
World Environment Day: Innovations Driving Land Restoration and Drought Resilience

5 June 2024 (Canberra) – This World Environment Day, the United Nations calls for global action to tackle critical issues such as land restoration, desertification, and drought resilience. In Australia, farmers and environmental land managers are at the forefront of adopting advanced agricultural and land management practices to meet these challenges. These practices are enabled through new technologies and innovations.

A recent report by ABARES highlights that, since the beginning of the green revolution over 50 years ago, Australian food production has more than doubled, while the land used for this production has decreased by 28 per cent.

"This achievement is no coincidence," said Matthew Cossey, Chief Executive Officer of CropLife Australia, the national peak industry organisation for the plant science sector. "As custodians of 60 per cent of Australia's landmass, farmers understand the crucial role of agricultural chemistry in environmental land management."

Sustainable intensification, enabled by plant science innovations, has allowed Australian farmers to increase food production while reducing land use, ultimately returning land to nature conservation efforts. One of the most significant practice changes has been the early adoption of zero-till farming, facilitated by the judicious use of glyphosate since the 1970s. Now, around 85 per cent of Australian farms use zero-till methods, which have revolutionised soil moisture retention, drought resilience, and soil erosion prevention.


While no farming operation can be entirely drought-proof, these technologies have enabled farmers to produce more food with less rainfall. According to ABARES, the negative impact of a one-in-20-year drought was reduced by over a third between 1979-80 and 2014-15.

"This is why it is crucial to rely on evidence for long-term environmental management decision making," emphasised Mr. Cossey. "Pesticides and the modern land management they enable play a vital role, and without them, we would significantly undermine our environmental and food production goals. Pesticides are the crucial tool not just for farming production but also for dealing with the wide array of pests, weeds and disease that threaten Australia's natural environment and biodiversity."

Invasive weeds, particularly "transformers" like these, can drastically alter ecosystems and displace native species. With over 2,700 invasive weed species endemic to Australia and 20 new species emerging annually, the increasing frequency of droughts, fires, and floods due to climate change is likely to exacerbate this issue.

About CropLife Australia

CropLife Australia is the national peak industry organisation representing the plant science sector in Australia. CropLife's members are the world-leading innovators, developers, manufacturers and formulators of crop protection and crop biotechnology products. The plant science industry, worth more than \$31.6 billion a year to Australian agricultural production, provides products to protect crops against pests, weeds and diseases, as well as developing crop biotechnologies key to the nation's agricultural productivity, profitability and sustainability. CropLife is a part of the plant science industry's 91 country international federation.



Mr. Cossey concluded, “Integrated weed management methods and strategies are vitally important. The judicious and targeted use of herbicides, like glyphosate, for cropping and environmental weed management forms the cornerstone of IPM strategies, along with the suite of other cultural and mechanical management tactics. The sustainable intensification enabled by plant science has shown real, tangible improvements for land restoration and drought resilience. In addition to drought preparedness, land clearing has reduced by 75 per cent in the past 20 years, delivering land back to nature and conservation and restoration efforts.”

- ENDS

Contact: Elyse Denman | 0459 550 010 | elyse.denman@croplife.org.au

About CropLife Australia

CropLife Australia is the national peak industry organisation representing the plant science sector in Australia. CropLife’s members are the world-leading innovators, developers, manufacturers and formulators of crop protection and crop biotechnology products. The plant science industry, worth more than \$31.6 billion a year to Australian agricultural production, provides products to protect crops against pests, weeds and diseases, as well as developing crop biotechnologies key to the nation’s agricultural productivity, profitability and sustainability. CropLife is a part of the plant science industry’s 91 country international federation.

