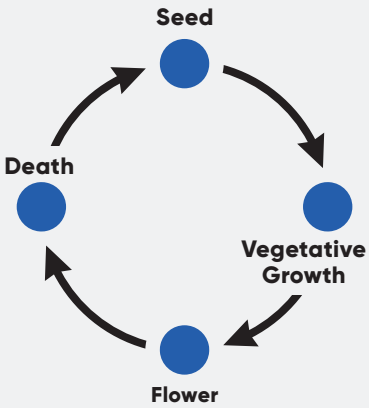
INNVICTIS CROP CARE

FALL BURNDOWN

A successful and fast start to spring planting can start with eliminating winter annuals in the fall. The life cycle of winter annuals starts with germination in the late summer to early fall, followed by dormancy in the winter, and rapid growth during the spring and early summer. The winter dormancy creates hardier, more difficult to control weeds in the spring. With mild to low temperatures and excess moisture, winter annuals can flourish in the early spring while growers struggle to find suitable field conditions and herbicides that will control larger, thicker weeds.

To avoid this situation, growers should consider a fall burndown in fields that have a history with winter annuals and wet conditions in the early spring.

ANNUAL GROWTH CYCLE



INNVICTIS

*University of Missouri: https://ipm.missouri.edu/ipcm/2013/9/Considering-Fall-Herbicide-Applications Its-not-just-about-the-weeds. Kansas State University: https://krex.k-state.edu/dspace/handle/2097/14844

A burndown application in the fall can provide numerous benefits for growers:

- **Control of winter annuals, such as marestail, before they overwinter and become more resilient.**

  A fall herbicide application provides more efficient control of winter annuals because it targets the weeds at the beginning of their growing cycle. Spring applications to fully established stands and larger weeds can require higher use rates and have a greater chance of failure.

- **Reduces pest havens**

  Winter annuals can serve as egg-laying sites for pests such as spider mites and black cutworms. They can also be an alternate host for soybean cyst nematodes.

- **Flexibility for spring applications**

  Increased rainfall in the spring leads to fewer days suitable for fieldwork. A fall burndown makes for one less trip over a field in the spring.

- **Improved soil temperatures in the spring**

  Research from the University of Missouri* discovered that eliminating winter annuals in the fall can increase spring soil temperatures by as much as five degrees in corn and eight degrees in soybeans.

- **Improved soil moisture for spring planting**

  Research from the University of Missouri* discovered that eliminating winter annuals in the fall can increase spring soil moisture by as much as 13% in corn and 6% in soybeans.

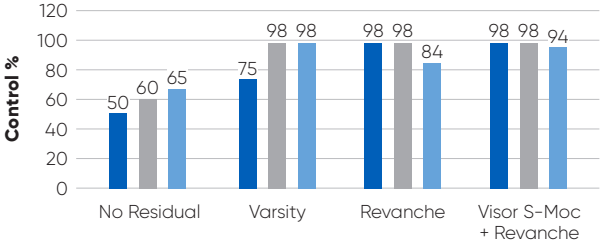
- **More fertilizer for spring crops**

  A Kansas State University* study, with 14 trial sites, showed that the average Nitrogen uptake from winter annuals was approximately 16 lbs per acre.

- **Better potential for early planting**

  Clean fields, optimal moisture, and warmer soil temperatures are ideal conditions for planting crops early in the spring.

FALL BURNDOWN: 135 DAA



Bareground – Booneville, MS

Protocol ID: 2021_CropCare_H(BL01)
Application Timing: November 13, 2021

All treatments were applied with 1 pt Devour, .5% v/v Venturi, and Verimax AMS @15 lb/100 gl

INNVICTIS CROP CARE

FALL BURNDOWN

An effective Fall Burndown program should include the following:

- A soil active herbicide to prevent winter annuals from germinating
- A broadleaf herbicide and grass herbicide OR a non-selective herbicide to control smaller weeds that have already emerged.

SOIL RESIDUAL

PRODUCTS + ACTIVE INGREDIENTS				
VANDAL S-MOC XRT	VARSITY	REVANCHE	GALVAN XRT	DERIVE 4L
S-metolachlor+ Sulfentrazone	Flumioxazin	Rimsulfuron + Thifensulfuron	Metribuzin + S-metolachlor	Metribuzin

BROADLEAF CONTROL

PRODUCTS + ACTIVE INGREDIENTS			
GRAVITAS	Havoc AMINE	Havoc LV SIX	VERITAS LV
6 lb 2,4-D Solventless Ester	4 lb 2,4-D Amine	6 lb 2,4-D Ester	DGA Dicamba

GRASS CONTROL

PRODUCTS + ACTIVE INGREDIENTS	
ENVY INTENSE	ENVY SIX MAX
4 lb glyphosate IPA salt	3.3 lb glyphosate IPA salt, 2.5 lb glyphosate potassium salt

NON-SELECTIVE

PRODUCTS + ACTIVE INGREDIENTS
DEVOUR*
Paraquat

INNVICTIS FALL TRIAL EVALUATIONS 2021-2022
(BOONEVILLE, MS)

*Innvictis Fall Herbicide Evaluations approximately 135 days after treatment

UNTREATED

VARSITY

REVANCHE

VISOR S-MOC + REVANCHE

***RESTRICTED USE PESTICIDE**

Simplot GROWER SOLUTIONS | INNVICTIS