

# Organic versus GM Agriculture in the Courtroom in Australia and the United States

Michael Blakeney

University of Western Australia and Queen Mary University

This article looks at two 2014 cases concerning the threat to organic farming from genetically modified (GM) agriculture. The first, *March v. Baxter* in the Supreme Court and Court of Appeal of Western Australia, concerned a dispute between two neighboring farmers in which one claimed that the loss of his organic certification was attributed to the harvesting practices of his GM-producing neighbor. The second, *Organic Seed Growers and Trade Association et al. v. Monsanto*, concerned an unsuccessful application by a number of farmers' organizations in the United States seeking a declaration that, should their crops become contaminated by the adventitious presence of patented genetic material, they should not be sued for patent infringement. The Australian case, which was a world's first between neighboring farmers, made some useful comments on organic certification practices. The US decisions in the Southern District of New York and the Court of Appeals laid to rest some of the concerns that had been raised in the Canadian Schmeiser case about the liability of farmers for innocent patent infringement.

**Key words:** GM agriculture, organic agriculture, Australia, United States, intellectual property, negligence.

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## Introduction

The size of the trade in organic agriculture was estimated to be worth US\$64 billion in 2014 (Willer & Lemoud, 2014) and has been increasing at a rate of 10%. This valuable trade is of obvious interest also to developing countries that are primarily agriculture-based economies. As early as 2003, the European Commission identified that the cultivation of GM crops was likely to have implications for the organization of organic agricultural production. In a communication of that year it observed that the possibility of the adventitious presence of GM material in organic crops raised the question as to how producer choice for the different production types could be ensured (European Commission, 2003). Additionally, the successful segregation of GM from organic agriculture is indispensable in preserving access to the lucrative trade in organic products. This article looks at litigation in Australia and the United States concerning the liability that arises in circumstances where GM cultivation was said to have imperiled organic agriculture.

The Australian case, *March v. Baxter* (2014), which commenced in the Supreme Court of Western Australia, concerned a dispute between two neighboring farmers in which one claimed that the loss of his organic certification was attributed to the harvesting practices of his GM-producing neighbor. The US litigation, *Organic Seed Growers and Trade Association et al. v. Monsanto* (2013), concerned an unsuccessful application by a

number of farmers' organizations seeking a declaration that should their crops become contaminated by the adventitious presence of patented genetic material they should not be sued for patent infringement.

## Australia's GMOs Regime

The release of genetically modified organisms (GMOs) in Australia is regulated by a combination of federal and state legislation. The Gene Technology Act (GTA) of 2000 and the Gene Technology Regulations 2001 (Cth) is federal legislation that establishes the Office of the Gene Technology Regulator (GTR) to identify and manage the risks posed by gene technology (Australian Government, 2008). The release of GMOs into the environment for agricultural purposes is prohibited unless authorized under the GTA (Commonwealth of Australia, 2000, Sections 32:1 and 33:1).

The GTA sets out requirements that the GTR must follow when considering an application for a license to release a GMO into the environment. The GTR is authorized to grant a license if it is satisfied that any risks to human and environmental safety posed by the GMO can be managed. Licenses and public risk assessments are used to control GMO releases, and strict liability is imposed for breach of the regulations. The GTR can require license holders to maintain buffer zones or physical barriers between GM and non-GM crops, clean equipment, and introduce seed handling and transport regimes to reduce the chance of contamination (see

Lawson, 2002; Ludlow, 2004; Young & Haynes, 2000). However, it is not yet clear what distance between GM and non-GM crops is necessary to prevent cross-pollination and contamination.

Monsanto was granted a licence for the release of Roundup Ready® canola “after extensive consultation on the risk assessment and risk management plan with the public, State and Territory governments, Commonwealth agencies, the Federal Environment Minister, the Gene Technology Technical Advisory Committee, and local councils, as required by the GTA” (Australian Government, 2002).

The GTA does not deal with the economic liability to neighboring farmers adversely affected by genetic contamination (Deakin, 2008), as the GTR does not consider the repercussions of a GMO release on the agriculture of third parties when it assess the risks of a release (see Ludlow, 2005a). This means that neither the GTA nor state legislation gives statutory immunity to farmers who comply with the regulations but nevertheless cause damage to others (Ludlow, 2005b). GM farmers could assert that the GTR has authorized a GM release, having struck a balance between the parties’ competing interests, and the court should not seek to reopen the matter (Ludlow & Smyth, 2011); however, an argument of statutory authority or that the legislation ‘covers the field’ is unlikely to succeed, given that the risk assessments are not comprehensive (Lunney & Burrell, 2006). In other words, the GTA may minimize the likely risks posed by GMOs by identifying some risks and seeking to minimize their impact through appropriate management, but the GTA does not establish a cause of action for any third parties affected by economic, health or environmental loss, or damage resulting from GMOs.

When developing its GM policy, the Commonwealth Parliament chose not to implement special liability arrangements for harm caused by GM contamination (Australian Senate Community Affairs References Committee, 2000) because it intended that questions of liability for harm be determined by the common law remedies including negligence and private nuisance. They were therefore deliberately retained in the GTA.

Under the GTA, it is a matter for individual states and territories to decide whether to allow GM crop production. In 2003, the Parliament of Western Australia passed the *Genetically Modified Crop Free Areas Act 2003* (WA), which permitted the Western Australian Minister for Agriculture to designate GM-crop-free areas. The *Western Australian Government Gazette* (2004) carried the Minister for Agriculture’s Genetically

Modified Crops Free Areas Order 2004, which designated the whole of the state of Western Australia as an area where GM crops could not be cultivated. Following a change of government at the 2008 state election, on January 25, 2010, the Minister for Agriculture issued an exemption order pursuant to the Act, exempting any person from growing GM canola in any part of Western Australia provided that it was licensed under the GTA.

