical theology of seeds in arguing against this practice.**

## The Tale of Troy Roush

I recently attended a conference on *Trust and Integrity in the Global Economy* organised by *Initiatives of Change*, the international organisation for moral and spiritual renewal which until 2001 was called *Moral Re-Armament*. It was held in the magnificent setting of the palatial hotel which serves as their conference centre in Caux, Switzerland, though unfortunately mist and rain obscured the spectacular views for much of the event. The programme included a day devoted to issues of global farming, and there was one speaker who particularly attracted my attention. He was Troy Roush, a quietly spoken middle-aged farmer from central Indiana. He and his family run a long-established farm of about 4000

acres, producing soya beans, popcorn and wheat. Troy Roush had a compelling story to tell.

Like many a US farmer of his type, Roush buys seed (or used to buy seed) from Monsanto, the world's leading agricultural biotechnology corporation. Roush is one of 120 such farmers who have been sued by Monsanto over the last decade for alleged violation of seed patent agreements. What marks Roush out as unusual is that he is one of only a tiny handful of farmers who have defended themselves successfully against Monsanto. It took a two-year legal battle and it cost him £400k in attorney fees, but Roush believes it was worth it. He believes that Monsanto are a thoroughly unethical company who put the profit motive far above the public good. In his case,

the company claimed that the Roushes had signed a technology agreement but the family were able to prove that it had been forged.<sup>1</sup>

Hearing Troy's story aroused my curiosity, which was further whetted by the playing at the conference of a video documentary called *The World According to Monsanto* produced by a French journalist, Marie-Monique Robin.<sup>2</sup> I know that such films can be one-sided so I have subsequently carried out a thorough internet search of material relating to Monsanto's activities. This included a careful reading of Monsanto's defence of what they do on their corporate website.<sup>3</sup> It is easy to lambast the world's big multi-national companies and important to listen to their side of the story: I have

done my share of defending multi-nationals that I feel have been unfairly maligned. But having undertaken this investigation, I remain deeply disturbed by Monsanto. I would go further and say that because of the primeval and fundamental nature of the business they are involved in – the sowing of seed – there are profound theological reasons why Christians should be concerned about what they do.

### A Company that Courts Controversy

Monsanto is a controversial company for a variety of reasons. Until the turn of the century, it was primarily a chemicals company, and as with many such



■ Monsanto's Plant in Leland Mississippi ■

companies, periodically got itself into trouble for contaminating sites and offloading toxic waste. Between 1997 and 2001, however, it offloaded the chemicals side of the business, in order to focus on agricultural products.<sup>4</sup> Since 1995 it has acquired over 50 seed companies around the world, including the large fruit and vegetable seed company Seminis in 2005. The extent to which it now near-monopolises its

industry is truly staggering. Monsanto dominates at least 70% of the market in soya beans, cotton and wheat; it provides 90% of genetically modified seed sown globally; and it owns at least 650 plant biotechnology patents.<sup>5</sup>

Monsanto is notable for its involvement in high profile lawsuits, as both plaintiff and defendant. It must have a large and busy legal department! In recent years it has been found guilty of bribing officials in Indonesia to avoid an

environmental impact assessment on its genetically modified cotton, and of misleading advertising in France concerning its record-selling herbicide *Roundup*. Areas of dispute where Monsanto's has been strongly criticised, though it has vigorously defended its actions include:

- The injection of a recombinant Bovine Growth Hormone into cows to increase milk production, with alleged risks to humans
- The concealment of data relating to research on rats related to genetically modified maize
- The attempted patenting of processes controlling the breeding of pigs

- The employment of child labour in the manufacture of cotton seeds in India<sup>6</sup>



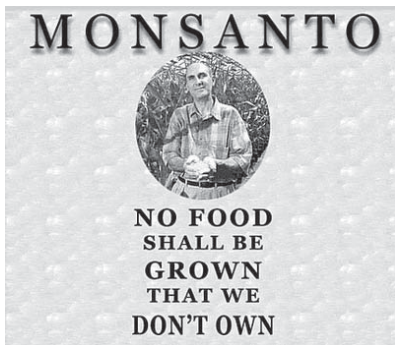
■ Vandana Shiva ■  
physicist, ecologist, activist, editor, and author

