

THE THREAT OF GENETICALLY MODIFIED ORGANISMS (GMOS) TO ORGANIC AGRICULTURE: A CASE STUDY UPDATE

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Abstract

*This paper examines the threat posed by genetically modified organisms (GMOs) to organic certification. In the case of *Marsh v Baxter* an organic farm in Western Australia is contaminated by GMO material including seeds and seed pods blown from a neighbouring farm and the organic certification is lost. This paper presents a five-year chronology of events and the processes, outcomes and costs of seeking legal redress, of proving negligence and/or nuisance, and of seeking damages and an injunction to constrain the GMO farmer. Damages are agreed at A\$85,000 (€60,000) while legal costs are in the region of A\$2,000,000 (€1,400,000) to date.*

Key words: *canola, GM canola, Roundup Ready canola, RR canola, swathe, Australia, Kojonup, Supreme Court, Appeals Court, Monsanto, WA Pastoralists and Graziers Association (PGA), Steve Marsh, Susan Marsh, Michael Baxter*

1. INTRODUCTION

Australia is a world leader in organic agriculture. It was the first country in the world to have an association dedicated to the advocacy of organic farming, the first association to publish an organics journal, the *Organic Farming Digest*, and the first association to develop a set of organic farming principles (Paull, 2008). With 17,151,000 hectares of organically certified agricultural land, Australia accounts for 40% of the world's total of certified organic agricultural land.

There has been a push from the farm lobby for growing genetically modified GM crops and, opposing that, resistance from consumers. Some outcomes of this tension and contestation in Australia are that: (a) GMO ingredients in food must be labelled; (b) there is a federal government entity (the Gene Technology Regulator) that approves the release of GMOs; (c) each Australian state deals somewhat differently with the growing of GMOs in their own state. Currently, only GM varieties of cotton and canola are approved for commercial-release (OGTR, 2014). The Gene Technology Regulator must be "satisfied that any risks can be managed to protect the health and safety of people and the environment" (DAFF, 2008).

Two Australian states, Tasmania (Tas) and South Australia (SA), have robust moratoria in place which exclude growing GMOs. Three Australian states, Victoria (Vic), New South Wales (NSW), and Western Australia (WA), have less robust moratoria and allow GM canola. Neither Queensland (Qld) nor Northern Territory (NT) have a moratorium on growing GMOs.

Thus, the growing of GMO crops must meet the requirements of both federal and state legislation. In 2003, WA passed the Genetically Modified Crop Free Areas Act 2003 (WA) which enabled the state government to declare GM-free areas. From the outset there was an awareness of the contamination issue: "The state's markets and its good reputation could be seriously damaged if the introduction of GM crops is allowed before adequate segregation and identity preservation systems are in place" (WA Parliament, 2003, p.1). Under this legislation, the whole state of WA was designated as a GM-free area.

Western Australia is the largest state of Australia. The two leading industries are mining and farming. The WA state government changed in 2008, from Labor to Liberal (i.e. to conservative) and Monsanto's herbicide-resistant GM canola (Roundup Ready canola, RR canola) was approved for planting in WA from January 2010 (Table 1). The stipulation in the federal approval process had been

that: “Growers planting GM canola are required by the technology provider to undertake stewardship training to enable the co-existence of GM and non-GM canola” (DAFF, 2008). Concerns about the coexistence of GMO agriculture and the organic sector were dismissed: “ABARE found that GM canola production will have little if any effect on the organic sector” (DAFF, 2008).

The case of *Marsh v Baxter* is a direct outcome of the lifting of the GMO moratorium in WA. Steven and Susan Marsh have a certified organic farm (Eagle Rest, 477 hectares) in Kojonup (about 260 km SE of Perth in the WA wheat belt). The region has an association with organic agriculture since 1928 (Paull, 2014). Michael Baxter has an adjacent farm (Sevenoaks, 900 hectares). Baxter planted GM canola on his farm in the paddocks bordering the Marsh farm in the 2010 planting season. A sequel to that decision coupled with his harvesting method was that GM canola plant material, including seed pods and viable seeds contaminated the Marsh farm and this led to the organic certification over most of the Marsh farm being extinguished. Marsh sued Baxter. Marsh has sought determinations of: (a) nuisance; (b) negligence; (c) an injunction to constrain Baxter from planting GMO canola in the vicinity of the Marsh farm; and (d) damages.

