



CropLinks

THE NEWSLETTER OF CROPLIFE AUSTRALIA

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Crop protection keeping food on plates and money in Australia's coffers

The crop protection industry is contributing enormous economic benefits to the Australian economy, a recent Deloitte Access Economics (DAE) study has confirmed.

The study reveals, on a very conservative basis that up to \$17.6 billion of Australian agricultural output can be attributed to the use of crop protection products.

As a cornerstone to the profitability of Australian agriculture, a strong, innovative crop protection industry will play a vital role in the ongoing diversification of the Australian economy.

The DAE study also reveals that crop protection plays a significant role in improving Australians' lives. Australia's accessible, nutritious and diverse food supply is often taken for granted. Many consumers don't realise that around 68 per cent of the total value of crop production in Australia would be lost if farmers did not have access to pesticides.

Carrots, peanuts, onions, grapes and many other crucial crops would be almost impossible to grow commercially without crop protection products and the crop protection sector creates 9250 full time equivalent jobs across Australia.



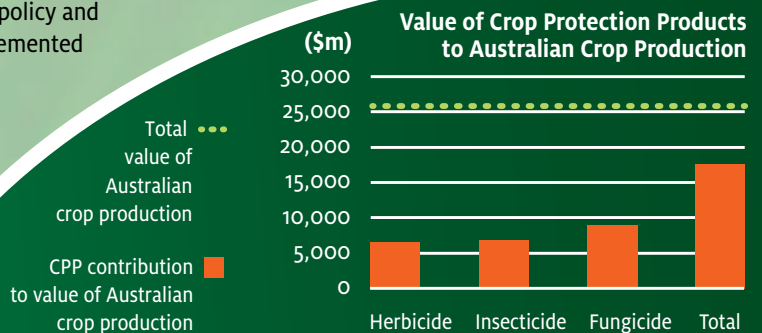
In the US crop protection products provide a **48% saving** in overall grocery bills for a family of four

To read the full report, go to www.croplifeaustralia.org.au

Similar studies in the US have found that the use of crop protection products provides a 48 per cent saving on grocery bills for a family of four. Crop protection products are vital for ensuring Australians have an affordable, safe and varied food supply.

In light of this, the importance of an efficient, targeted regulatory system that facilitates innovation in this sector is now clearer than ever. The data contained in this study provides a solid evidentiary basis for the new federal government's targeted approach to the regulation of agricultural chemicals.

Unnecessary, poorly targeted and costly regulation passed by the federal parliament earlier this year, if allowed to come into effect, will place a significant burden upon the plant science industry and, negatively impact on Australia's farmers. This legislation will deprive farmers of essential tools that contribute more than half the value of the nation's crop production. The new federal government's plan to streamline agricultural chemical regulation and fund a minor use and specialty crops program is a good first step towards aligning rhetoric on the importance of increasing agricultural productivity with the actual policy and regulation implemented by government.



SOURCE: MARK GOODWIN CONSULTING 2011, DELOITTE ACCESS ECONOMICS 2013.



THE PEAK ORGANISATION FOR AUSTRALIA'S PLANT SCIENCE INDUSTRY



Agriculture has played an enormous role in the development of Australia's economy and culture, but its continued strength and success cannot be taken for granted.

From the Chief Executive Officer

Minor use program set to provide boost to agriculture, the economy and much more

Australia's harsh climate and limited natural resources have always posed challenges for our nation's farmers and the industries that support them. As conditions become more variable, it is only through constant innovation that the agricultural sector remains a key driver of our country's economic output, both directly and indirectly.

In the world of policy making, the private sector's capacity for innovation is often taken for granted. Innovation, however, is easily stifled when unnecessary regulation makes doing business too costly, or when a market failure is left uncorrected.

In difficult economic times, it takes vision and ingenuity to craft policies that facilitate innovation without sucking the budget dry. It also takes good, strategic vision to realise where resources can be best spent to have the greatest positive effect on the whole supply chain.

The Coalition Government's commitment to funding a minor use and specialty crops program and removing poorly targeted regulation of agricultural chemicals are promising first steps to recognising the importance of the plant science industry to delivering genuine gains in Australian agricultural productivity.

The plant science industry and the farming sector more broadly have been calling on the Australian Government

for many years to provide base funding for a minor use and specialty crops program, as the system in its current form is failing not only Australian agriculture, but the economy as a whole.