Whatever Monsanto does, it appears to court controversy. Vandana Shiva, in her 2000 Reith Lecture, blamed the company for an epidemic of suicides among Indian farmers who were driven to despair because the lure of genetically modified crops had led to smaller rather than greater yields.<sup>7</sup>

### Genetic Engineering

For some people, the company is ethically suspect simply because it is in the business of genetic engineering. Advocates of genetically modified food argue that it offers the best long-term hope of solving the world's food shortage, with biotechnology yielding 30% more produce than organic techniques. Harm done by pests and weeds can be effectively removed with insect-resistant cotton and herbicide-tolerant soya beans (the latter actually entails the combined use of two Monsanto products, *Roundup Agricultural Herbicide* and *Roundup Ready* seeds). Critics of

genetic engineering say that the food shortage is more to do with failures in distribution. They fear the potential impact on biodiversity if herbicide-tolerant crops are sprayed with herbicide to the extent that no weeds are



■ *Anti-Monsanto Poster (Greenpeace)* ■

left to survive; weeds, after all, are useful to other forms of wild life. In addition, there is dispute about the extent to which genetically engineered crops are or are not significantly different from those modified by nature or humans in the past.<sup>8</sup>

Genetically modified food is a complex issue and one about which I am open to persuasion. The evidence I have seen thus far appears finely balanced: the jury is still out as far as its long-term safety and environmental effects are concerned. Interestingly, Troy Roush, the farmer from Indiana, is not against the use of genetically modified seeds. What he is against is the stranglehold Monsanto put on their use.

In Monsanto's opening statement on its website – what might be called a mission statement – they say 'We apply innovation and technology to help farmers around the world produce more

while conserving more.'<sup>9</sup> Produce more, maybe, but *conserve*? As they also acknowledge on a page entitled 'Why Does Monsanto Sue Farmers Who Save Seeds?', Monsanto says 'When farmers purchase a patented seed variety, they sign an agreement that they will plant only the seed they purchase from us and that they will not save and replant seeds produced by the plants they grow.'<sup>10</sup> What sort of conservation policy is this? The clear intention is to oblige farmers to make fresh purchases from Monsanto each year.

What angers Troy Roush and many other farmers the world over is the patenting of seeds and the restriction put on their use by companies like Monsanto. By saving and replanting seed, a contract with the company is violated. Saving seeds for re-use in a later planting season is something that farmers have done since the earliest days of agriculture. It makes obvious sense: why waste something that still has use, especially since nature itself re-uses or replicates seeds? Monsanto's web-page fails to answer this obvious question. It simply justifies patents as 'necessary to ensure that we are paid for our products, and for all the investments we put into developing these products'.<sup>11</sup>

Without the protection of patents, it is maintained, there would be little incentive for privately owned companies to

invest in the innovation paid for through Research and Development.

In fact, it could be argued that such excessive restriction on saving and replanting Monsanto's seeds is unnecessary for protecting the patents, because the company's hybrids lose their vitality<sup>12</sup>, and it is uneconomic to save such seeds and replant. There seems therefore to be little commercial justification for making farmers sign away their right to replant. Monsanto appears to be unjustly heavy-handed, making farmers feel the weight of their authority. Is this cycle of planting and replanting a God-given right, which Monsanto is attempting to remove? Is Monsanto playing God? It is time for a little biblical excursus.

### Seeds: A Biblical Theology

One does not need to read far in the Bible to note something that is obvious already, that seeds and



■ *"A Sower went out to sow..."* ■  
 Vincent Van Gogh: *The Sower (Arles, June 1888)*

sowing are fundamental to the way God has designed the world.