The essential facts of this case are agreed between the parties and are not in contention. It is the interpretation and significance of the facts that are contested. The threat of GMO farming to organic farming is examined in the light of this litigation.

2. METHODOLOGY

The *Marsh v. Baxter* case generated a substantial body of paperwork pertaining to the 12 day trial, including the trial bundle (over 3000 pages), the trial transcript (over 1000 pages), and the judgment (150 pages), along with the submissions and transcripts of the three days of appeals. There was a general consensus about the facts of the case. The present account is informed also by personal attendance for some days of the trial, attendance at the two appeal hearings, a site visit to the Kojonup region and the road forming the common boundary of the Marsh and Baxter farms, and by informal encounters with the parties and their legal representatives at the Supreme Court and Appeals Court of WA.

3. RESULTS

A timeline of the *Marsh v Baxter* (organic v GMO) case is presented in Table 1. To date there is no satisfactory resolution to the grievances of Marsh, and the outcomes so far provide no assurances to the organics sector that GMO is not a threat to the viability of their agricultural practices and their business model.

In the judgement from the case in the Supreme Court of Western Australia the plaintiff's case was lost in its entirety, no nuisance, no negligence, no injunctions, and no damages (Martin, 2014). Added to this, costs of A\$804,000 were awarded to Baxter. The judgement has been appealed on ten grounds, and the costs award has also been appealed. The two appeals have been heard in the Appeals Court of WA, each before a panel of three judges. The determination in this court is of the majority. The outcome of the appeals are awaited.

The need for maintaining a segregation of GMO and non-GMO agriculture was identified as an issue from the outset in the consideration of approving the release of GMO into the Australian agricultural landscape. However no precautions, protocols or penalties for breach were legislated. A farmer who was negatively impacted by GMOs could seek legal redress under existing provisions of the law. Such a post-cautionary approach puts the onus on the injured party to prove injury and to seek remedies. As this case demonstrates, this approach provides scant protection for the organic sector which is particularly vulnerable to the GMO sector since organic certification excludes GMOs from the production chain.

3.1 Agreed Facts

The parties agreed that the Marsh farm is an organically certified farm, certified by NASAA Certified Organic (NCO) the certifying arm of the National Association for Sustainable Agriculture Australia (NASAA). In anticipation that GM canola would be exempted from the WA moratorium on GMOs, Marsh alerted Baxter to the risk to his organic certification of GMO contamination of his farm prior to the exemption. Nevertheless in the 2010 season, the first planting season subsequent to the lifting of the ban on such crops, Baxter planted GM canola, a Monsanto product (RR canola). Baxter was legally entitled to do this. Baxter took the advice in the planting and harvesting of GM canola from an agronomist. The crop was planted with a five metre setback from Baxter's fence line as was specified in the agreement between Baxter and Monsanto (Monsanto, 2010). The Baxter's GM canola was planted in the paddocks adjacent to the Marsh farm. There is a dirt road separating the two farms. Baxter harvested the GM canola using the method of swathing. This involves cutting off the heads the plants, and letting them drop in situ, gathering this loose cut GM canola material into windrows (long piles) and leaving it for some weeks before collecting it. Baxter was an experienced canola grower. He had previously always direct harvested his canola (i.e non-GM canola) so this was a novel harvesting method for him. Wind blew cut GM canola material from the Baxter's farm to the Marsh farm. This had not happened previously from Baxter's growing of non-GMO canola which he had always direct harvested (i.e. the seeds were removed from the canola plants and out of the paddock) and never swathed. 245 GM canola swathes were found by Marsh on his farm. Swathes included seeds and seed pods. Marsh advised his organic certifier, as he was obliged to do under his certification contract. The Marsh farm was inspected by the certifier and subsequently his organic certification was withdrawn in December 2010. Organic certification was reinstated in 2013. Damages to Marsh's enterprise were agreed between the parties at A\$85,000, mostly due to the loss of the organic premiums on farm outputs due to the loss of certification.