An analysis of a similar program in the US, which has been in place for over 30 years, showed that every dollar spent by government in assisting specialty growers in the US returned more than \$500 to the economy. A 500 to one return on investment for the Australian taxpayer makes this one of the best public policy investments a government could hope for.

Beyond this, if this program is successfully implemented, Australia's plant science industry stands ready to make its own additional investments to assist in bringing more products and more uses to Australian farmers.

The Coalition Government's proposed \$8 million investment will improve responsible chemical usage. It will also allow Australian farmers to consider a range of new high return produce and crops.

The program will also assist in addressing the challenges of weed and pest resistance problems and ensure that Australian food producers develop environmentally friendly, sustainable, integrated crop management systems through access to the latest chemistry.



Representing Australia's plant science industry



CropLife releases strategies for sustainable use of agchem products

Weeds cost the Australian agricultural industry millions of dollars in yield losses and production contamination each year. They also cause substantial ongoing damage to the environment. While advances in plant science have greatly improved farmers' capacity to protect their crops, one of the most significant challenges in tackling pests, weeds and disease is their ability to develop resistance to crop protection products.

CropLife Australia has recently released its updated Resistance Management Strategies for fungicides, herbicides and insecticides. These accessible, detailed strategies are vital to prevent and delay resistance, and to ensure the sustainability and long term viability of Australian crops. Pesticide resistance is an issue worldwide and can occur in as little as three to four years without proper resistance management.

It is critical that farmers and other agricultural chemical users have access to the most accurate, up to date advice on how to use crop protection products safely, responsibly and sustainably. CropLife's Resistance Management Strategies are developed each year by scientific and technical review committees made up of members with expert knowledge on pesticide use and the prevalence and extent of resistant weeds.

Using agricultural chemical products consistent with these resistance strategies is vital to the economic and environmental sustainability of Australian agriculture.

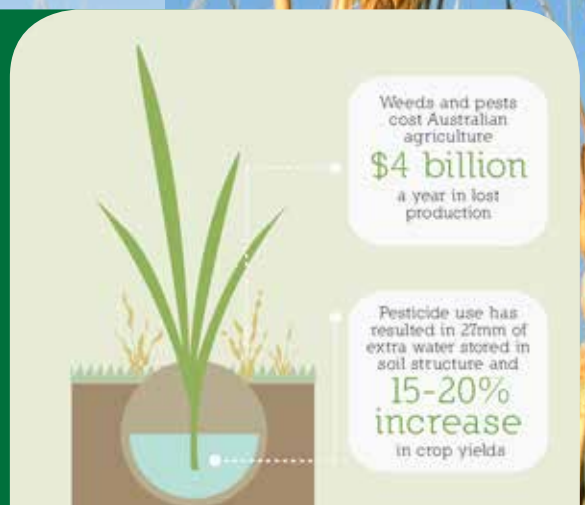
CropLife Australia and its members are committed to responsible stewardship of agricultural chemical products, investing

considerable resources in the pursuit of technologies that provide economically viable and environmentally sustainable crop protection solutions.

The purpose of these strategies is to foster the responsible, sustainable use of crop protection products, thereby extending the life of these vital farming tools.

CropLife Australia's Resistance Management Strategies can be found at www.croplifeaustralia.org.au

Herbicide resistant weeds represent the single largest threat to Australian and global food security and cost the Australian grains industry more than \$200 million each year



Did you know? Globally there are 218 species of herbicide resistant weeds

CropLife Australia's Resistance Management Strategies can be found at www.croplifeaustralia.org.au



Crackdown on illegal chemical imports needed to protect farmers

Australia is fortunate to have an effective, rigorous and scientific system for the registration of agricultural chemicals, which requires all chemical products to demonstrate their health and environmental safety before they can be registered for use in Australia.

CropLife has commenced a targeted national information campaign in response to the growing global trade in illegal pesticides. The campaign aims to raise awareness of the dangers of purchasing illegal and unregistered agricultural chemicals from illegitimate overseas suppliers.

This robust system should give Australians confidence in the regulatory scheme that governs agricultural chemical use. Unfortunately, increased imports of illegal chemicals are undermining this public confidence.