## GM Agriculture in Australia

The Australian Department of Agriculture takes the position that GM technology can assist in managing pressure on global food supplies and the management of pest and diseases (Australian Department of Agriculture, Fisheries, and Forestry, 2011). Currently, the only GM food crops produced in Australia are canola and cotton, but a variety of other GM foods can be imported and used as an ingredient in packaged foods. GM cotton has been grown commercially in Australia since 1996. GM canola, modified for herbicide tolerance, was approved for commercial production in Australia in 2003. GM crops accounted for 15% to 20% of Australia’s 3.2 million tonne canola crop in 2012/13 (Packham, 2014), and the proportion has been growing. However, due to bans imposed by state governments, GM canola is currently grown only in the states of New South Wales, Victoria, and Western Australia. Food Standards Australia New Zealand (FSANZ) allows manufacturers to use a wide range of imported GM food ingredients, GM varieties of soybeans, corn, rice, potatoes, and sugarbeet (see FSANZ, 2015).

Field trials of GM pineapple, papayas, wheat, barley, and sugarcane are under way in Australia and gene technology research is also under way in Australia on bananas, rice, and corn (Australian Government, n.d.).

It is estimated that currently agricultural biotechnology in Australia is worth between \$1.5 billion and \$5.8 billion in national economic gains to 2015 (Apted, McDonald, & Rodgers, 2005). Given the expectation that climate change will cause a decline in agricultural yields and a higher occurrence of extreme climate events that will interact to affect agricultural productivity, quality, pests, and diseases, it has been argued that Australians will have to accept GM food if the agricultural industry is to continue in an era of climate change.<sup>1</sup>

1. Professor Mark Tester from the Australian Centre for Plant Functional Genomics at the University of Adelaide has said that GM food should be embraced as farmers battle the effects of global warming (see *The Sydney Morning Herald*, 2007).

Concerns have been expressed in the farming community that those non-GM farmers exposed to GM material might lose their organic status and suffer consequential economic loss (ACIL Tasman, 2005). The Organic Federation of Australia has stated that the right to be “GM-free” is a fundamental right that must be preserved, as it is a responsibility that farmers have to ensure their actions do not impact upon others (Australian Department of Agriculture, Fisheries, and Forestry, 2003). The GM industry, on the other hand, has said that we need to consider the concept of ‘freedom to farm’ and the ability and freedom of adjacent farmers to make their own decisions with respect to growing non-GM and GM crops (Australian Department of Agriculture, Fisheries, and Forestry, 2003). The fact is that the nature of farming practices is such that it is impossible to achieve perfect coexistence in a situation where farmers could choose to either embrace or completely avoid GMOs (Ludlow, 2005b).

Non-GM farmers are concerned that GM crops will contaminate their crops in a great variety of ways; cross pollination can occur when pollen disseminates over long distances (Hardy, 2008), and pollen dispersal can occur by wind, insects, and other carriers. Seeds can also be dispersed during transport, cropping, or harvesting.<sup>2</sup> The loss of organic certification carries the risk of the loss of access to organic markets in which a premium price can be charged. For example, in 2014 Japan and South Korea were reported to have halted American wheat shipments after an Oregon wheat farmer’s field tested positive for an unapproved GMO wheat variety (Adams Sheets, 2014).

There have been few cases between organic and GM farmers and little Australian case law with respect to the analogous situation of the spread of conventional agricultural organisms from one property to another.<sup>3</sup> The recent decisions of the Supreme Court and Court of Appeals of Western Australia in *Marsh v. Baxter* (2014) have attracted widespread interest, both domestically and internationally, as it is thus understood to be the first legal proceeding of its kind—a claim for economic loss

caused by a GM incursion brought by one farmer against his neighbor.

### **Marsh v. Baxter in the Supreme Court of Western Australia**

Steve Marsh and his wife—organic farmers from Kojonup, Western Australia—had entered into a contract for organic certification with the National Association of Sustainable Agriculture (Australia) Ltd. (NASAA) for their farm, Eagle Rest. Their farm shared a boundary with a neighboring farm operated by Michael Baxter, which was on the opposite side of a 20 meter road. In early 2010, Baxter planted a crop of Monsanto’s Roundup Ready (RR) GM canola in the paddocks of his farm, which were adjacent to Eagle Rest, and he had notified Marsh of his intention to do so. On September 29, 2010, Marsh had hand delivered to Baxter a document entitled ‘Notice of Intention to Take Legal Action,’ which stated, amongst other things that

1. *The use of genetically modified organisms in farming, including GM canola seed (GMOs), has the potential to cause catastrophic commercial losses to non-GM farmers and particularly to non-GM farmers that have been accredited as being organic (or sustainable) farms (Organic Farmers) if GMOs enter upon and contaminate a non-GM farm or non-GM farm production cycle;*
2. *The principal cause of the commercial losses to Organic Farmers as a consequence of GMOs contaminating a non-GM farm or non-GM farm production cycle is as a result of the forfeiture of the price premiums attached to the sale of the produce grown by Organic Farmers and/or the withdrawal of their accreditation as Organic Farmers. There may also be other costs and expenses incurred as a direct consequence of such contamination by GMOs.*

On October 25, 2010, Marsh had published in local newspapers notices to the effect that Eagle Rest was a ‘GMO free area.’

In November 2010, Baxter harvested the GM canola by the process of swathing. This involved cutting the not yet fully matured canola plant close to its base. The swathes were then stood to ripen in the paddock for several weeks before being processed by a header to harvest the ripened seeds from each swathe. This was the first time Baxter had swathed his canola instead of direct harvesting.

2. *Because of Australia’s size, produce is often transported thousands of kilometers. For example, in 2002, GM seed from New South Wales was spilled in Darwin on its way to Western Australia (see Randerson, 2002).*

3. *Parliament intended that liability with respect to GMO contamination be consistent with how contamination is dealt with in other areas (Australian Department of Agriculture, Fisheries and Forestry, 2003).*

A total of approximately 245 GM canola swathes were blown by the wind and landed on the Marshes' farm in late November/early December 2010 (*Marsh v. Baxter*, 2014).