DATE	EVENT
2000	Gene Technology Act 2000 (Cth)
2003	Genetically Modified Crop Free Area Act 2003 (WA)
2003, December	Gene Technology Regulator approves Monsanto's Roundup Ready canola (RR canola) a genetically modified canola (GM canola) for commercial release in Australia
2004	GMO Moratorium in WA
2007, 14 September	Marsh farm certified organic by NASAA (National Association for Sustainable Agriculture Australia) and NCO (NASAA Certified Organic)
2008, 6 September	Change of government, Liberal (conservative) government elected in WA
2008, November	Marsh warns Baxter that GM canola (if it were to become legal) could compromise his organic certification
2010, January	WA government approves GM canola for planting across all of WA exempting it from the constraints of the Genetically Modified Crop Free Area Act 2003 (WA)
2010, May	Baxter plants GM canola
2010, 8-10 November	Baxter swathes GM canola (cuts the heads off), herbicides the crop, windrows the cut material in situ for intended collection in 3 weeks
2010, 29 November & early December	Marsh finds GM canola swathes on the road and on his property (cut heads, seed pods, and seeds)

2010, 2-4 December	Marsh harvests the swathes (collects the previously cut GM canola swathes including seeds and seedpods from the windrows of 8-10 November)
2010, December	NCO inspects Marsh property
2010, 29 December	Marsh farm decertified
2011	Marsh finds volunteer GM canola plants on his property
2012, April	Marsh v Baxter instigated: negligence, nuisance, injunction & damages
2013, October	Organic certification reinstated on Marsh farm by NCO
2014, 10-28 February	Marsh v Baxter hearing in the Supreme Court of Western Australia (WA)
2014, 28 May	Marsh v Baxter judgement: case dismissed, costs against Marsh
2015, 23-24 March	Marsh v Baxter appeal #1 re case
2015, 25 March	Marsh v Baxter appeal #2 re costs liability
2015, c.July	Marsh v Baxter appeals: judgements expected

Table 1. Timeline of Organic v GMO: Marsh v Baxter.

3.2 Costs

Having lost the case, legal costs of \$804,000 were awarded to Baxter. Liability for these costs has been appealed. At the time of writing, Marsh has not paid this to Baxter, and it appears that Baxter has not paid this to his lawyers. An order from the costs appeal is that Baxter must declare the details of his communications and dealings with Monsanto and the WA Pastoralists and Graziers Association (PGA) with the view to establishing the money trail. In the event that Baxter has not paid and is not liable to pay his legal costs, that they have been guaranteed and/or paid by a third party, then it was argued that he is not entitled to a windfall gain from Marsh of the said A\$804,000.

Whatever the outcome of the costs appeal, what is clear is that the costs of such legal action places it beyond the reasonable ambit of most farmers of the organic sector. The legal costs of the trial for Marsh are not in the public domain and nor are the costs of the appeals for either parties. If we take it that the legal costs of Marsh and Baxter are comparable (arguably a reasonable assumption) and we pro rata the known Baxter costs of the twelve day trial to the three days of appeals for the two parties, then an estimate of the total legal costs of the two parties to date is A\$2,010,000.

The legal costs of the parties, by the above estimate, are comparable or exceed the value of the Marsh and Baxter farms (477 ha & 900 ha) taken together. Farming properties at Kojonup are presently for sale and offered at A\$1,300,000 (11037 ha plus 3 bedroom house and farm sheds) (Rondoni, 2015) and A\$870,000 (587 ha plus work shop and sheds) (Jannings, 2015). This suggests that such a contest jeopardises the livelihood of the parties as it carries the risk of the loss of the farm and potential bankruptcy for an unsuccessful contestant. The potential asymmetry of such a contest is exacerbated by the willingness, if established, of the multinational Monsanto to fund GMO farmers. Monsanto has a vested interest in the proliferation of GM agriculture and deep pockets, so that an organic or non-GMO farmer may have Monsanto as a proxy defendant.

