

# Flag the Technology Update



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West Texas Agricultural Chemicals Institute Conference

September 13, 2017





## Flag the Technology And Avoid Crop Injury!

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This publication produced in cooperation with:



West Texas Agricultural  
Chemicals Institute



Texas Ag Industries Association



Texas Plant Protection Association

Flag the Technology is a field marking program originally developed by personnel at the University of Arkansas<sup>1</sup> and is now a widely accepted practice to reduce the risk of a misapplication. This practice will also make the applicator aware of sensitive crops adjacent to the field being sprayed. Recent herbicide tolerant crop introductions have provided new options for controlling herbicide resistant weeds. However, the herbicides used in these programs can have detrimental effects on non-tolerant crops. To minimize misapplications, marking fields with designated color flags representing the herbicide tolerant trait(s) has become a beneficial practice. Flags should be placed in a location clearly visible to applicators upon entry into the field.

Since the color of the flag represents a specific trait technology, multiple flags may be placed in a field where stacked technologies are used, such as those possessing both Liberty Link and Roundup Ready traits. The objective of the Flag the Technology program is to help reduce herbicide application errors, improve herbicide and technology stewardship, and foster good community relations.

<sup>1</sup> Bob Scott, Dharmendra Saraswat, Ples Spradley and Ron Baker, "Flag the Technology" FSA2162



Flags should be placed at all likely entry points into the field.



Very low concentrations of some herbicides drifted on to non-tolerant crops can cause noticeable injury.

### Preferred Flag Size

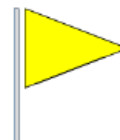
6' x 1/4" fiberglass pole with minimum 11" x 17" flag for maximum visibility

### Color Codes

**RED**  
signifies conventional varieties with no herbicide technology traits.  
*Extreme caution.*



**BRIGHT YELLOW**  
is the color chosen for Clearfield® rice technology, STS® soybeans<sup>1</sup> and INZEN grain sorghum.



**WHITE**  
represents the Roundup Ready technology that is tolerant to glyphosate herbicide.



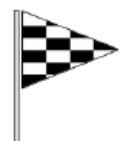
**TEAL**  
indicates tolerance to both 2,4-D and FOP (ACCase) herbicides or Enlist® technology. The white stripes indicate tolerance to glyphosate. For Enlist cotton and soybean fields, a green flag should be added to denote tolerance to glufosinate (Liberty).



**GREEN**  
indicates the Liberty Link® technology. This technology is tolerant to glufosinate (Liberty®) herbicide.



**BLACK**  
indicates tolerance to dicamba herbicide or Xtend®. The black and white checks indicate tolerance to both dicamba and glyphosate (Roundup). A green flag should be added for cotton to denote glufosinate (Liberty) tolerance.



<sup>1</sup> Although many herbicides are in the ALS family of herbicides, crops with this technology are not tolerant to all ALS herbicides.

Produced by Soil & Crop Sciences  
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# Percentage of Fields Where You Can See Flags?

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## High Plains

- <5%

## Upper Gulf Coast/Blacklands

- 5% max (probably generous)

## Costal Bend/Rio Grande Valley

- 5 to 10%





# Types of Flags (Most to Least)

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## High Plains

- Conv=LL>Enlist>XF

## Upper Gulf Coast/Blacklands

- XF>Enlist>LL>Conv

## Costal Bend/Rio Grande Valley

- LL>>XF>Enlist>red(none observed)





# Flag Initiation and Duration

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## High Plains

- Well after planting but before first POST applications were made

## Upper Gulf Coast/Blacklands

- After stand establishment

## Costal Bend/Rio Grande Valley

- 2 to 6 weeks after planting through harvest





# Flag Quality

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## High Plains

- Clips won't work!

## Upper Gulf Coast/Blacklands

- Many not durable enough to last all season.

## Costal Bend/Rio Grande Valley

- All brands seemed to lose the pennant after a couple of months.



# Did it make a difference?

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## High Plains

- “Internal” to the operation likely the most significant benefit.

## Upper Gulf Coast/Blacklands

- It is hard to say considering the relatively low adoption. If it prevented one mistake it had value. Most growers preferred “talking” to neighbors rather than advertising their technology.

## Costal Bend/RGV

- With adoption this low, I imagine not.



# Can the flags be reused?

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## High Plains

- For the most part, yes!

## Upper Gulf Coast/Blacklands

- If someone is going to go to the trouble to flag their fields, I suggest using new flags. However, this is assuming the companies will provide them again at no or low cost.

## Costal Bend/RGV

- Will definitely need new flags.

# Any mischief?

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## High Plains

- No. More damage done by moving machinery around.

## Upper Gulf Coast/Blacklands

- None

## Costal Bend/RGV

- None



# Do you see greater adoption next year?

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## High Plains

- Maybe an increase in conventional and LL flags?? Maybe a decrease if we move towards one technology.

## Upper Gulf Coast/Blacklands

- I suspect the same to low adoption because a higher percentage will be in one technology.

## Costal Bend/Rio Grande valley

- Perhaps. We had about 8 cases of wrong herbicide sprayed on the wrong variety (dicamba on non-DT cotton / Enlist Duo on non-Enlist cotton). I heard from several involved “Maybe if we had used those colored flags, this wouldn’t have happened...”

# What about Hit the Target ?

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## High Plains

- Don't know of anyone who used it.

## Upper Gulf Coast/Blacklands

- As was suspected, there is apprehension from row crop growers about privacy about entering their farm information. The non-herbicide tolerant crops and minor crops will likely dominate the utilization of Hit the Target.

## Costal Bend/RGV

- Adoption has been very low down here, even specialty crops and vineyards aren't using the system. It goes back to privacy concerns.





# One disconnect was weed size. Will these weeds die?

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Will these die?

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# What about these?

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# Ideal situation?

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Can tell the difference between dicamba and 2,4-D symptomology?  
All of the time? Most of the time? Some of the time?

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dicamba or 2,4-D?

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dicamba or 2,4-D?

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dicamba or 2,4-D?

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dicamba or 2,4-D?

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dicamba or 2,4-D?

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dicamba or 2,4-D?

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dicamba or 2,4-D?

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dicamba or 2,4-D?

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# dicamba or 2,4-D?

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dicamba or 2,4-D?

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# What's Next? Thank you...

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