After inspection of the GM canola swathes, NASAA decertified approximately 70% of Eagle Rest on the basis of an assessment that the RR canola swathes and seed pods identified on Eagle Rest posed an "unacceptable risk" of contamination under NASAA Standard 3.2.9, which provided that "organic certification shall be withdrawn where NASAA considers there is an unacceptable risk of contamination from [genetically modified organisms] or their derivatives."

The Marshes sued Baxter for AU\$85,000 for the loss arising out of the loss of NASAA/NASAA certified organic (NCO) certification for 70% of Eagle Rest, citing negligence and private nuisance as the two causes of action. These actions were dismissed by the Supreme Court of Western Australia (*Marsh v. Baxter*, 2014) and the Court of Appeal of Western Australia (*Marsh v. Baxter*, 2015).

### ***Negligence Proceedings in the Supreme Court of Western Australia***

The Marshes claimed that the presence of GM canola swathes had caused them to lose their contractual right to apply the "NASAA Certified Organic" label when selling their organically grown crops and livestock. They claimed economic loss only and sought common law damages and a permanent injunction to restrain Baxter from swathing a GM canola crop in the eastern boundary of his farm.

The Marshes alleged that Baxter knew of their organic certification and did not take reasonable steps to prevent movement of his GM canola seeds to Eagle Rest. The Marshes claimed that Baxter breached his duty of care to ensure that there was no escape of GM material and no loss to the Marshes. The Marshes' private nuisance claim centered upon an alleged unreasonable interference by Baxter in the Marshes' ordinary use and enjoyment of their land.

Justice Martin observed that the negligence claim "traverses into legally uncharted territory" (*Marsh v. Baxter*, 2014). He said that the duty alleged was novel and faced a conceptual difficulty given the law's reluctance to expand the categories of cases in which economic loss is recoverable (*Marsh v. Baxter*, 2014). His Honor's key finding was that the Marshes' loss was without precedent and that no basis in principle had

been shown to extend the law regarding pure economic loss to the events.

Justice Martin commented that the duty alleged by the Marshes "to ensure that the Marshes did not suffer loss" was absolute and set far too high the circumstances involving broad-acre farming, which was exposed to uncontrollable seasonal weather (*Marsh v. Baxter*, 2014). If a duty of care was more specifically formulated, a plaintiff might have better chance of success. For example, from the point of causation, the Marshes' real grievance was Baxter's choice to harvest by swathing (*Marsh v. Baxter*, 2014), not his decision to grow GM canola, thus the alleged duty of care could have related to Baxter's choice of harvesting method. However, on the facts, it had not been shown that Baxter had acted negligently, either by growing or by swathing RR canola.

The closest Australian precedent for the court to consider was the Australian High Court decision in *Perre v. Apand* (1999). Apand had supplied potato seeds that were infected with bacterial wilt to the Sparmons in South Australia. The Perres grew potatoes for export to Western Australia, where they received a considerably higher price than was available elsewhere in Australia. Regulations in Western Australia prohibited the importation of potatoes if they had been grown on a property within 20 kilometers of any bacterial wilt. The Sparmon's farm was within this zone and, although none of the potatoes grown by the Perres were actually infected by bacterial blight, they could not legally be exported to Western Australia. The Perres sought to recover the economic loss caused by their loss access to the higher-priced Western Australian market. The High Court unanimously held that Apand owed the Perres a duty of care to prevent economic loss.

Following this decision, Allsop in *Caltex Refineries (Qld) Pty Ltd v. Stavar* (2009) stated that there are 17 different 'salient features' that are potentially relevant to recognizing a duty of care with regard to pure economic loss. Australian courts will place heavy emphasis on policy considerations in determining whether there is a duty of care in these situations, even when the reasonable foreseeability requirements are satisfied (Ludlow & Smyth, 2011).

It was a fundamental requirement in *Perre v. Apand* (1999) that the class of persons suffering loss could be ascertained to avoid indeterminate liability. This is important because trace amounts of seed and pollen can be distributed over large distances (Garforth, 2006). If a GM farmer knows his neighbors are GM-free, he may owe them a duty of care because they are an identifiable

class. There would be a stronger argument for foreseeability if GM crops were cultivated within a GM-free zone, such as those states in which moratoriums still exist. Nevertheless, the decision in *Perre v. Apand* (1999) shows that it may be reasonably foreseeable that non-GM farmers could be harmed, even when there is no physical contamination, if the defendant has knowledge of the particular market conditions for non-GM produce. Indeterminacy in respect to those who have suffered economic loss from GM farmers should therefore not be a basis for refusing to find a duty of care,<sup>4</sup> particularly in the context of neighboring farmers.

The vulnerability of the plaintiff is another important determinant of the duty of care. Callinan in *Perre v. Apand* (1999, para. 328) stated that “the appellants were rendered powerless to abate or prevent the occurrence of the loss to which they were subjected...in no way did they act illegally, improperly or unreasonably or without regard for their own interests.” But GM farmers may assert that economic loss suffered by non-GM farmers is the result of adoption of voluntary standards, such as contractual arrangements with organic bodies, causing them to be especially vulnerable. As a matter of policy, an organic farmer who voluntarily adopts a form of agriculture economically susceptible to adverse consequences if GMOs are released should not be able to force GM farmers to cease doing something they otherwise could. For conventional farmers, for whom there is no special vulnerability, there is little evidence that conventional non-GM crops attract any price advantage over GM crops (ACIL Tasman, 2005).

A breach of duty could result from failing to adhere to ‘good practice’ in GM crop cultivation. However, in *Perre v. Apand* (1999, para. 224), McHugh stated that “as long as a person is legitimately protecting or pursuing his or her social or business interests, the common law will not require the person to be concerned with the effect of his or her conduct on the economic interests of other persons.” The non-GM and GM farmers may well be in competition with each other; therefore, imposing a duty could even hinder competition, and courts are reluctant to hamper market competition by protecting resultant losses of commercial interests, opportunities or advantages (McGivern, 2002).