3.3 Time

This saga has created uncertainty and anxiety for the plaintiff over a seven year period (2008 -2015) and has not yet run its course. This creates a destabilisation of the well being and a distraction from the core business of the plaintiffs, viz. farming.

3.4 Nuisance

To have your neighbour's debris blow on to your property and to require removal is, in any ordinary construction of the word, a nuisance. Losing organic certification due to the "incursion" of this unwanted material is also a nuisance. The judge did not deem that the actual and real 'nuisance' experienced by the Marshes met the legal criteria for nuisance. The judgement states that "there was no unreasonable interference with the Marshes' enjoyment of Eagle Rest" (Martin, 2014). It remains to be seen whether this unfortunate judgement will withstand the appeal.

3.5 Buffer zone

The five metre buffed zone specified in the Monsanto grower licensing agreement is manifestly inadequate to protect the interests of non-GMO growers, and to maintain segregation between GM and non-GM produce. The Marshes sought a permanent injunction retraining Baxter from planting GM canola within 2 km of the Marsh farm. Seeking a permanent injunction puts the case into the realm of the Supreme Court. A useful outcome of this case would have been an injunctioned distance of somewhere between Monsanto's 5 metres and Marsh's 2 kilometres. This aspect of the plaintiffs' case played out as something of a circus as no research was forthcoming to substantiate an appropriate buffer and the plaintiff team retreated in a Dutch auction with their proposals of 1.5 km and 1.1 km, before changing tack to an injunction against swathing. The judge stated: "In circumstances where a court is asked to exercise a discretion to grant permanent injunctive relief, the absence of an empirical basis to support any buffer distance sought (in perpetuity) is a negative consideration of some moment" (Martin, 2014). No injunction was granted and none is now sought.

The resolution of an appropriate buffer zone to protect the integrity of non-GM farming would have been a valuable outcome of this case. As an outcome of Marsh v Baxter, the opportunity has now been, lost for this. A better prepared and researched case may have lead to a less useless outcome. Given the time frame in which this case played out, commissioning research, in the unlikely event that no relevant research was available, would have enabled site specific research, a consideration which may usefully have been considered.

Modelling the wind data, the topography (the organic paddocks were downwind of the GM paddocks), the weight profiles of canola (seeds seed pods, swathes) would have generated dispersal maps of distribution and density coupled with probabilities.

3.6 Contamination

The decertification of most of the Marsh farm (325 ha decertified out of a total of 477 ha; paddocks #7-13 were decertified, paddocks #1-6 retained their certified organic status) was due to the presence of GM canola dispersed over the Marsh farm, and across most paddocks. That the canola was GM canola and that it was from the Baxter farm are not contested. The judgement stated that: "there can be no doubt as to the origin of these canola swathes as being from Sevenoaks" (Martin, 2014, p.25).

From the organics viewpoint the essential aspect of the case is that the Marsh farm was contaminated with GM material. However, the framing of the events as contamination was never accepted by the judge. From the organics point of view contamination was of the essence of the decertification: "According to documentation produced in December 2010 by the senior executive certification decision-maker for NCO (Ms Stephanie Goldfinch), NASAA standard 3.2.9 was invoked to support first the initial suspension, then the decertification of Eagle Rest paddocks 7 - 13. Those paddocks were assessed by NCO as being 'contaminated' by GMOs, raising the underlying question as to what actually had constituted the 'contamination,' for the purposes of the National Standard and the NASAA standards" (Martin, 2014, p.48).

The judge objected to characterising the GM canola in the organic farm as contamination, he preferred to characterise it as an incursion. He wrote of: "the late November/early December 2010 airborne incursion of GM canola swathes into Eagle Rest (described by the Marshes in their pleadings and submissions in tendentious fashion as a 'contamination')"(Martin, 2014, p.15).

Under the organic certification regime GM plant material on an organic farm is contamination . The

judge took an alternative view arguing that the GM canola was “benign”, that for Baxter growing it was “lawful”, that it was not a health risk, that it was not a genetic risk for the plants and livestock of the Marsh farm, and that “there was no evidence at all adduced at this trial of any physical dangers, toxicity or risks of harm to persons, animals or property, by reason of contact with GM canola” (Martin, 2014, p.39).

