

Managing pests to help eradicate global hunger

By Mark Ross

Farmers and growers contribute to the quest of eradicating global hunger by providing nutritious food. Their approach to managing pests helps maximise production with finite resources.

Between 26 and 40 percent of the world's potential crop production is lost annually because of weeds, pests and diseases, and these losses could double without the use of crop protection practices. This powerful statement was released earlier in 2017 in a report by the Food and Agricultural Organization (FAO) of the United Nations and the Organisation for Economic Co-operation and Development.

In New Zealand, the economic damage caused by pastoral weeds is conservatively estimated at \$1.2 billion per annum in lost animal production and control costs, reports the Royal Society of New Zealand. The Society also states that more than 300 weeds are endangering up to one-third of our threatened plant species. These weeds could degrade seven percent of the conservation estate within a decade, corresponding to a loss of native biodiversity equivalent to \$1.3 billion. Invertebrate plant pests in productive ecosystems incur similar costs.

Such a compelling case for the use of crop protection practices, including agrichemicals, is pertinent as the global community develops a strategy to meet the United Nation's goal to eradicate hunger by 2030. But that does not mean peddling more pesticides - their role to play is part of an integrated pest management (IPM) approach.

To grow a healthy crop, the FAO recommends the careful consideration of all available pest control techniques - telling farmers to 'integrate appropriate measures that discourage the development of pest populations and that keep pesticides and other interventions to levels that are economically justified and reduce or minimise risks to human health and the environment'. The international crop protection industry supports this.

The industry also supports the International Code of Conduct on Pesticide Management that states that all stakeholders — including farmers, agronomists, the food industry, manufacturers of biological and chemical pesticides, environmentalists and consumer groups — 'should play a proactive role in the development and promotion of IPM'.

The global CropLife network – which represents crop science companies - embraces a proactive approach to training, communication and implementation of IPM. Agcarm, as a member of this network, also supports the safe and responsible use of crop protection products.

Ensuring farmers are trained on the most environmentally sound and responsible methods for protecting crops from pests is a priority for the crop protection industry. Our members work with trainers, regulators and growers to achieve the best pest control practices. This ensures we meet the global shared goals of health and safety to people, the environment and the food chain.

Agcarm is a trustee of the non-profit organisation, Growsafe, which promotes the safe, responsible and effective use of agrichemicals. New Zealand primary producer groups formed the organisation in 1992 to develop and maintain good practice standards of agrichemical use. The Trust's mission statement is 'to facilitate the approved and safe use of agrichemicals in New Zealand consistent with effective sustainable land management and environmental protection through advocacy and education'.

In a further commitment to the FAO's call to promote the responsible use of agrichemicals, the CropLife network recently launched a 12-month communications campaign called The Crop Protectors. The campaign features men and women that keep crops healthy by making integrated pest management happen — from a farmer on the front line to a computer programmer developing a phone app, and everyone in between. The campaign explains and promotes all aspects of responsible agrichemical usage, including the importance of preventing pests, monitoring for pests and, if needed, the appropriate method of intervention — be it cultural, biological or chemical.

Today's global food challenge is unprecedented, with demand expected to increase by 59 to 98 percent by 2050. Given the lack of available arable land to expand, the FAO believes 80 percent of the increased demand must be realised through productivity gains. As almost a half of food is lost to pests, diseases and weeds every year, effective IPM — where farmers can access all crop protection tools — is essential to improve productivity and meet the challenge of feeding the world and eradicating global hunger.

- Mark Ross is chief executive of Agcarm, the industry association for companies which manufacture and distribute crop protection and animal health products.