With respect to the choice to grow GM crops over conventional or organic crops, McHugh said in *Dovuro Pty Ltd. v. Wilkins* (2003, para. 330) that

“a defendant is not negligent merely because it fails to take an alternative course of conduct that would have eliminated the risk of damage....If inaction is a course reasonably open to the defendant, the plaintiff fails to prove negligence even if there were alternatives open to the defendant that would have eliminated the risk.”

While Justice Martin in *Marsh v. Baxter* noted that economic loss has been successfully recovered in *Perre v. Apand*, that case showed physical damage (disease) caused to the potatoes, whereas in the case of the canola swathes, there was no risk of any GM genetic trait transfer to any species (Ambrose, 2014).

It should be noted that the negligence claim ultimately failed because of the break in the chain of causation arising from the conduct of NASAA. In this case, Justice Martin found that the ‘vulnerability’ concept from *Perre v. Apand* (2014) did not extend to catch what was a different and ‘self-inflicted’ contractual vulnerability. The Marshes’ vulnerability to economic loss arose from their contractual relationship with NASAA.

### ***Negligence Proceedings in the Court of Appeal***

On September 3, 2015, the Court of Appeal of Western Australia, by a majority of 2:1, upheld the decision of the court below and dismissed the appeal (*Marsh v. Baxter*, 2015). The majority judges, Newnes and Murphy, observed that it was not in dispute “that in the particular circumstances of this case, the GM plant material that landed on the appellants’ farm posed no risk of any genetic trait transfer to any species of crop or produce on the appellants’ land” (para. 385). They noted that although some 245 swathes had entered onto the appellants’ land, only eight volunteer GM canola plants were ever detected in the subsequent growing season and that these had been identified and pulled out by Mr Marsh, “presumably before they had set seed” (para. 426).

On the question of negligence, the majority judges ruled that

“ordinarily, in our view, the law would not require a farmer in Kojonup directing his or her mind at harvest time, to swathing or direct heading of the crop, to reasonably have in contemplation the effect of that decision on the economic

4. See *Dovuro Pty Ltd. v. Wilkins* (2000), describing the vulnerable class, comprising the ultimate purchasers of contaminated seed, as limited and ascertainable.

interests of other farmers in the district, whether on adjoining farms or up to 10 km away. That would still ordinarily be the position, in our view, even where the owners of a neighboring organic farming enterprise had informed others in the district about their organic certification by taking out advertisements in local newspapers, or by putting up signs on their fences to that effect” (*Marsh v. Baxter*, 2015, para. 647).

They drew a distinction between a farmer deciding how to harvest his or her crop with other cases in which liability in negligence for pure economic loss had been found by the High Court, e.g., a solicitor who negligently draws a will—in effect, disinheriting his or her client’s intended beneficiary (*Hill v. Van Erp*, 1997); or the builder who negligently builds a suburban home with defective foundations (*Bryan v. Maloney*, 1995); or the dredger that negligently dredges and fractures a pipeline (*Caltex Oil [Australia] Pty Ltd. v. The Dredge ‘Willemstad’*, 1976). The majority judges observed that in those cases, not only was the defendant’s fault or blameworthiness, at least prima facie, more palpable, but it would be expected that the defendant in those cases would well understand the deleterious financial consequences that would almost certainly be visited upon the plaintiff in the ordinary course if the defendant were careless (*Marsh v. Baxter*, 2015).

The joint judgement ruled that the appellants did not established that a duty of care was owed in the particular circumstances of this case (*Marsh v. Baxter*, 2015) and that in any event, reasonable foreseeability of the risk of economic loss was not in itself sufficient to generate a duty of care in the circumstances of the case. Even if such a duty was feasible, the joint judges considered it to be too indeterminate on the facts of this case.

The joint judgement left it open for a duty of care to be imposed in a subsequent case. In late 2010, the respondent had sound financial and farming reasons for swathing his canola crop. There was at that time no expectation that swathes would be picked up and carried across to the appellants’ property by strong winds. However, the extreme weather events of that time could counsel prudence in the future and that harvesting should be by direct heading rather than swathing to avoid contamination of neighboring properties.

The minority judge was the President of the Court of Appeal—Judge McClure. She considered that “a reasonable person in the position of the respondent ought to have known that there was a real risk that GM canola swathes could be blown by strong winds” from his prop-

erty onto Eagle Rest (*Marsh v. Baxter*, 2015, para. 135) and that “the respondent had no compelling reason to harvest his GM canola in late 2010 by swathing” (*Marsh v. Baxter*, 2014, para. 136). On these bases she challenged the trial judge’s finding that “the respondent did not know, and ought not reasonably to have known, of the risk of GM canola swathes being carried by the wind from Sevenoaks to Eagle Rest, and thus the risk of that occurrence was not reasonably foreseeable” (*Marsh v. Baxter*, 2014, para. 316). McClure also found that in these circumstances the decertification of the appellant by NCO was not unreasonable.

### ***Nuisance in the Supreme Court of Western Australia***

The Marshes argued that the presence of GM canola on Eagle Rest constituted an unlawful interference with their use and enjoyment of the land. In particular, it was submitted that the interference and consequential loss of certification resulted in the Marshes not being able to use Eagle Rest to cultivate certified organic crops or livestock. Justice Martin focused on the balance between what Baxter was lawfully entitled to do on his farm and the Marshes’ right not to have their use and enjoyment of Eagle Rest unreasonably interfered with (*Marsh v. Baxter*, 2014).

