

Reap the Benefits of Crop Rotation

syngenta®

Herbicide resistance is the inherited ability of a weed to survive a rate of herbicide which would normally give effective control. With a better understanding of herbicide resistance, you can implement a series of practices to proactively manage weed populations and avoid its onset.

MANAGE

DIVERSIFY

IMPLEMENT

Herbicide performance is impacted by many factors including correct application timing; the use of full labeled rates; proper use of adjuvants and effective spray application. But what if you've done everything right, and weeds are still taking over your fields?

This lack of control might mean that you are facing a herbicide resistance issue.

Diversify crops for future harvests

To help prevent the over-reliance on key cereal herbicides and delay the onset of herbicide resistance, a diverse crop rotation should be considered. If environmental and economic conditions permit, rotating crops in sequential seasons helps fight resistance issues by:

- Changing the weed population complex in fields
- Allowing implementation of different tillage practices to control weeds
- Allowing the use of different herbicides with different modes of action

While a variety of crop rotations will work for wheat, experts recommend rotating wheat with a broadleaf crop like dry beans, soybeans, cotton, canola or sunflowers. Rotating cereals crops with these broadleaf crops prevents weeds from adapting to a cereal monoculture and generally allows for more options to rotate herbicide modes of action.

“Crop rotation is a key technique for mitigating the risk of herbicide resistant weeds from ever developing.”

—Gaylon Morgan
Professor, Extension Specialist
Department of Soil and Crop Sciences
Texas A&M

“If growers have issues with herbicide resistance, crop rotation is one of the best management tools. It opens the door for better herbicide rotation.”

—Clark Neely
Assistant Professor,
Extension Small Grain Specialist
Department of Soil and Crop Sciences
Texas A&M

DEFINITION

Crop rotation is the successive planting of different crops on the same land.