

# Implementing Integrated Weed Management (IWM) for Herbicide Tolerant Crops

A comprehensive guide for effective, efficient, and sustainable weed control



Since the beginning of agriculture, farmers have looked for ways to control weeds, which compete with crops for valuable sunlight, water and nutrients, and , at their worst, can decimate a farmer's harvest completely. Effective weed control is vital for farmers as they seek to maximize crop yields and sustain farm productivity and profitability.

Over time, farmers have used many methods to manage weeds – hand weeding, tillage and herbicides to name a few. More recently, growers have planted herbicide tolerant crops, which have delivered not only huge productivity and efficiency gains to farmers, but significant environmental and societal benefits as well. With these new crops, farmers no longer have to hand-weed or hoe to keep weeds in check. Their yields are high. The need for tillage is reduced, which conserves and enriches precious topsoil, protects wildlife habitats and improves runoff into lakes and streams.

While herbicide tolerant crops can help farmers manage weeds more effectively and sustainably, the reality is that weed control is never a simple task. Weed control methods need to be carefully managed to slow or prevent the evolution of resistance in targeted weed species. Reliance on any one single herbicide, cropping system or cultural practice without the use of other methods can result in the development of resistant weeds. When that happens, crop yields and quality can decrease unless corrective actions are implemented. If not managed correctly, weed resistance can make weed control methods – including herbicides and herbicide tolerant crops –

obsolete, which means farmers will have fewer tools at their disposal to combat weeds.

To improve the lifespan and sustainability of herbicides and herbicide tolerant crops, the plant science industry has developed stewardship strategies that promote integrated weed management (IWM) on farms growing biotech-derived crops. IWM is an important strategy that utilizes a combination of techniques to achieve effective weed control, slow the development of herbicide resistant weeds and enable sustainable crop production. To educate farmers on the benefits and components of IWM and to speed its adoption globally, CropLife International has developed *Implementing Integrated Weed Management for Herbicide Tolerant Crops* – a comprehensive training manual offered in English and Spanish.

**This free manual offers:**

- Extensive background information on weeds and herbicides, including herbicide resistant weeds
- Detailed discussion of the full range of Integrated Weed Management tools including:
  - Prevention
  - Monitoring
  - Cultural controls (crop rotation, tillage, mowing, etc.)
  - Biological controls
  - Herbicides
  - Herbicide tolerant cropping systems
- Step-by-step guide to developing an integrated weed management plan, as well as a sample set of IWM standard operating procedures and record-keeping tools
- Examples of local and regional IWM programs in action

Integrated weed management is a strategy that can be adapted to different types and scale of farm operations – from smallholder farmers to large-scale multi-crop producers. To download the *Integrated Weed Management for Herbicide Tolerant Crops* manual and additional resources on IWM visit:

**[www.croplife.org/IntegratedWeedManagement](http://www.croplife.org/IntegratedWeedManagement)**

To learn more about Weed Resistance Management, visit the Herbicide Resistance Action Committee (HRAC) Web site at: **[www.hracglobal.com](http://www.hracglobal.com)**

To learn more about product stewardship programs for biotech-derived plants visit: **[www.CropLife.org](http://www.CropLife.org)** and **[www.ExcellenceThroughStewardship.org](http://www.ExcellenceThroughStewardship.org)**.