There is significant, growing evidence that Australia is the target of considerable illegal imports of unregistered crop protection products. Europe's illegal pesticide trade has been estimated to make up 10 per cent of the overall market. It can be safely assumed that Australia, with its geographical proximity to Asia and strong agricultural sector, is being targeted in a similar fashion.

Illegal crop protection products have the potential to endanger human health, agriculture, the environment and the economy. The overseas experience of illegal pesticides shows they often contain dangerous contaminants, which can be a safety risk. They are usually poor-quality and may not even contain effective levels of active constituents — often rendering them ineffective.

CropLife has commenced a targeted national information campaign in response to the growing global trade in illegal pesticides. The campaign aims to raise awareness of the dangers of purchasing illegal and unregistered agricultural chemicals from illegitimate overseas suppliers.

CropLife member companies follow a strict code of conduct, which requires commitment to high standards of safety, stewardship and product quality. CropLife members must also comply with the United Nations International Code of Conduct on the Distribution and Use of Pesticides and participate in industry stewardship activities including **drum**MUSTER and ChemClear® to ensure that health and environmental risks from unwanted products and empty containers are responsibly managed.

While these important industry led initiatives ensure the legitimate industry is playing its part, many flyby night operators are not. There is little use in having a regulatory system that assesses and tests legitimate, registered products, while allowing cheap, untested, illegal products to cross our borders and put our farmers, environment and food supply at risk.

It is time that the Australian Pesticides and Veterinary Medicines Authority is given the resources to ensure that all agricultural chemicals sold in Australia are legitimate, high-quality and used safely for the sake of farmers, consumers, the environment and the longevity of this important industry.

Don't put your farm at risk with illegal agricultural chemicals



Illegal pesticides endanger agriculture, human health, the environment and the economy. The global trade in illegal and counterfeit pesticides is growing and Australia is at risk.

Illegal pesticides are poor quality and may contain dangerous contaminants. Australian farmers risk being ripped off by products that don't work.

Avoid buying illegal pesticides – keep these tips in mind:

- Only buy products from reputable stores or distributors.
- Avoid internet or email deals from unknown suppliers.
- Never buy pesticides that do not have instructions written in English.
- Ensure the product has a proper registration label that includes an APVMA/NRA approval number.

If you have information relating to the sale of illegal or unregistered pesticide products contact the Australian Pesticides and Veterinary Medicines Authority:

www.apvma.gov.au

Do right by your farm, do right by your local community and do right by Australian agriculture – only purchase legitimate and registered crop protection products.

To ensure you are buying legal, registered and quality products, look to CropLife member companies:





Brakes on innovation

Innovation is one of the most crucial drivers of progress, but the path to acceptance for new technologies is never smooth. In the short but checkered history of agricultural biotechnology in Australia, the focus on the political significance of perceived fear of technology has made for a concerning brake on progress.

Good public policy should target resources at areas of real risk. However, too often politics and misinformation warp policy and divert resources towards perceived risk instead.

Almost three decades of research, testing and experience have shown that approved GM crops present no risk beyond that posed by their conventionally bred counterparts. For scientists, regulators and industry, this is a point of scientific theory as settled as evolution, the benefits of

vaccination, and human contribution to climate change.

Despite this fact, with a few exceptions, policy on agricultural biotechnology at state level has been aimed at perceived rather than actual risk, through moratoria that deny farmers access to GM crops. These moratoria do more than stymie agricultural productivity. In their inherently punitive nature, these laws contribute to public confusion about the risks of agricultural biotechnology.

A recent report from the then Department of Industry, Innovation, Science, Research and Tertiary Education found a correlation between knowledge about biotechnology, a belief that GM crops are allowed to be grown in a respondent's own state and support for their use.

This means that if you don't know a lot about biotechnology and you think it's banned in your state, statistically you're

a great deal less likely to be in favour of its use.

There is now significant evidence that shows the negative impact of GM crop moratoria on the Australian economy. An ABARES report estimated that from 2008–09 to 2018–19, South Australia will have foregone \$115 million in lost revenue as a result of its moratorium on GM canola. More recently, a report commissioned by the Tasmanian Government suggested that Tasmania's agricultural sector has suffered a \$40 million net farm gate loss over the past 10 years because of its moratorium on GM crops. The facts and the numbers don't stack up to justify restrictions.

