

Beyond® Herbicide in Clearfield® and Clearfield Plus® Sunflower

### Benefits of Beyond Herbicide

- Broad spectrum grass and broadleaf weed control with foliar and residual activity
- No risk of herbicide tank-mix antagonism
- Simple use and cost effective



Sulfentrazone PRE (4.5 oz/A)



Beyond Herbicide (4 oz/A) + NIS (0.25% v/v) + AMS (17 lb/100 gal)

BASF Field Trial (2010). NDSU, Fargo, ND.

150 years

**BASF** 

We create chemistry

**Technical Information Bulletin** 

# Herbicide Tolerant Sunflower System Comparisons

Characteristics	Beyond® Herbicide	Express <sup>®</sup> Herbicide
Residual Weed Control	Yes	No
Post Broadleaf Weed Control	Yes	Yes
Post Grass Control	Yes	No (requires tank mix)
Post Grass Herbicide Required	No	Yes
Tank-mix Antagonism Potential*	No	Yes
Mode of Action	Group 2 (ALS-inhibitor)	Group 2 (ALS-inhibitor)
Formulation	Liquid (1 lb ai/gallon)	50% WDG

<sup>\*</sup>Grass control may be reduced in tank mixtures containing of ALS and ACCase herbicide mode-of-actions

#### 2014 NSA Variety Trials

Clearfield® Production System			2729	
Expres	sSun® 2	613		
2550	2600	2650	2700	2750
		Yield in lbs/Acre	!	



### Best Use Recommendations

- Apply Beyond herbicide at 4 fl oz/A to 2- to 8-leaf Clearfield® herbicide and Clearfield Plus® Sunflower
- Add non-ionic surfactant (NIS) at 0.25% v/v (Clearfield Sunflower)
- Add crop oil concentrate (COC) or methylated seed oil (MSO) 1–2% v/v (Clearfield Plus Sunflower ONLY)
- Add AMS at 12 to 15 lbs/100 gallons of spray solution

## Weed Control Comparisons

Weed Species	Beyond Herbicide	Express Herbicide
Barnyardgrass	Excellent	None
Field sandbur	Fair-Good	None
Green foxtail	Excellent	None
Yellow foxtail	Good-Excellent	None
Volunteer cereals	Good-Excellent	None
Wild oat	Excellent <sup>1</sup>	None
Wild proso millet	Good-Excellent	None
Common cocklebur	Good-Excellent	Fair
Kochia	Excellent <sup>1</sup>	Excellent <sup>1</sup>
Lanceleaf sage*	Excellent	None
Marshelder	Good-Excellent	Excellent
Wild mustard	Excellent	Excellent
Eastern/black nightshade	Excellent Fair-Good	
Hairy nightshade	Excellent	
Redroot pigweed	Excellent	Fair-Good
Wild sunflower	Excellent	Excellent
Russian thistle	Good-Excellent	Excellent

<sup>&</sup>lt;sup>1</sup>Except where resistant populations have developed. \*Lanceleaf sage is not on the approved label for Beyond herbicide. Rating obtained from the 2015 North Dakota Weed Control Guide.