He observed that Baxter’s conduct was not unreasonable as swathing was not a novel or unconventional method of harvesting (*Marsh v. Baxter*, 2014). Baxter could not be held legally responsible for growing a lawful crop and swathing (an entirely orthodox harvesting methodology), which he had undertaken on the advice of his agronomist. He had legitimate reasons for swathing as it would assist weed control. Furthermore, Baxter did not intend to cause any loss to the Marshes and there was no recommended swathing buffer distance suggested for GM canola grown during the 2010 season. It was also noted that GM canola being blown onto Eagle Rest was not reasonably anticipated by Baxter and had been caused by unexpectedly strong winds (*Marsh v. Baxter*, 2014). Justice Martin recognized that the level of experience of a GM farmer and the local farming community is a relevant factor in assessing liability (Smith, Gray, & Elks, 2014). Thus, farmers who make reasonable, considered, and commercially appropriate decisions are legally entitled to utilize any variety of legal farming production practices to enhance their productivity and commercial interests (Perpitch, 2014). However, Justice Martin commented that had the underlying facts been different—for example an incursion of

a physically dangerous substance like a pesticide or herbicide causing physical damage—the nuisance action would be different (Ambrose, 2014). The hurdle organic farming plaintiffs face is that GM material has so far proved to be benign.

The consideration of the plaintiff's vulnerability to economic loss in a nuisance action was treated the same as that undertaken from a duty-of-care perspective (*Marsh v. Baxter*, 2014). Justice Martin was not willing to extend the vulnerability concept to a 'self-inflicted contractual vulnerability,' especially where the conduct of the NASAA/NCO might be assessed as unreasonable, or even in breach of their contractual terms with the Marshes. As to the private contractual arrangements, Justice Martin considered that idiosyncratic contractual arrangements might "be assessed as a wholly unreasonable status quo from the broader community perspective" (*Marsh v. Baxter*, 2014, para. 379). The judgment confirms that in an assessment of private nuisance, it is appropriate and necessary for the Court to conduct some high-level analysis of the workings of private contractual arrangements; in this case, it is between the Marshes and NASAA/NCO (*Marsh v. Baxter*, 2014).

### **Nuisance in the Court of Appeal of Western Australia**

The appellants' case in nuisance depended upon establishing that the presence of the GM canola seeds from the swathes exposed them to the risk of decertification under the NASAA contract. The majority judges observed that in the district of Kojonup, "swathing was a conventional and moreover the generally preferred method of harvesting canola crops, and formed part of the common and ordinary use of the land" (*Marsh v. Baxter*, 2015, para. 779). The question then was whether the incursion of swathes involved an interference that was beyond what an ordinary, average resident of the district should reasonably have expected under the circumstances.

The joint judges noted that the GM canola swathes that were transferred to the appellants' land were benign in the sense that there was no risk of any genetic transfer to any species of animal, crop, or produce, and there was also no prospect that the GM canola seeds could germinate and become a volunteer plant before the appellants harvested their wheat in early 2011 (*Marsh v. Baxter*, 2015). They took account of a Western Australia Department of Agriculture newsletter that said that non-GM canola and GM canola crops should be segregated; within the context of a trading standard for non-GM

canola seed, a presence of less than 0.9% of an adventitious approved GM canola in the seed was required. In light of this, they held that the trial judge did not err in his conclusion that there was no unreasonable interference with the appellants' use and enjoyment of Eagle Rest as a result of the incursion of GM canola swathes.

The dissenting judge upheld the appellants' nuisance claim. She saw this claim to be whether the interference with the appellants' use and enjoyment of Eagle Rest "was substantial and unreasonable" (*Marsh v. Baxter*, 2015, para. 258). McClure noted that "the central issue not addressed by the trial judge is whether the arm to the appellants could have been avoided without appreciable prejudice to the respondent's interests" since the respondent had no compelling reason to swathe his GM canola (*Marsh v. Baxter*, 2015, para. 271). The President also disagreed with the trial judge's finding that swathing was part of the "ordinary usages" of broadacre farming in the Kojonup locale, as he did not address the real issue, "which is what was reasonable in the circumstances having regard to the fact that in 2010 GM canola was being grown in this State for the first time and was accompanied by public warnings from the Ag Department as to the care required to ensure the co-existence of organic, non-GM, and GM farming" (*Marsh v. Baxter*, 2015, para. 272). Consequently, she ruled that in 2010 "the harvesting of GM canola, by swathing or otherwise, was not among the ordinary usages of broadacre farming in Kojonup" (*Marsh v. Baxter*, 2015, para. 272) and that the physical incursion of GM canola swathes, cultivated by the respondent, from his farmland onto the appellants' farmland created NCO decertification and had the consequence of preventing the appellants from continuing their business of producing certified organic products from 70% of their farmland for three years.

McClure concluded that the evidence supported a finding "that the respondent failed to harvest the GM canola crop in a manner which would have made it possible to avoid the damage caused to Eagle Rest without appreciable prejudice to his own interests" (*Marsh v. Baxter*, 2015, para. 274).

Given the majority decision in the Court of Appeal, with the strong dissent by McClure, it would not be surprising if this case was appealed on to the High Court of Australia.

### **DNA Patenting in Australia**

An appeal of *Marsh v. Baxter* to the High Court would occur at a time when that court had set its face against DNA patenting. In *CancerVoices Australia v. Myriad*

*Genetics Inc.* (2013), the Australian Federal Court at first instance ruled that isolated human DNA was patentable because the breaking of covalent bonds linking the gene to the rest of the chromosome made it sufficiently different from the gene as found in the human body. The Australian High Court had previously held in *National Research Development Corporation v. Commissioner of Patents* (1959) that the subject matter of a patent claim had to consist of an “artificially created state of affairs” that provided a new and useful effect of economic significance. The trial judge applied this decision in observing that isolated DNA was the product of human intervention and involved processes of extraction and purification, as well as immense research and intellectual effort.

The Full Federal Court followed the same approach as the trial court in upholding the patent (*D’Arcy v. Myriad Genetics Inc.*, 2014). By the time the case went before the Full Federal Court, the US Supreme Court had ruled that that a naturally occurring DNA segment was a product of nature and not patent eligible merely because it has been isolated. However, the Court noted that in Australia there was no statutory or jurisprudential limitation of patentability to exclude ‘products of nature.’ The Full Federal Court also noted that Myriad’s patent claim was “not, as the US Supreme Court considered, concerned *primarily with the information contained in the genetic sequence* [rather than] *with the specific chemical composition of a particular molecule*” (*D’Arcy v. Myriad Genetics Inc.*, 2014, para. 2.16).