A new federal government that has committed to prioritising agricultural productivity gives some hope that the regulation of GM crops will someday align with the science and the biotechnology sector will be given freedom to invest and innovate. Industry, regulators and the scientific community still have some way to go with bridging the gap in public understanding. Along with improved communication on the risks and benefits, removing misleading, unscientific and obsolete laws like state moratoria will help a great deal.

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No matter your values, vandalising research won't nourish anyone

Both doomsayers and optimists would agree that supplying over nine billion people with the food and nutrition they need by 2050 will be a challenge. The farmers of the world will need every safe and beneficial tool, technique and strategy at their disposal to meet this challenge.

Genetics, chemistry, intensive agriculture, organic farming, crop mixing, improved farmer training, precision fertilisation and watering, and reducing food waste will all play a role in coming years.

If the challenge of global food and nutritional security is to be addressed democratically, those advocating for scientists and governments to ignore any one safe and beneficial option should bear the burden of proof to show why it must be excluded. A person attempting to convince doctors to completely rule out prescribing antibiotics to patients regardless of their symptoms would need to have very strong scientific evidence to support their argument. Similarly, anti-GM groups lobbying to ban access to and research into GM crops now bear a heavy burden of proof to demonstrate why this tool should be ignored.

Unfortunately, for these groups, finding proof requires more effort than simple vandalism. In August this year, 400 protesters scaled and destroyed the

fences surrounding a field in the Bicol region of the Philippines and uprooted the genetically modified 'Golden Rice' plants growing there. These plants formed part of a research initiative into the only variety of rice that produces beta-carotene, which is the source of vitamin A.

The World Health Organization estimates that 150–250 million children suffer from vitamin A deficiency. A comparison of a large number of studies shows that vitamin A supplementation reduces child mortality from all causes by 24–34 per cent.

This means that millions of deaths can be prevented by vitamin A supplementation. But every year 'Golden Rice' is kept out of farmers' fields is a year that millions of children are denied access to the essential nutrients it could provide.

The vandalism in the Philippines mirrors that undertaken in July 2011, when Australian Government funded CSIRO research was also destroyed by an anti-GM group. The crop they razed to the ground holds potential to increase levels of high-amylose starch in the Australian diet, thereby reducing occurrences of bowel cancer.

In both instances, the vandalism was rightly condemned in Australia and internationally. Unfortunately, however, the Filipino Government is under enormous pressure from these groups. Vandalism and the public relations campaigns of misinformation that surround it could seriously delay granting of public access to 'Golden Rice'.

The scientific consensus on the safety of approved GM crops is as strong as that on anthropogenic climate change. There is strong evidence that the research destroyed by these anti-GM groups has the potential to save millions of lives. No well-meaning, reasoned individual could be against reducing preventable disease or providing nutrients to the malnourished. While there are many ways to improve the health and nutrition of those living in poverty, no single group has the right to rule out any solution without credible evidence for their cause.

Industry Stewardship

CropLife and its members are global leaders in their full life cycle approach to industry stewardship ensuring products are developed, sold, used and disposed of appropriately.

CropLife members adopt and promote ethical and responsible practices, from discovery and development of crop protection and biotechnology products, through to their final disposal of associated wastes. CropLife Australia and its members are global leaders in their full life cycle approach to industry stewardship.

drumMUSTER supports local communities

drumMUSTER is an industry stewardship program, managed by CropLife Australia's wholly owned subsidiary, Agsafe. **drumMUSTER** has become a household name which helps farmers and other chemical users dispose of their chemical containers in an environmentally responsible manner.

Charities, Country Fire Authorities, Lions' Clubs, P&C groups, sporting clubs and landcare groups in rural towns are joining **drumMUSTER** to help improve the quality of life and the environment in their local communities.

Every year, volunteers hold **drumMUSTER** collections for farmers to get rid of their agvet chemical containers, rewarding them with 25 cents for each drum.

One hundred and ten community groups operate musters around the country, with thousands of volunteers helping **drumMUSTER** to collect two million drums, or roughly 2,000 tonnes, of waste a year.

Since 1999, **drumMUSTER** has collected more than 22 million drums nation-wide. That represents more than 27,000 tonnes of waste avoiding landfill and being recycled into new and useful things like plastic cable covers, wheelie bins and cement reinforcing bar chairs. This achievement is testament to the success of **drumMUSTER** and the important role it plays in assisting farmers and industry to achieve genuine sustainability for agriculture.

