

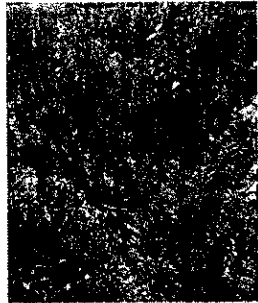
Why Dicamba?

- Provides excellent POST control of key glyphosate resistant weeds plus many tough to control broadleaf weeds
- Can provide residual control up to 14 DAT
- Rapid visual symptom development in weeds
- Similar uptake/translocation profile as glyphosate
- Good physical compatibility with glyphosate
- Moderate use rates, acceptable COG'S
- Low volatility salt registered in market (DGA-Dicamba)

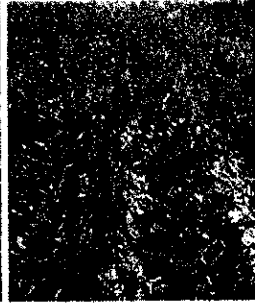
BEST FOR THE
ROAD AHEAD

The Roundup Ready® Xtend Crop System Provides Excellent Marestalk Control

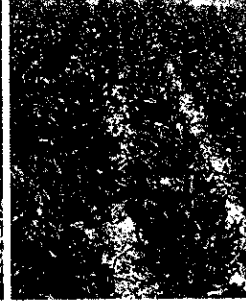
2012 Monsanto Trial – Lincoln, Nebraska - Glyphosate Resistant Marestalk



Untreated Check



Residual+2,4D+ Roundup
WeatherMAX® FB Roundup
WeatherMAX®



Residual + dicamba/glyphosate
premix FB Roundup
WeatherMAX®

Pending regulatory approvals

ROAD AHEAD

The Roundup Ready® Xtend Crop System Provides Excellent Waterhemp Control

2012 Trials - Ankeny, Iowa - Glyphosate Resistant Waterhemp



Monsanto®-internal trial; Ankeny, IA, 2012 ; 2012-01-87-02

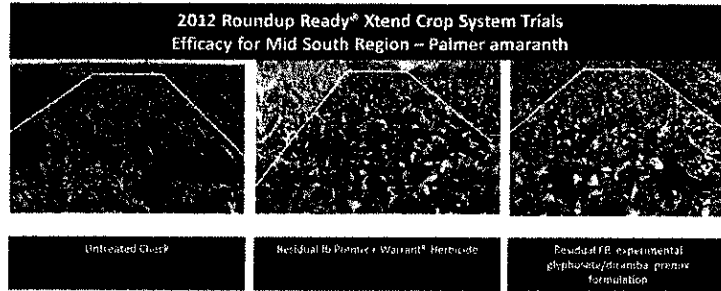
- Highly effective control of glyphosate resistant and tough to control broadleaf weeds
- Can provide residual soil activity up to 14 days on certain small seeded weeds
- Excellent application flexibility – before, at, and after planting

Pending regulatory approvals

GOING FOR THE
ROAD AHEAD

The Roundup Ready® Xtend Crop System

Provides Excellent Palmer amaranth Control



University of Arkansas, Newport, 2012; 2012-01-07-06

Pending regulatory approvals

GOING FOR THE
ROAD AHEAD

The Roundup Ready® Xtend Crop System
Provides Excellent Pre-emergent Palmer amaranth Control
(34 Days After Treatment)