The case was appealed to the High Court of Australia, which handed down its decision on October 7, 2015. The High Court reversed the court below; the majority observed that despite the formulation of the claimed invention as a class of product, its substance was “information embodied in arrangements of nucleotides [which was] not ‘made’ by human action” (*D’Arcy v. Myriad Genetics Inc.*, 2014, para. 4). The majority observed that

“where an affirmative application of the concept is likely to result in the creation of important rights as against the world, to involve far-reaching questions of public policy and to affect the balance of important conflicting interests, the question must be asked whether that application is best left for legislative determination. The patentability of nucleotide sequences derived from human DNA is in that category. The inherent patentability of the invention as claimed would powerfully imply patentability of any claim for an isolated nucleic acid coding for a specified

polypeptide” (*D’Arcy v. Myriad Genetics Inc.*, 2014, para. 4).

As a matter of policy, the majority observed that there was a real risk that the chilling effect of the claims—on the use of any isolation process in relation to the patented gene—would lead to the creation of an exorbitant and unwarranted *de facto* monopoly on all methods of isolating nucleic acids containing the sequences coding for the protein.

The High Court’s decision may raise a question as to whether it will support the glyphosate-resistant patents which underpinned *Marsh v. Baxter*.

### Implications of the Case for Organic Farming in Australia

*Marsh v. Baxter* was not about the legality of growing GM crops, nor was it about GM contamination of crops or consumers’ choice to eat GM-free food. The case seemed to be a platform for anti-GM sentiment and the ideological battle between organic farmers and GM farmers. In cases such as *Marsh v. Baxter*, the issues publicized may bear little resemblance to those argued in the courts and can lead to a public that is completely misinformed (Tiller & Hill, 2014). The judgment has been lauded as a triumph of common sense and freedom of farming choice (Jones, 2014). A victory for the Marshes may have had broad and damaging implications for the GM community, especially those farmers who share boundaries with certified organic farmers. At the same time, the decision does not suggest that growers of GM crops have immunity or protection against similar claims in the future. Instead, it establishes that something more will be required for a claim of negligence or nuisance to succeed, for example, economic loss that is not caused by a self-inflicted vulnerability. Where adjoining farms grow a compatible crop species, genetic contamination is possible and physical damage—as well as economic loss because of decertification—could be suffered. A duty of care to take reasonable steps to prevent contamination could be owed in such circumstances. For this reason, the decision in *Marsh v. Baxter* does not imply that plaintiffs who have suffered economic loss will be prevented from recovery against GM farmers.

The tort regime will not always compensate economic loss, as illustrated by *Marsh v. Baxter*. A potential plaintiff may face difficulty and expense in establishing foreseeability, causation, and proving the extent of any damage because of the possible time lapse before dam-



age is discovered and the scientific evidence that would be required comes to light (Law Commission, 2002). They may also be prevented from recovery if their loss derives from a self-inflicted vulnerability, such as an organic certification contract. This area of law and development remains very much unsettled. It is clear that further judicial or legislative consideration will be required to clarify the issues (Gill, 2014).

*Marsh v. Baxter* has highlighted contradictions between current Australian farming practices and the organic-certifying regulations. Justice Martin suggested that the major cause of the dispute in the case was the inflexibility of the NASAA guidelines. In some ways, the contradiction is unique to Australia because the Australian organics industry has zero tolerance for the presence of any GM material in certified organic product (McAloon, 2014). In other countries, there is a tolerance for very small levels of legally approved seeds, pollen, or other material to be found in a crop, even in organics.<sup>5</sup> In the United States, there is not a legally established or recognized tolerance threshold. But the comments to the US National Organic Program clearly state that the inadvertent presence of genetically engineered material does not affect the organic status of a product or the land (Organic Trade Association, 2014). Even in Europe, where anti-GM sentiment is stronger, there is a 0.9% tolerance (Jones, 2014), recognizing that cross-pollination is considered an unavoidable consequence of large-scale farming. In the aftermath of *Marsh v. Baxter*, the Western Australian government has lodged a request with the Organic Industry Standards and Certification Council for the tolerated threshold of GM trace elements in organic products to be increased from zero to 0.9%, consistent with the approach in other countries.

Placing the threshold for contamination within a nationally consistent framework—like the GTA—is necessary because many issues raised by agricultural biotechnology are trans-border in nature (Deakin, 2008). Even NASAA General Manager, Ben Copeman, says that the court's decision in *Marsh v. Baxter* not to recognize NASAA's decertification as warranted, highlighted a need for greater regulatory certainty for organic producers. Once those tolerances are set, any farmers who voluntarily contract to meet stricter standards accept an

increase in contractual risk in return for possible higher prices or greater market access and should bear the costs to fulfill such contracts accordingly (ACIL Tasman, 2005). This sort of reform would allow the common law remedies of negligence and private nuisance to compensate non-GM farmers appropriately for economic loss because it diminishes the issue of whether the loss was caused by a self-inflicted vulnerability and whether the level of contamination was 'reasonable.' More certainty should exist in the market for both GM and non-GM farmers as to their legal rights.