The Newdegate Community Development Association in Western Australia has helped raise more than \$20,000 for their small wheat belt town since 2005. Part of the money went to building a gazebo for their historic Lanz Tractor and tennis court resurfacing.

CropLife Australia and its members are global leaders in their full life cycle approach to industry stewardship. Spending more than AUD

\$13 million
a year on stewardship programs.



CropLife Australia is part of a global network representing the plant science industry across 91 countries. Australia is a world leader in industry stewardship initiatives. Such leadership influences sustainable initiatives globally.

Your essential morning cuppa — brought to you by plant science

Coffee is one of life's little pleasures and a vital part of the morning ritual for many people. But most of us don't realise as we sip on our lattes that there's a nasty little bug that could destroy up to 75 per cent of coffee plantations.

In Columbia, CropLife International has initiated a pest management program to combat the threat of the coffee berry borer (CBB), which can overrun up to 75 per cent of coffee acreage in Columbia. If left untreated, the pest can cause irreversible damage to plantations. The CBB is considered the most serious pest in coffee plantations worldwide.

Insecticide application has significantly helped to control the CBB in Columbia and has seen an increase in coffee production in the Columbian coffee industry.

Crop protection products save 414,000 tonnes of coffee per year or the equivalent of 59 billion cups of coffee.

Not only is this helping ensure you get your daily caffeine fix, but helps to employ 563,000 local farmers in the Columbian plantation — this represents over a quarter of the rural population.



DUPONT



Global food security improved in the third quarter

Global food commodity prices fell in the third quarter, improving food affordability in all but nine countries covered in the Economist Intelligence Unit's (EIU) Global Food Security Index. In Australia, food affordability remained steady, scoring 88.9 and ranking sixth, behind Singapore, the United States, Belgium, Switzerland and the Netherlands. The index, commissioned by DuPont to deepen dialogue on food security, evaluates the affordability, availability and quality of food across 107 countries.

FARMOZ



Young Potato People website launched

Farmoz has collaborated with Young Potato People (YPP) founder Stuart Jennings to build and launch the group's official website. The site allows the younger potato grower generation to stay connected with each other, make new contacts and communicate on industry related topics.

The idea stemmed from an AUSVEG grower tour to the World Potato Congress in 2012. To date, the group has been involved in several grower visits to differing locations throughout Victoria. Farmoz is very proud of what the YPP and Stuart have been able to achieve and looks forward to seeing the YPP concept grow and develop.

MONSANTO



Monsanto celebrates World Food Prize

Dr Robert T Fraley, Monsanto Executive Vice President and Chief Technology Officer, was named a 2013 World Food Prize Laureate. Fraley was one of three recipients of the foremost international award recognising individuals who have contributed landmark achievements in increasing the quality, quantity or availability of food in the world. Fraley's recognition is for the research he and his teams pioneered in plant biotechnology and its application to advanced breeding and crop improvement techniques in agriculture.

BAYER CROPSCIENCE



Dr Kathy Ophel Keller wins AUSVEG Researcher of the Year Award

Dr Kathy Ophel Keller, Research Chief, Sustainable Systems Division at the

South Australian Research and Development Institute was awarded the Researcher of the Year Award sponsored by Bayer CropScience at the recent AUSVEG National Convention. The Researcher of the Year Award acknowledges researchers for successful research or extension work in fields which have made long-term advancements for the vegetable industry.

SYNGENTA



Syngenta launches Good Growth Plan



LEFT TO RIGHT: Syngenta's Head of Corporate Affairs, Peter Arkle and Territory Head — Australasia, Paul Luxton, were joined in Jakarta by Australian stakeholders including Matt Linnegar (CEO, National Farmers' Federation), Mick Keogh (Executive Director, Australian Farm Institute), Hollie Baillieu (Chair, National Farmers' Federation 2050 Committee) and Rob Cairns (Program Manager —Sustainable Agriculture, WWF Australia) for the launch of the company's Good Growth Plan.

BASF



New system to control barley weeds

BASF and Agriculture Victoria Services the commercial arm of the Victorian Department of Environment and Primary Industries will introduce a new system to help Australian farmers control barley weeds. The partners have signed a license agreement to add Clearfield barley to the BASF Clearfield production system. This complete herbicide package includes a herbicide tolerant barley variety, the herbicide itself, and a product stewardship program helping growers tackle challenging weed control problems.