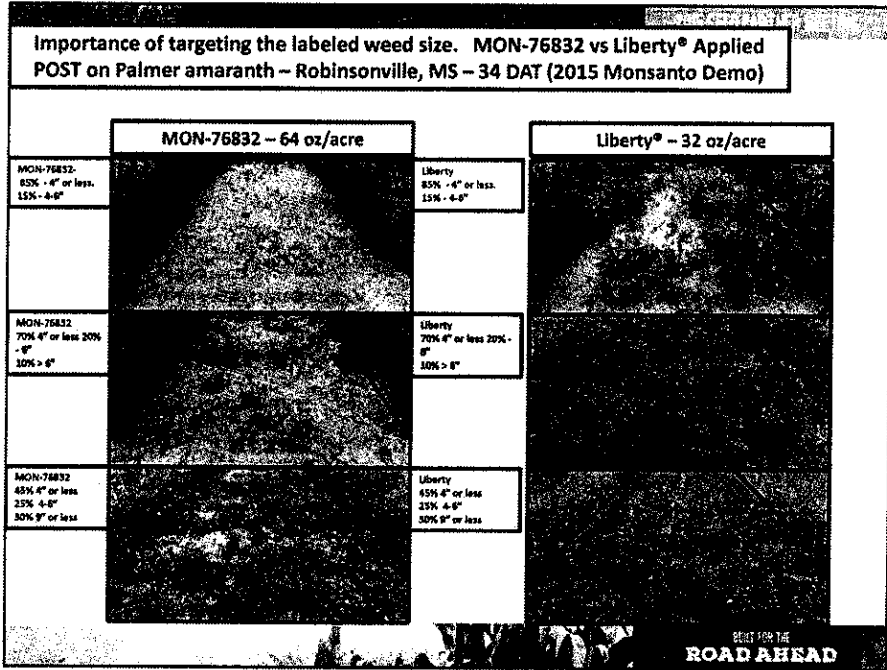


MON 119295* - 0.5 lb ae/a

Valor® 2.02/a + MON 119295* - 0.5 lb ae/a

Monsanto Research Demonstration - Robinsonville, MS - 2014
* Pending regulatory approvals

RIGHT FOR THE
ROAD AHEAD



Label pics bigger?

Roundup Xtend™, XtendiMax™, Liberty® & Enlist Duo™ Product Comparison

	XtendiMax™ with VaporGrip™ Technology	Roundup Xtend™ with VaporGrip™ Technology	Liberty®	Enlist Duo™
Formulation Loading	2.92 lb ae/gal	4.5 lb ae/gal	2.34 lb ae/gal	3.3 lb ae/gal
Use Rate	22 oz/A (+ 32 oz PMAA)	64 oz/A	29-36 oz/A	56-76 oz/A
Acres per Gallon	5.8	2	3.5-4.4	1.7 - 2.3
Signal Word	Caution	Caution	Warning	Warning
Re-entry Interval (REI)	24 hours	24 hours	12 hours	48 hours
Rainfastness	4 hours	Heavy rainfall soon after may wash product off leaves	4 hours	Heavy rainfall soon after DO NOT apply if rain is expected in 24 hours
Weed Height	Less than 4 inches	Less than 4 inches	varies	3-6" (56 oz) > 6" (76 oz)
# of Weeds Controlled	250	274	137	122

This information is for educational purposes only and is not an offer to sell Roundup Xtend™, XtendiMax™, or Roundup Ready 2 Xtend™. These products are not yet registered or approved for sale or use anywhere in the United States.

BEAT THE
ROAD AHEAD

Example of Utilizing Dicamba as Part of a Weed Control Recommendation Within the Roundup Ready® Xtend Crop System

1	2	3	4
Burndown	PRE or Preplant	POST Application 1	POST Application 2
Roundup PowerMAX® + 2,4-D*	Rowel™ or Rowel™ FX + Roundup Xtend™ with VaporGrip™ Technology	Warrant® Herbicide + Roundup Xtend™ with VaporGrip™ Technology + SelectMAX® (if needed)	Roundup PowerMAX + Cobra®

* Must follow labeled plant back restriction. For the full complement of herbicide options, see RoundupReadyPLUS.com. Other weed management recommendations as part of the Roundup Ready PLUS platform are available.

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Pending regulatory approvals

BEAT FOR THE ROAD AHEAD

Example of Utilizing Dicamba as Part of a Weed Control Recommendation Within the Roundup Ready® Xtend Crop System

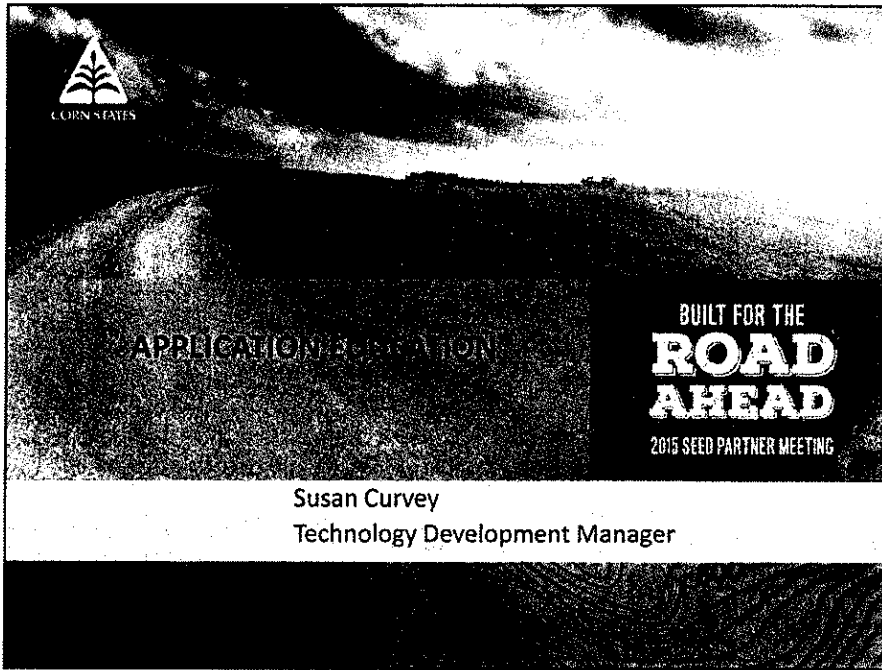
1	2	3	4
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Pending regulatory approvals