GM canola was not on trial. It was a strategic legal decision to rely on the exclusion of GMOs from the organic production process under the certification regime rather than to argue the rationale for that exclusion. Perhaps the case was a lost opportunity for putting GM on trial but that was never the intention of the plaintiffs who sought to “protect their patch” and livelihood rather than the much grander project of taking to trial the underlying and incompatible philosophies of organic and GM agriculture.

The failure to get an acceptance from the judge that GM material on an organic farm is contamination for the purposes of organic production severely limited the capacity to achieve a win in this case. If this view prevails beyond the appeal, it affords no comfort to the organics sector for the future.

3.7 Certification

The organic certification over 325 ha (out of 477 ha) was withdrawn due to contamination by GM material. That is the organics view. The judge took an alternative view, it could be said an extreme view, that not only was this not fairly characterisable as contamination, but in any event the decertification was caused not by the incursion of GM canola but by the contract between Marsh and the the organics certifier.

The argument was put, and rebut at the case appeal, that the decertification was a consequence of the contract freely entered into between Marsh and the certifier, NCO. It is a characterisation that might be regarded as bunkum outside of a courtroom. As it was, it was an argument that swayed the judge who went, it would seem, outside his brief and declared that “NCO looks to have acted well beyond the scope of its contractual rights with the Marshes in decertifying 70% of Eagle Rest ... there was no legitimate contractual basis for NCO to decertify” (Martin, 2014, pp.144-145). In a make-work gesture the judge even offered the following gratuitous advice, in his judgement, to sue the certifier: “NCO officials ... applied zero tolerance ... The Marshes would be better served directing their concerns in that contractual quarter as regards the economic loss sustained” (Martin, 2014, p.145).

It is an extraordinary finding that the decertification was the fault of the certifier, rather than of the GM farmer who grew GM canola in paddocks adjacent to the organic farm, up wind of the organic farm, and then opted to swath it, and then left exposed piles of loose cut GM canola plant material (including seeds and seed pods) to the vagaries of the weather in his paddocks for three and a half weeks as it dried out before finally collecting it. There was no claim that Baxter was malicious, nor was there a claim that he was smart.

3.8 Damages

The agreed damages in this case amounted to A\$85,000. This is out of proportion to the legal costs incurred. The judge commented on this lack of proportionality between the loss claimed and the anticipated costs of the recovery: “the \$85,000 damages claimed is, in the context of the costs of Supreme Court litigation these days, a demonstrably uneconomic amount of money to be litigating over” (Martin, 2014). The \$85,000 agreed is below the threshold for uplifting the case to the Supreme Court, however I understand that in the course of proceedings the agreed losses were negotiated down to the said figure. The call for a permanent injunction puts the case into the jurisdiction of the Supreme Court.

3.9 Negligence

The bar for proving negligence is higher than the bar for establishing nuisance. A case that fails on the negligence claim may still be sustained on a nuisance claim as a fall-back. In the present case the judge dismissed the negligence claim declaring that “the common law duty of care as contended for by the Marshes ... is conceptually misconceived and cannot be made out, This is for many reasons. Not

the least is, in a wholly novel case, the absence of a duty of care to avoid a foreseeable economic loss” (Martin, 2014).

The novelty of the case appears to have been somewhat overplayed in the judgement. Baxter was, after all, a well experienced farmer who had grown canola (albeit non-GM canola) for at least ten years, and importantly had grown it at his Sevenoaks farm at Kojonup. He had lived a lifetime in the Kojonup area and cannot have been unaware that there are, on occasions, wind conditions, and that wind can carry plant material over distances and sometimes over great distances. Baxter was well familiar with canola and can hardly have been unaware that the seeds are small, light and can be, indeed will be, displaced by wind, and rather than any novelty at play, this is surely common knowledge of a man of the land. The judge nevertheless declared: “Given that growing novelty for GM canola in WA, there was necessarily a certain amount of initial learning associated with the first planting, nurturing and then harvesting such a GM canola crop. Although Mr Baxter had grown canola crops for approximately 10 years before 2010, he had never harvested any of these crops by swathing ... it should be fairly recognised that there was something of an unknown position ... as the first commercial GM canola crops were planted, then harvested by farmers” (Martin, 2014).

