

RESISTANCE MANAGEMENT

CropLife
INTERNATIONAL 



WORKING WITH FARMERS TO MANAGE RESISTANCE

FARMERS USE VARIOUS CONTROL METHODS TO

protect their crops from weeds, insects, fungi, rodents and other pests. If left uncontrolled, pests can significantly reduce crop yields and quality, as well as destroy crops in storage.

FOUR MAIN TOOLS TO CONTROL PESTS ARE:



FUNGICIDES



HERBICIDES



INSECTICIDES

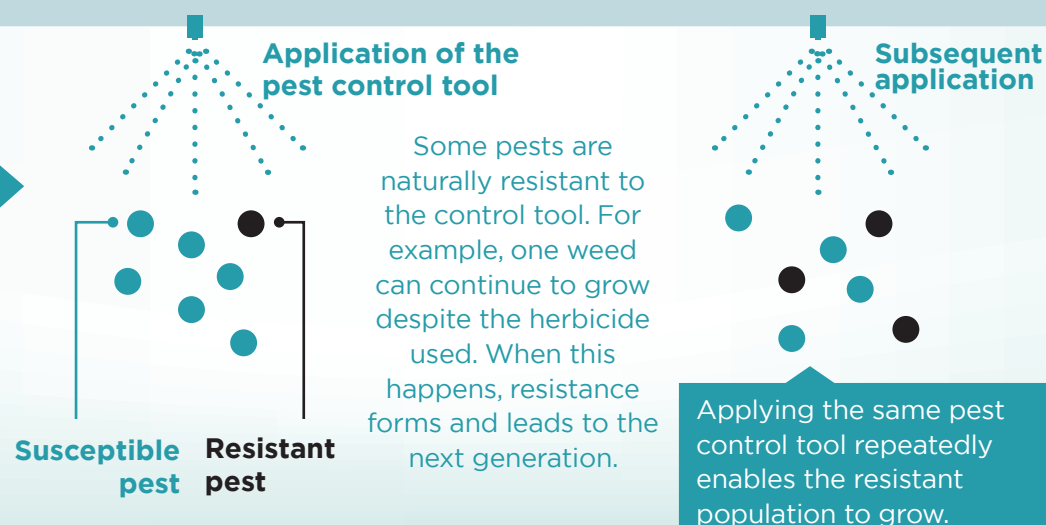


RODENTICIDES

MOST METHODS OF PEST CONTROL, REGARDLESS OF THE AGRICULTURAL PRODUCTION SYSTEM, ARE AFFECTED BY **RESISTANCE**.

WHAT IS RESISTANCE?

When a pest no longer responds to a chemical control method, it has developed resistance, which is a biological and protective response. This happens when farmers use the same pest management methods instead of varying agronomic practices.



RESISTANCE CAN BE PROACTIVELY
MANAGED THROUGH DIVERSE
STRATEGIES, SUCH AS:

INTEGRATED PEST MANAGEMENT



PREVENTION
VARY
AGRONOMIC
PRACTICES
TO PREVENT
RESISTANCE
FROM
OCCURRING



MONITORING
DETERMINE
IF
INTERVENTION
IS NECESSARY



INTERVENTION
APPLY
THE RIGHT
COMBINATION
OF TOOLS
FOR THE
TARGET PEST



All crop protection products approved for use today have been thoroughly evaluated by academic institutions and regulatory bodies around the world for environmental and human safety, and pose no unreasonable risk if used according to label instructions.

PROMOTING AND IMPLEMENTING RESISTANCE MANAGEMENT PRINCIPLES



RESEARCH

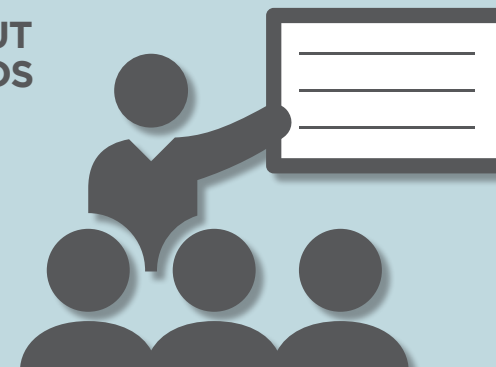
Biotech crops express traits that help protect plants from various pests. They work in tandem with crop protection products within an integrated pest management system to control pests and mitigate resistance.

Working together, the plant science industry and farmers can help maintain the longevity and effectiveness of plant science technologies, which encourages sustainable pest control, improves food safety, and promotes animal and human health.

MONITOR
RESISTANCE

SCOUT
FIELDS

TRAIN FARMERS



CropLife International, together with its Fungicide, Herbicide, Insecticide and Rodenticide Resistance Action Committees (RACs), prepared this resource to help advance the understanding of responsible resistance management and how it supports sustainable agriculture. The RACs are comprised of key technical personnel from CropLife International member companies who are dedicated to providing farmers, agronomists and industry members worldwide with the tools and educational resources they need to manage resistance.

