



**Clearfield®**  
Production System



**Clearfield® Plus**  
Production System for Sunflower

**Grow Smart™**  
with BASF

# Beyond® Herbicide in Clearfield® and Clearfield Plus Sunflower

## Benefits of Beyond Herbicide

- Broad spectrum grass and broadleaf weed control
- Convenient liquid formulation



**PRE residual herbicide  
No POST herbicide**



**PRE residual herbicide  
followed by POST application  
of Beyond herbicide (4 oz/A) +  
MSO (0.25% v/v) + AMS  
(17 lbs/100 gal)**

BASF Clearfield Plus Sunflower Field Trial (2010), NDSU, Fargo, ND.

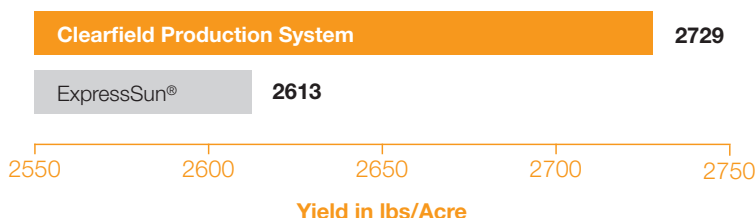


## Herbicide Tolerant Sunflower System Comparisons

Characteristics	Beyond® Herbicide	Express® Herbicide
Post Broadleaf Weed Control	Yes	Yes
Post Grass Control*	Yes	No
Mode of Action	Group 2 (ALS-inhibitor)	Group 2 (ALS-inhibitor)
Formulation	Liquid (1 lb ai/gallon)	Dry (50% SG)

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

### 2014 National Sunflower Association Variety Trials



Source: www.sunflowerusa.com/growers/yield-and-survey



To learn more about crop protection products from BASF, visit [www.agproducts.basf.us](http://www.agproducts.basf.us)

## Best Use Recommendations

### Use Rate:

- Clearfield® Sunflower – 4 fl oz/A
- Clearfield Plus Sunflower – 4-6\* fl oz/A

### Timing:

- 2 to 8-leaf Clearfield and Clearfield Plus Sunflower

### Adjuvants:

- Clearfield Sunflower – Add non-ionic surfactant (**NIS**) at 0.25% v/v
- Clearfield Plus Sunflower – Add crop oil concentrate (**COC**) or methylated seed oil (**MSO**) 1-2% v/v
- Add AMS at 12 to 15 lbs/100 gallons of spray solution

\*Rotational crop restrictions are determined based on geographic region, annual rainfall, soil pH and tillage practices. See Beyond herbicide product label to find rotational crop restrictions for a specific region and cropping system. Do not apply more than 4 fl oz/A of Beyond herbicide to Clearfield Plus Sunflower in California.

## Weed Control Comparisons

Weed Species	Beyond Herbicide	Express Herbicide
Barnyardgrass	Excellent	None
Downy Brome	Good-Excellent	None
Green foxtail	Excellent	None
Yellow foxtail	Good-Excellent	None
Volunteer cereals	Good-Excellent	None
Wild oat	Excellent <sup>1</sup>	None
Prickly lettuce	Good-Excellent	Good <sup>1</sup>
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	Poor-Fair
Hairy nightshade	Excellent	—
Redroot pigweed	Excellent	Fair-Excellent
Wild sunflower	Excellent	Fair
Russian thistle	Good-Excellent <sup>1</sup>	Excellent <sup>1</sup>

<sup>1</sup>Except where resistant populations have developed.

\*Lanceleaf sage is not on the approved label for Beyond herbicide.

Ratings obtained from the 2017 North Dakota University Weed Control Guide.



### Always read and follow label directions

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