### **Organic Seed Growers & Trade Association v. Monsanto (2013)**

#### ***Monsanto and "Inadvertent" Contamination***

An issue that was not canvassed in *Marsh v. Baxter* (2014) was whether the Marshes would have been liable for infringing Monsanto's patents over GM canola if they had cultivated canola adulterated with Monsanto's proprietary genes. This issue had been addressed in the now notorious Canadian litigation between Monsanto Canada, Inc., and a farmer, Percy Schmeiser. Schmeiser grew canola commercially in Saskatchewan. He had never purchased Monsanto's patented RR canola nor did he obtain a license to plant it. Yet, in 1998, tests revealed that 95% to 98% of his 1,000 acres of canola crop was made up of RR plants. The origin of the plants is unclear. They may have been derived from RR seed that blew onto or near Schmeiser's land. Monsanto brought an action for patent infringement. In finding patent infringement, the trial judge ruled that the growth of the seed, reproducing the patented gene and cell, and sale of the harvested crop constituted taking the essence of Monsanto's invention, using it without permission, and in so doing infringed the patent. By a majority of 5:4 the Federal Court of Appeal ruled that Schmeiser's saving and planting seed, then harvesting and selling plants that contained the patented cells and genes appeared to the Court, on a common-sense view, to constitute "utilization" of the patented material for production and advantage, within the meaning of s. 42 the Canadian Patent Act (*Monsanto Canada, Inc. v. Schmeiser*, 2004). The argument that the infringing seed had merely grown as the result of wind pollination or through the pollinating activities of birds and bees was rejected by the majority judges as denying "the realities of modern agriculture." What was at stake in this case was sowing and cultivation, "which necessarily involves deliberate and careful activity on the part of the farmer." They noted that he

5. In the United States, for example, there are broad-scale examples of GM and organic crops being grown in close proximity. In fact, in some farming operations in the United States the same farmer will be using both GM and organic production (see Entine, 2014).

had actively cultivated RR canola as part of his business operations, thus in light of all of the relevant considerations, Schmeiser had used the patented genes and cells, and infringement was established.

Monsanto's (n.d.) website states that "since 1997, we have only filed suit against farmers 147 times in the United States." It suggests that this is "really a small number... when you consider that we sell seed to more than 350,000 American farmers a year." This small risk of litigation did not dissuade a coalition of 38 farmers, seed sellers, and agricultural organizations—led by the Organic Seed Growers and Trade Association—to seek declaratory judgments of non-infringement and invalidity in the District Court for the Southern District of New York (*Organic Seed Growers & Trade Association v. Monsanto Co.*, 2012), with respect to 23 patents owned by Monsanto Co. and Monsanto Technology, LLC (collectively, "Monsanto").<sup>6</sup>

### **Absence of Justiciable Dispute**

The plaintiffs described themselves as growers, seed-selling businesses, and agricultural organizations that grow, use, or sell conventional seeds, and many of whom have organic certification and did not want to use or sell transgenic seed incorporating Monsanto's tech-

nologies. Their principal concern was that, given Monsanto's patent enforcement policy, if their crops became contaminated by transgenic seed, they could perversely be accused of patent infringement by the company responsible for the transgenic seed that contaminated them.

The plaintiffs' application for a declaration was refused by the District Court on the ground that there was no justiciable dispute between the parties. It noted that there was no evidence that Monsanto had commenced litigation against inadvertent users of patented seed and there was no evidence that any of the plaintiffs had experienced contamination from Monsanto's seed or had ever been threatened by Monsanto for patent infringement. Shortly after they initiated the lawsuit, the plaintiffs had asked Monsanto for an express undertaking not to sue. While refusing to enter into such an undertaking, Monsanto referred the plaintiffs to its website, which contained the statement that "it has never been, nor will it be Monsanto policy to exercise its patent rights where trace amounts of our patented seeds or traits are present in farmer's fields as a result of inadvertent means." Monsanto's attorneys by letter further expanded on the company's absence of any intent to sue persons in the position of the plaintiffs, declaring that

"Monsanto is unaware of any circumstances that would give rise to any claim for patent infringement or any lawsuit against your clients. Monsanto therefore does not assert and has no intention of asserting patent-infringement claims against your clients. You represent that 'none of your clients intend to possess, use, or sell any transgenic seed, including any transgenic seed potentially covered by Monsanto's patents.' Taking your representation as true, any fear of suit or other action is unreasonable, and any decision not to grow certain crops unjustified."

These representations were also taken into account by the District Court in ruling that there was no imminent dispute between the parties.

These factors were equally influential in the determination of the Court of Appeals that there was no justiciable controversy between the parties (*Organic Seed Growers & Trade Association v. Monsanto Co.*, 2013). The Supreme Court refused the grant of certiorari to allow an appeal to it (*Organic Seed Growers & Trade Association v. Monsanto Co.*, 2014).

6. US Patent Nos. 5,322,938 ("DNA sequence for enhancing the efficiency of transcription"); 5,352,605 ("Chimeric genes for transforming plant cells using viral promoters"); 5,362,865 ("Enhanced expression convention in plants using non-translated leader sequences"); 5,378,619 ("Promoter for transgenic plants"); 5,424,412 ("Enhanced expression in plants"); 5,463,175 ("Glyphosate tolerant plants"); 5,530,196 ("Chimeric genes for transforming plant cells using viral promoters"); 5,554,798 ("Fertile glyphosate-resistant transgenic corn plants"); 5,593,874 ("Enhanced expression in plants"); 5,641,876 ("Rice actin gene and promoter"); 5,659,122 ("Enhanced expression in plants using non-translated leader sequences"); 5,717,084 ("Chimaeric gene coding for a transit peptide and a heterologous peptide"); 5,728,925 ("Chimaeric gene coding for a transit peptide and a heterologous polypeptide"); 5,750,871 ("Transformation and foreign gene expression in Brassica species"); 5,859,347 ("Enhanced expression in plants"); 6,025,545 ("Methods and compositions for the production of stably transformed, fertile monocot plants and cells thereof"); 6,040,497 ("Glyphosate resistant maize lines"); 6,051,753 ("Figwort mosaic virus promoter and uses"); 6,083,878 ("Use of N-(phosphonomethyl) glycine and derivatives thereof"); 6,753,463 ("Transformed cotton plants"); 6,825,400 ("Corn plants comprising event PV-ZMGT32 (nk603)"); RE38,825 ("Glyphosate tolerant plants"); and RE39,247 ("Glyphosate-tolerant 5-enolpyruvylshikimate-3-phosphate synthases").