BEAT FOR THE ROAD AHEAD




Roundup Ready® Xtend Crop System
PREPARING THE SPRAYER

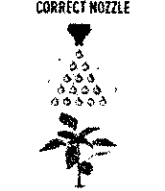
Nozzle Selection

- Proper nozzles and settings help determine:
 - Droplet size and potential driftable fines
 - Uniformity of spray pattern and coverage
 - Carrier volume

INCORRECT NOZZLE



CORRECT NOZZLE



ROAST FOR THE ROAD AHEAD


PREPARING THE SPRAYER: NOZZLE SELECTION

- Nozzle selection is one of the most important parameters for drift reduction
- Successful herbicide applications largely depend on correct nozzle selection and settings that help determine the application rate, uniformity of spray droplet size and carrier volume
- Proper nozzles and settings help determine:
 - Droplet size and potential driftable fines
 - Uniformity of spray pattern and coverage
 - Carrier volume
- Incorrect nozzle selection, worn or improperly functioning nozzles and poor planning can result in:
 - Off-target movement
 - Poor weed control
 - Crop damage
 - Increased application rates and costs

Roundup Ready® Xtend Crop System
PREPARING THE SPRAYER

Boom Height

- Maintain boom height at lowest efficient setting based on manufacturer's directions
 - No more than 20 inches above target crop or pest canopy
 - Too high increases potential for spray drift
 - Too low reduces pattern overlap and coverage
 - Operate sprayer to maintain consistent boom height



SOUL FOR THE
ROAD AHEAD

PREPARING THE SPRAYER: BOOM HEIGHT

- Boom height influences spray pattern, application uniformity and the amount of time droplets are exposed to wind and evaporation
- Set boom height at lowest efficient setting based on manufacturer's directions
 - No more than 20 inches above crop or pest canopy
 - Too high increases potential for spray drift
 - Too low reduces pattern overlap and coverage
 - Operate sprayer to maintain consistent boom height
- Automated boom height controllers are recommended with large booms to better maintain optimum nozzle-to-canopy height

Roundup Ready® Xtend Crop System

PREPARING TO SPRAY

Wind Speed

Spray when wind speeds are 3-10 mph

- Spraying in wind speeds of 0-3 mph is restricted
 - Most unpredictable and variable in direction
 - May indicate a temperature inversion; check first before spraying
- Faster speed increases risk of drift and potential for farther off-target movement

REMINDERS:

- Wind speed and direction can change at any time
- Implement a buffer as required per label instructions
- Tools such as anemometers and wind socks can assist in gauging wind speed and direction in the field
- Be fully informed of neighboring and downwind areas

BEIT FOR THE
ROAD AHEAD

PREPARING TO SPRAY: WIND SPEED & DIRECTION

- While wind speed will be a requirement of the Roundup Ready® Xtend Crop System, these recommendations are good practices when spraying any herbicide
- Spray when wind speeds are 3-10 mph
 - Spraying in wind speeds of 0-3 mph is restricted
 - Most unpredictable and variable in direction
 - A temperature inversion may be present; check first before spraying
 - Faster speed increases risk of drift and potential for farther off-target movement
- Reminders:
 - Wind speed and direction can change at any time
 - Implement a buffer as required per label instructions
 - Tools such as anemometers and wind socks can assist in gauging wind speed and direction in the field
 - Be fully informed of neighboring and downwind areas

Roundup Ready® Xtend Crop System

SPRAYING

Ground Speed

- Do not exceed 15 mph ground speed
- Faster speeds can increase drift potential, by:
 - Decreasing boom stability
 - Increasing air turbulence
- To reduce drift potential, be aware of field terrain for appropriate ground speed

15
mph



BEET FOR THE
ROAD AHEAD

SPRAYING: GROUND SPEED

- Do not exceed 15 mph ground speed
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Roundup Ready® Xtend Crop System

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ROAD AHEAD

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Roundup Ready® Xtend Crop System

PREPARING TO SPRAY

Weed Height

- Spray weeds less than 4 inches tall
 - Earlier applications help protect yield potential
 - Smaller weeds are more easily controlled
 - Scout fields prior to application for appropriate weed height
- Within the labeled application window, time applications to weed height versus crop stage



RIGHT FOR THE
ROAD AHEAD

PREPARING TO SPRAY: WEED HEIGHT

- Spray weeds less than 4 inches tall
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 - Smaller weeds are more easily controlled
 - Be sure to scout fields prior to application for appropriate weed height
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