Reaping the benefits of GM canola

After just one season, Australian farmers are discovering a range of reasons to continue using the technology that is unlocking the potential of their canola crops

Rueben Chessman (right) grows GM canola with his father Arthur (left) in Central Victoria.

Photo credit: Monsanto Australia, photographer Richard Jagger

When you're working the land that has been in your family for over 150 years, sticking with traditional, historical farming practices could be an easy option. Changing not only what you farm, but how you produce it are big decisions. But for Jason Ritchie, choosing to grow GM canola was easy.

He says, "For me it was pretty simple – you just have to look at countries such as Canada where adoption of the technology is so high. If the huge majority of Canadian farmers think it's good, then that's enough for me."

In fact, Ritchie, 40, and his wife Kate, 35, were the largest GM canola growers in Australia last year, planting 300 hectares on their mixed cropping farm in south-western Victoria. Primarily sheep and cattle producers in the past, Ritchie has gradually converted his 2,400-hectare property into cropping land, finding the change to be more profitable and more enjoyable. In doing so, he has adopted a number of new agricultural technologies, including GM canola, to ensure he remains competitive both within Australia and overseas.

In 2003, two types of herbicide-tolerant GM canola were approved by Australia's Gene Technology Regulator. However, commercialization was prevented by moratoria imposed by State governments. In 2008, the bans were lifted in the eastern states of Victoria and New South Wales, and the West Australian Government has issued an exemption from its moratorium for a commercial trial of GM canola in 2009. Seed companies are currently offering farmers a range of canola varieties incorporated with one herbicide-tolerant trait.

GM canola is not the only herbicide-tolerant canola on the Australian market. For several years, farmers such as Ritchie have been growing conventionally bred varieties tolerant to a range of herbicides. However, for Ritchie, GM canola "performed well above some of my other canola varieties in terms of yield and oil content. It is also more cost effective and profitable," he adds.

About 250 kilometers away, 35-year-old Reuben Chessman was so impressed with the GM canola he grew in 2008 that

he planted three times as many hectares in the 2009 season.

"When we finally got the chance to see how GM canola would perform on our farm, we weren't disappointed. It yielded well and was cost effective, but it's the ease of management that has made it such a winner with me," Chessman says.

Reuben, along with his parents, wife and two young children, farm in Central Victoria, an area of Australia where rainfall is becoming increasingly unpredictable. This particular GM canola system facilitates dry sowing, making the best use of the growing season's rainfall and allowing the crop to make the best use of the moisture available.

Australia's grain industry delivers market choice

The Australian grains industry has a policy on industry market choice, the framework of which was developed to ensure there were effective coexistence arrangements throughout the supply chain for different canola product types, including GM and conventional canola.

- In 2008, the Australian Oilseeds Federation (AOF) introduced an additional trading standard for non-GM canola to accommodate market requirements.
- The supply chain implemented appropriate protocols and systems (from on-farm through to processors) to meet the industry's market choice criteria and customer requirements and ensured successful segregation in the first year of commercialization.
- Tools such as identity preservation processes, segregation and traceability were used to maintain product integrity.
- From 2009, the two standards will ensure that there is a non-GM supply chain in place for each season's canola crop, and this will continue as long as there is market demand for each segregation.

Source: Australian Oilseeds Federation & Grain Trade Australia

What's next ?

- About 300 farmers will grow 40,000 hectares of GM canola in 2009, compared with 9,500 hectares in 2008.
- In Victoria and New South Wales, the limited commercial release of the 2008 season is expanding to a large-scale release in 2009.
- In West Australia, a commercial trial of 1,000 hectares will be grown under exemption from the State Government's moratorium on GM crops.
- Globally, companies are using both traditional breeding methods and biotechnology to develop higher yielding canola varieties and those that continue to offer maximum value to farmers.

"This was a critical factor for us given the recent run of dry seasons. Canola is such an integral part of our crop rotation, so we need to utilize any new methods or technologies that come our way."

Both farmers believe other farmers should open their minds to new technologies. Ritchie says, "When I hear the figures relating to the amount of food we need to produce in the future to simply feed the world, it's staggering. We should be supporting the companies prepared to spend the hundreds of millions of dollars it takes to bring products like GM canola to the market."

"We can't afford to ignore any advances in agricultural technology, be it biotechnology or other forms, if we want to be sustainable – We don't have that luxury."

Chessman agrees, "I just keep thinking of the future and what else might be coming that will help us with all the other issues we face as farmers. It's exciting. There's no going back now."

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About CropLife Asia:

CropLife Asia promotes the benefits and responsible use of crop protection and plant biotechnology products, as well as sound regulatory frameworks in support of sustainable agriculture in the Asia Pacific region. As a regional unit of CropLife International – a global federation of the plant science industry in 91 countries – CropLife Asia supports the work of 15 member associations and is led by member companies at the forefront of crop production research and development.

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