4. DISCUSSION AND CONCLUSION

The case as it stands - the case lost in its entirety and with costs awarded against the plaintiffs - is all bad news for the organics sector and good news for GM agriculture advocates. Just how much of the judgement withstands the case appeal remains to be seen. The costs appeal made some points including that the costs award as it stands, of A\$804,000 to the defendant, may represent a substantial windfall gain for the defendant if the defendant has not paid any such amount (which appears to be the fact) and if he is not liable to pay (or repay) such costs on the grounds that one or several third parties (Monsanto and the PGA were specifically mentioned) have paid his legal costs.

The legal costs of the plaintiffs were underwritten by the Safe Food Foundation from aggregated small donations specifically contributed for the purpose (Kinneer, 2014). However, if the costs award against the plaintiff is upheld then the Marshes face the prospect of losing their farm and livelihood and being bankrupted. It is a game of high personal stakes.

The case, as it stands, offers no comfort that organic agriculture and GM agriculture can co-exist since the GM agriculture permanently puts the organic enterprise in jeopardy and the law offers scant or no protection. Worse than that, a byproduct is that the case may offer a recipe for putting organic farmers out of business and without negative ramifications for the GM sector.

It has been claimed that “The judgement could be seen as a step towards resolving the tension between those who adopt GM technology and those who eschew it, but not an entirely satisfactory one” (Bunn & Douglas, 2014, p.160). That view seems overly optimistic from an organics viewpoint, since there is no resolution from the organics standpoint and no step towards it, rather the contrary. The case to date has evidenced no effective legal protection for the organics sector against the behaviour of a GM farmer. In the present case the GM farmer was at least careless in the management of his GM material, some might say foolhardy. The Marsh v Baxter case evidences no effective legislative protection for the organics sector, and identifies that the present legal and legislative regime puts at risk the organics project, an enterprise which long predates the GM industry and which has earned a valued place in Australia’s agricultural landscape.

The results of appeals against the judgement, and against the awarding of costs are awaited. The legal avenue in this case, beyond the WA Appeals Court, is the High Court of Australia.

REFERENCES

- Bunn, A., & Douglas, M. (2014). Breaking new ground? Nuisance, negligence and pure economic loss in *Marsh v Baxter*. *Torts Law Journal*, 22, 160-182.
- DAFF. (2008). *Biotechnology briefs: Genetically modified crops*. Canberra: Department of Agriculture, Fisheries and Forestry (DAFF).
- Jannings, D. (2015). Poppies (588 Ha - 1452 Ac) \$870,000 Kojonup WA: 30.4.2015. www.realestate.com.au.
- Kinnear, S. (2014). Steve Marsh case fundraising update. Fundraising update, 16 February. Melbourne: Safe Food Foundation (www.safefoodfoundation.org).
- Martin, K. (2014). Judgment: *MARSH -v- BAXTER* [2014] - WASC 187BC201302729; CIV 1561/2012. Perth: Supreme Court of Western Australia.
- Monsanto. (2010). *Monsanto Technology/Stewardship Agreement*. St. Louis, MO: Grower Licensing, Monsanto.
- OGTR. (2014). *Table of applications and authorisations for Dealings involving Intentional Release (DIR) into the environment*. Canberra: Office of the Gene Technology Regulator (OGTR). www.ogtr.gov.au.
- Paull, J. (2008). The lost history of organic farming in Australia. *Journal of Organic Systems*, 3(2), 2-17.
- Paull, J. (2014). Ernesto Genoni: Australia's pioneer of biodynamic agriculture. *Journal of Organics*, 1(1), 57-81.
- Rondoni, T. (2015). Gracefield, Albany Highway, Kojonup (1037 Ha, 2563 Acres) \$1,300,000 Kojonup WA: 30.4.2015. www.realestate.com.au.
- WA Parliament. (2003). *Explanatory Memorandum, Genetically Modified Crops Free Areas Bill (WA)*. Perth: WA State Government.