### Observations on “Inadvertent” Contamination

Monsanto’s undertaking not to bring patent infringement actions in cases of inadvertent contamination disposed of the plaintiffs’ declaratory action, but the District Court noted the inevitability that conventional crops would be contaminated by trace amounts of wind-blown pollen or seeds from GM crops or other sources (*Organic Seed Growers & Trade Association v. Monsanto Co.*, 2012). The Court of Appeals noted Monsanto’s acknowledgement that conventional crops could be exposed to “cross-pollination from nearby fields where biotech crops are grown” and that they “might inadvertently contain traces of Monsanto biotech genes (because, for example, some transgenic seed or pollen blew onto the grower’s land)” (*Organic Seed Growers & Trade Association v. Monsanto Co.*, 2013, para. 13).

The Court of Appeals referred to a study finding that, despite stringent precautionary measures meant to prevent any commingling of modified and conventional seed crops, a large majority of conventional seed samples had become contaminated by Monsanto’s Roundup resistance trait (*Organic Seed Growers & Trade Association v. Monsanto Co.*, 2013, para. 14). The District Court found that due to contamination,

“...some unlicensed—and unintended—use of transgenic seeds is inevitable. Like any other seeds, transgenic seeds may contaminate non-transgenic crops through a variety of means, including seed drift or scatter, crosspollination, and commingling via tainted equipment during harvest or postharvest activities, processing, transportation, and storage” (*Organic Seed Growers & Trade Association v. Monsanto Co.*, 2012, para. 548).

The Court of Appeals observed that GM seeds cannot easily be separated from conventional seeds; thus, a grower who harvests and uses or sells contaminated crops risks incurring infringement liability. The Court of Appeals observed that “both parties seem to concede that at a minimum, using or selling patented seeds without a license is potentially infringing activity.” Thus for the purposes of the appeal before it, the court assumed “(without deciding) that using or selling windblown seeds would infringe any patents covering those seeds, regardless of whether the alleged infringer intended to benefit from the patented technologies” (*Organic Seed Growers & Trade Association v. Monsanto Co.*, 2013, para. 13).

The Court of Appeals conceded that there was a substantial risk that at least some of the appellants could be liable for infringement if they harvested and replanted or sold contaminated seed. In *SmithKline Beecham Corp. v. Apotex Corp.* (2005), the Court of Appeals had observed that the use even of “trace amounts” of a patented compound might “place potential infringers in the untenable position of never knowing whether their product infringes because even a single undetectable [molecule] would infringe” (para. 1339).

The question of deliberate infringement had been considered by the US Supreme Court in *Bowman v. Monsanto Co.* (2013). This case concerned a soybean farmer who had purchased, harvested, and replanted Roundup Ready soybeans without a license. He also used glyphosate on his fields, thereby favoring the survival of transgenic soybeans and eliminating conventional soybeans. The Court carefully distinguished Bowman’s use of the patented soybean seeds from the situation of inadvertent infringement. It ruled that patent exhaustion did not permit a farmer to reproduce Monsanto’s transgenic seeds without a license.

The first consideration by the US Supreme Court of inadvertent contamination occurred in *Monsanto Co v. Geertson Seed Farms* (2010). This case arose out of a decision by the Animal and Plant Health Inspection Service (APHIS) to deregulate a variety of genetically engineered alfalfa. The US Supreme Court—in holding that conventional farmers had standing to challenge the administrative deregulation of Roundup Ready Alfalfa—recognized that there is a risk of “gene flow” from GM crops into conventional crops.

### Conclusion

The decision of the US courts in the Organic Seed Growers litigation is relevant to the US situation. The undertakings not to sue have no relevance to any disputes which might arise in other jurisdictions.

Even in the United States, Monsanto’s representations refer only to individuals producing crops having only “trace amounts” of its proprietary genes. The Appeal Court noted that

“At oral argument, Monsanto resisted our efforts to clarify whether it would assert its patents against a conventional grower who inadvertently uses or sells *greater* than trace amounts of modified seed, but who, for example, does not make use of the Roundup Ready trait by spraying the plants with glyphosate. Thus, we cannot con-

clude that Monsanto has disclaimed any intent to sue a conventional grower who never buys modified seed, but accumulates greater than trace amounts of modified seed by using or selling contaminated seed from his fields” (*Organic Seed Growers & Trade Association v. Monsanto Co.*, 2013, pp. 17-18).

All plaintiffs in the Organic Seed Growers litigation alleged that they were “using their best efforts” *not* to produce crops comprising more than “trace amounts” of recombinant seed, and thus they did not allege activities that would put them at patent infringement risk.

The US Supreme Court had held that parties “cannot manufacture standing merely by inflicting harm on themselves, based on their fears of hypothetical future harm” (*Clapper v. Amnesty International USA*, 2013).

In any event, it has been observed that to date, “inadvertent infringement based upon genetic drift or the presence of trace amounts of contaminating patented seed in a farmer’s field does not appear to have ever resulted in a lawsuit by Monsanto” (Holman, 2014, p. 165). The finding against Schmeiser is explained by Holman on the basis that “the Canadian judges were convinced by overwhelming evidence that Percy Schmeiser was not the victim of drift and inadvertent contamination, but rather a disingenuous and wilful patent infringer.” He states that “in every case involving an allegation of patent infringement of a Monsanto seed patent by a farmer that has been addressed at the appellate level (by the Court of Appeals of the Federal Circuit or Supreme Court), there has invariably been compelling evidence that the infringing farmer intentionally planted infringing seeds and benefited from the patented technology” (p. 168). This is a limited category of cases, as we do not know of those which were settled out of court.

Regardless, as Holman points out, it would be irrational for a farmer to spray glyphosate (which destroys all plant growth) unless he knows that at least a substantial percentage bear Monsanto’s patented Roundup Ready resistance trait (Holman, 2014). Intention to infringe has no bearing on whether patent infringement has occurred, but will have a bearing on damages. It should be noted that Monsanto’s Roundup Ready patent expires in 2015, so that cases concerning this particular patent will disappear. However, the principles that have been established concerning inadvertent infringement remain relevant.

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