In the first creation story, no sooner had God created the earth



than he says, “Let the earth put forth vegetation; plants yielding seed, and fruit trees of every kind on earth that bear fruit with the seed in it.” And it was so’ (Gen.1:11). When God creates



■ ...come home with shouts of joy, carrying their sheaves with them ■

human beings, he points out that he has made the earth like this for their benefit: “I have given you every plant yielding seed that is upon the face of all the earth, and every tree with seed in its fruit; you shall have them for food” (Gen.1:29).

Note how the plants and fruit are self-replicating. They ‘yield’ seed which leads to their reproduction. The Wikipedia definition of a seed is ‘an essential plant organism which enables the species to perpetuate itself’.<sup>13</sup> That is what seeds are all about.

Seeds are essential for human survival. When famine struck the land of Egypt, the Egyptians implore Joseph: ‘just give us seed, so that we may live and not die’ (Gen.47:19). After buying both the land from the people and the people into slavery – why has Joseph escaped criticism for that exploitative action? – Joseph says to the people: “Now that I have

this day bought you and your land for Pharaoh, here is seed for you; sow the land.” (Gen.47:23). Sowing in the Bible is seen as a normal part of everyday work: ‘in the morning sow your seed, and at evening do not let your hands be idle’ (Eccl. 11:6).

When the sowing of seed is productive, it brings great rejoicing and is seen as a sign of God’s blessing. Psalm 126, which is about the Lord restoring the fortunes of Zion, says:

*May those who sow in tears reap with shouts of joy.*

*Those who go out weeping, bearing the seed for sowing,*

*Shall come home with shouts of joy, carrying their sheaves with them.*

Amos 9:13 contains a comically exaggerated image of future prosperity:

*The time is surely coming, says the Lord, when the one who ploughs shall overtake the one who reaps, and the treader of grapes the one who sows the seed; the mountains shall drip sweet wine, and all the hills shall flow with it.*

Conversely, when seed does not bear fruit it is often seen as a sign of God’s judgment. The price of disobedience is that ‘You shall sow your seed in vain, for your enemies shall eat it’ (Lev.26:16). A land under

God’s judgment is one where ‘ten acres of vineyard shall yield but one bath, and a homer of seed shall yield a mere ephah’ (Is.5:10). Similarly Joel laments a scene where:

*The seed shrivels under the clods, the storehouses are desolate; the granaries are ruined because the grain has failed.*

(Joel 1:17).

Micah states bleakly that the punishment for such offences as ‘wicked scales’ and ‘a bag of dishonest weights’ (6:11) is a scenario where ‘You shall eat, but not be satisfied....You shall sow, but not reap’ (6:14-15).

Seeds and sowing are so crucial a component of life that it is not surprising they are used to powerful symbolic effect in Scripture. In Isaiah 55 their productivity, which depends on the winter rainfall, is compared to the way that the word of God accomplishes its purpose:

*For as the rain and the snow come down from heaven, and do not return there until they have watered the earth, making it bring forth and sprout, giving seed to the sower and bread to the eater;*



■ Michelangelo - Isaiah - Sistine Chapel, 1509 ■

*so shall my word be that goes out from my mouth;*

*it shall not return to me empty, but it shall accomplish that which I purpose,*

*and succeed in the thing for which I sent it.'*

(Is.55:10-11)

In Jesus' parable of the sower the seed which is scattered on a variety of types of ground is the 'word of the kingdom' (Matthew 13:19) or the 'word of God' (Luke 8:11). It needs receptive soil in the hearts and minds of people to take root. But it can have decisive and dynamic effects, just as seeds do in real life:

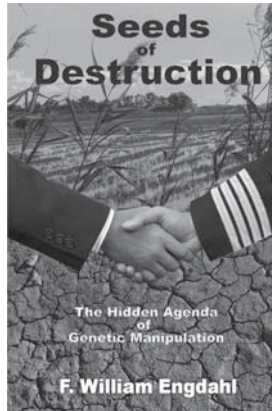
*The kingdom of God is as if someone would scatter seed on the ground, and would sleep and rise night and day, and the seed would sprout and grow, he does not know how. The earth produces of itself, first the stalk, then the head, then the full grain in the head. But when the grain is ripe, at once he goes in with his sickle, because the harvest has come'*

(Mk 4:26-29).