DOW AGROSCIENCES



Dow announces global strategic relationship

Dow AgroSciences LLC recently announced a global strategic relationship with The Royal Barenbrug Group for the development and commercialisation of advanced germplasm in forage seeds. Dow AgroSciences will be a minority shareholder in Barenbrug Holding B.V, part of The Royal Barenbrug Group and will provide Barenbrug access to select hybrid *Brachiaria* germplasm. This relationship will allow the two companies to maximise strengths to realise a shared vision of growth in forage grasses. Barenbrug are the owners of Agriseeds in New Zealand and Heritage Seeds in Australia.

CROPLIFE AUSTRALIA



Plant science industry welcomes Barnaby Joyce MP as Minister for Agriculture and Joel Fitzgibbon as Ag Opposition Spokesman

CropLife Australia CEO, Matthew Cossey said Barnaby Joyce's appointment to the position of Minister for Agriculture is welcome news for Australian agriculture and the supporting agribusiness sector.

Minister Joyce's understanding of and commitment and dedication to Australian agriculture will stand the sector in good stead now and for the coming years.

Farmers, agribusiness and the community alike will benefit enormously from the passion and perseverance that the new Minister brought to his previous roles. The plant science industry also welcomes the new Parliamentary Secretary for Agriculture, Senator the Hon. Richard Colbeck.

It is very positive news that Senator Colbeck's proven record of commitment to the agricultural portfolio in his work as

Shadow Parliamentary Secretary will be continued into the new Ministry.

The industry also welcomes The Hon. Joel Fitzgibbon MP's appointment to the position of Shadow Minister for Agriculture. During his time as Minister for Agriculture, Shadow Minister Fitzgibbon demonstrated a passion for agriculture and a desire to engage with the farming and agribusiness sectors.

CropLife is looking forward to working with Minister Joyce, Parliamentary Secretary Colbeck and Shadow Minister Fitzgibbon to ensure a strong, productive future for Australian agriculture.

EXTRACT FROM CROPLIFE MEDIA RELEASES.

For all the latest media releases from CropLife go to www.croplifeaustralia.org.au/news



CropLife Australia

CropLife Australia (CropLife) is the peak industry organisation representing the agricultural chemical and biotechnology (plant science) sector in Australia. CropLife represents the innovators, developers, manufacturers, formulators and registrants of crop protection and ag-biotechnology products.

The plant science industry provides products to protect crops against pests, weeds and diseases, as well as developing crop biotechnologies that are key to the nation's agricultural productivity, sustainability and food security.

CropLife is focused on three key areas of modern farming: crop protection (pesticides), crop biotechnology (GM crops) and industry stewardship.

CropLife's members represent 85 per cent of crop protection and 100 per cent of the crop biotechnology products used by Australia's farmers.

CropLife ensures the responsible use of the industry's products through its code of conduct and has set a benchmark for industry stewardship through programs such as **drumMUSTER**, ChemClear® and Agsafe Accreditation and Training.

CropLife Australia is part of the CropLife International Federation, representing the industry in 91 countries around the world.

Facts about Australia's plant science industry

- The plant science industry is worth more than \$17.6 billion a year to the Australian economy and directly employs thousands of people across the country.
- CropLife member companies spend more than \$13 million a year on stewardship activities, which ensure their products, are sustainably managed for the benefit of users, consumers and the environment.
- It costs up to US \$136 million and 13 years to research, develop and register a new GM crop product.
- It costs up to US \$256 million to research, develop, and register a new crop protection product: only 1 in 139,000 chemical products make it out of the laboratory.
- Pesticides are a key tool for farmers; increasing crop production by up to 50 per cent by ensuring crops are pest and disease free.
- In 2011 the total farm income benefit from using GM technology was US \$19.8 billion an average increase in income of US \$133 per hectare.
- The amount of carbon dioxide emissions saved by biotech crops in 2011 was equal to removing 10.2 million cars from the road for one year.



Crop Protection

Crop Biotechnology

Industry Stewardship

CROPLIFE AUSTRALIA MEMBER COMPANIES



CROPLIFE AUSTRALIA LIMITED

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