The phenomenon of seeds and the process of sowing are therefore important both for their literal and metaphorical significance. They bring us temporal life and they promise us eternal life. We need to think through this theology of seeds and sowing for what is going in the global economy today.

## Decisions, Decisions

An important legal decision was made in 1980, unnoticed by most of the world at the time. In the case of *Diamond v. Chakrabarty*, and by the narrowest of margins (5-4), the US Supreme Court deemed that a living, man-made micro-organism is patentable subject matter as a 'manufacture' or 'composition of matter' within the meaning of the 1952 Patent Act. The fact that the organism sought to be patented is alive is 'no bar to patentability'.<sup>14</sup> It is



■ *Engdahl's book drew attention to the devastating effect of *Diamond v. Chakrabarty* on global agribusiness* ■

that judgment which has given Monsanto the green light to establish hundreds of patents for genetically modified seeds.

It was a momentous decision, but it remains a controversial one. At the heart of the matter is the question of whether reengineered genes should be considered human inventions or merely skillful manipulations of nature. Should life in all its varied forms be viewed as a human creation for the purpose of granting patents when it is freely given as a gift from God?<sup>15</sup> As Vandana Shiva said in her Reith Lecture, 'Humans do not create life when they manipulate it'.<sup>16</sup> Surely that makes a difference?

Even if a case for patenting genetically modified seeds can be made, because of the human inventiveness involved in

developing them (the cost and ingenuity of R & D, as Monsanto is at pains to emphasise), the restrictive and punitive attitude Monsanto is adopting towards the farming community comprises a lamentable use of power. The unhappy fact is that farmers have lost control of the seeds that they use. Astonishingly, they may even fall foul of the company for the re-seeding of genetically modified crops which takes place *by natural means*.

## Farmers of the World, Beware

In 1998 Monsanto sued a 70-year-old Canadian farmer, Percy Schmeiser, for patent infringement because their private investigators found genetically modified



■ *Percy Schmeiser* ■

*Roundup Ready* canola in his fields. But as Schmeiser was able to establish, he had never purchased seed from Monsanto. It appears that pollen from some genetically engineered canola had blown on to his land from neighbouring farms or off passing trucks. Even so, Monsanto still argued that Schmeiser owed the company money for use of the seed, seed

that he was unable to eradicate from his fields.

The case went all the way to Canada's Supreme Court, which eventually sided (in another 5-4 decision) with the manufacturer, stating that patent law had indeed been violated. However, the court rejected Monsanto's claims for damages and legal fees, so Schmeiser only had to meet his own legal fees, considerable though these were.<sup>17</sup> In a further twist to the story, Monsanto agreed to pay Schmeiser all the clear-up costs of the *Roundup Ready* canola contaminating his fields, in an out-of-court settlement finalised in March 2008.<sup>18</sup>

Monsanto has a further, potentially sinister trick up its sleeve, which it may choose to play at some unspecified date. In June 2007 it acquired Delta & Pine Land, a company that has developed so-called 'terminator technology', sterile seeds that become infertile after one life cycle. This is another way of preventing farmers from replanting their crop's seed, rather than purchasing seed from Monsanto each year. On its website, Monsanto insists that it 'has never developed or commercialised a sterile seed product. Sharing many of the concerns of small landholder farmers, Monsanto made a commitment in 1999 not to commercialise sterile seed technology in food crops.'<sup>19</sup> But

many fear that its commitment to that pledge is weakening. They wonder why else would Monsanto have taken over Delta & Pine Land Co. And on the website it does point out some alleged benefits of sterile seed technology.

The world needs to wake up and take notice of what is happening.

It appears that Monsanto is helped to maintain its powerful position because it has friends in high places. *The World According to Monsanto* documentary alleges a 'revolving doors' syndrome, whereby several senior executives at Monsanto have oscillated between

working for the company and working for key enforcement agencies like the Food and Drug Administration and the Environmental Protection Agency – the argument being that they have helped to ensure judgments in the company's favour. It is also important to note that Monsanto's actions are having a world-wide impact. The imposition of the non-replanting of seeds by farmers – surely a natural, God-given right – is not just an issue for fighting fellows like Troy Roush in the mid-West. When the Americans took over in Iraq after driving out Saddam Hussein in 2003, the US Administrator Paul Bremer enforced the non-replanting of seeds on farmers in Iraq.<sup>20</sup> That is the measure and the menace of Monsanto's influence. ■



■ The original French documentary *The World According to Monsanto* by Marie Monique Robin ■

## Notes

1. Cropchoice news, 'Monsanto goes after Indiana farm family', 25 Sept.2001, [www.cropchoice.com/leadstry4901.html?recid=470](http://www.cropchoice.com/leadstry4901.html?recid=470).
2. The video can be seen live on: [www.livevideo.com/video/embedLink/1C4FB64D50354B9A856504954B453CC9/580798/the-world-according-to-monsant.aspx](http://www.livevideo.com/video/embedLink/1C4FB64D50354B9A856504954B453CC9/580798/the-world-according-to-monsant.aspx).
3. See [www.monsanto.com](http://www.monsanto.com).
4. See [en.wikipedia.org/wiki/Monsanto](http://en.wikipedia.org/wiki/Monsanto), section 1.
5. Institute of Science and Society, 'Monsanto versus Farmers', 28 April 2005, [www.i-sis.org.uk/MonsantovsFarmers.php](http://www.i-sis.org.uk/MonsantovsFarmers.php).
6. See [en.wikipedia.org/wiki/Monsanto](http://en.wikipedia.org/wiki/Monsanto), sections 4 & 9.
7. Vandana Shiva, 'Poverty and Globalisation', [news.bbc.co.uk/hi/english/static/events/reith\\_2000/lecture5.stm](http://news.bbc.co.uk/hi/english/static/events/reith_2000/lecture5.stm).
8. For a survey of the arguments on both sides see [en.wikipedia.org/wiki/Genetically\\_modified\\_food](http://en.wikipedia.org/wiki/Genetically_modified_food).
9. [www.monsanto.com/default.asp](http://www.monsanto.com/default.asp).
10. [monsanto.mediaroom.com/?s=59&item=137](http://monsanto.mediaroom.com/?s=59&item=137).
11. Ibid.
12. See Sue Branford, 'Field of broken dreams', article in *Guardian Weekly* 8.9.08, p.44: 'Farmers have traditionally saved seeds from one harvest to another, but this is not possible with hybrids, as they lose vitality'.
13. See [en.wikipedia.org/wiki/Seed](http://en.wikipedia.org/wiki/Seed).
14. See [en.wikipedia.org/wiki/Diamond\\_v.\\_Chakrabarty](http://en.wikipedia.org/wiki/Diamond_v._Chakrabarty).
15. On this see the article by John Meakin in *Vision*, 'Should We Put a Patent on Life?', Winter 2005, [www.vision.org/visionmedia/article.aspx?id=1162](http://www.vision.org/visionmedia/article.aspx?id=1162).
16. [news.bbc.co.uk/hi/english/static/events/reith\\_2000/lecture5.stm](http://news.bbc.co.uk/hi/english/static/events/reith_2000/lecture5.stm).
17. See [en.wikipedia.org/wiki/Monsanto](http://en.wikipedia.org/wiki/Monsanto), section 9.
18. [www.percyschmeiser.com/](http://www.percyschmeiser.com/).
19. [monsanto.mediaroom.com/?s=59&item=136](http://monsanto.mediaroom.com/?s=59&item=136).
20. [www.i-sis.org.uk/MonsantovsFarmers.php](http://www.i-sis.org.uk/MonsantovsFarmers.php).