

# North Dakota Specific Use Restrictions for Dicamba



**These restrictions will only apply to post-emergence applications of XtendiMax (Monsanto), Engenia (BASF), and FeXapan (DuPont)**



# Reported Dicamba Damage

## Official Complaints

- During the 2017 application year the Department received many complaints of herbicide damage to soybeans from alleged misuse or off target movement of Dicamba
  - 40 formal investigations
  - Led us to develop survey



# Reported Dicamba Damage

## Survey Results

- 215 responses
- 207 people reported herbicide damage believed to be caused by Dicamba
  - 8 unsure
- Only 23 people indicated they did plant tissue analysis testing to confirm Dicamba presence



# Reported Dicamba Damage

## Survey Results

- Damage was reported to 3,623 fields
  - 118- damage to entire field
  - 112- damage to portion of field
- 163,204 acres were reported damaged



# Reported Dicamba Damage

## Survey Results

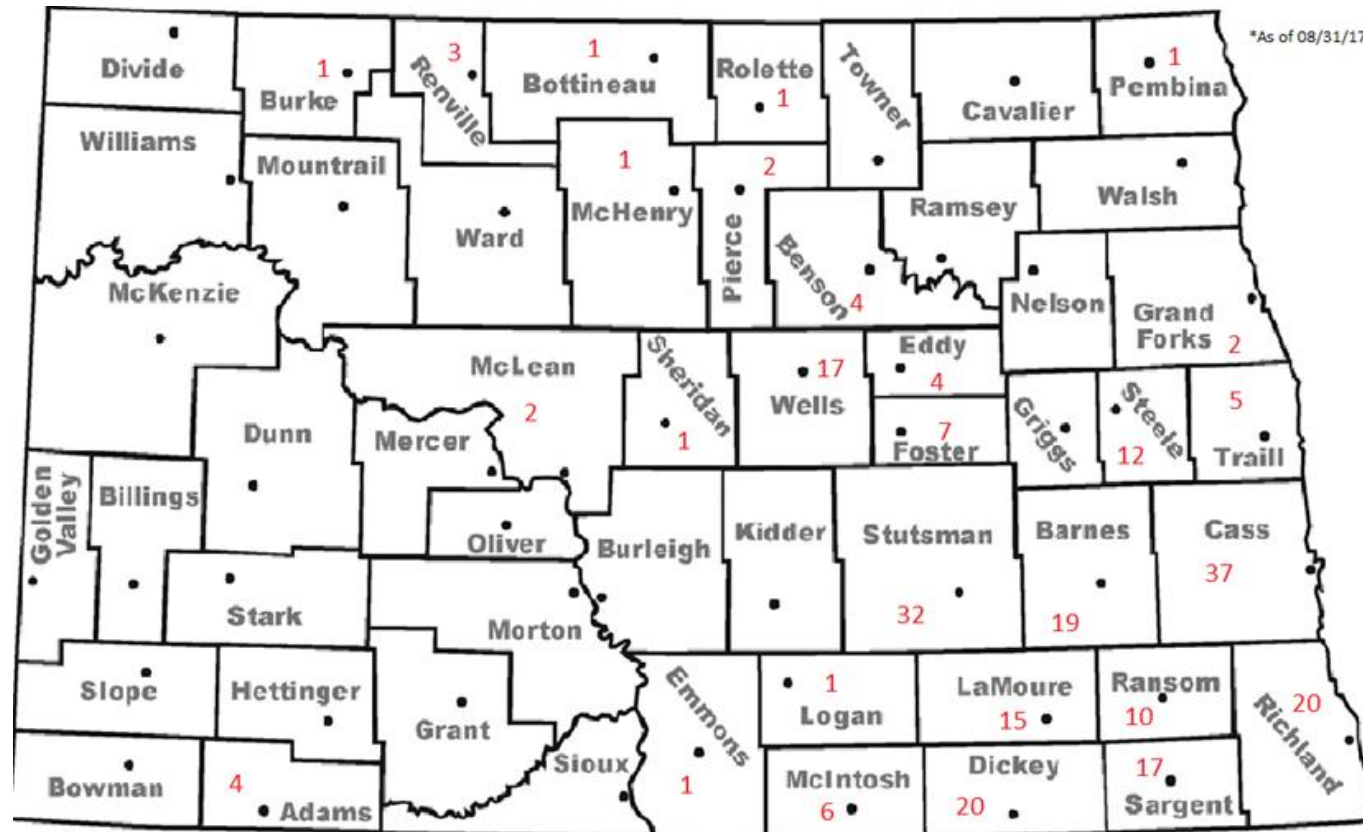
- Most reported experiencing heat stress and severe drought conditions that may have stressed crops or exaggerated herbicide damage
- Almost all reported damage was to non Dicamba tolerant soybeans
  - Several reports of damage to gardens and ornamentals



# Reported Dicamba Damage

## Survey Results

- Damage reported in 28 counties





# Reported Dicamba Damage

## Survey Results

- Comment Summary
  - Most believed label was followed properly
  - Most believed product volatilization was the cause of movement
  - Indicated most April and May applications did not have movement
  - Indicated damage was believed to come from June and July applications

# ND Changes for 2018 Season



**These restrictions would only apply to post-emergence applications of XtendiMax (Monsanto), Engenia (BASF), and FeXapan (DuPont)**



# Changes for 2018 Season

## **North Dakota Specific Use Restrictions:**

**No applications can be made after June 30<sup>th</sup>**

The vapor pressure of many pesticides including Dicamba increases as air temperature increases which makes them more prone to volatility. Higher temperatures are historically known to occur in late June and early July increasing the risk of volatility. The data we collected in 2017 shows that almost all damage reported came from applications that occurred in very late June through July. To address this concern the Department has placed a definitive cutoff date for applications.



# Changes for 2018 Season

## **North Dakota Specific Use Restrictions:**

No applications may be made if air temperature of the field at the time of application is over 85 degrees Fahrenheit or if the forecasted National Weather Service high temperature at the nearest available location for the day exceeds 85 degrees Fahrenheit.

North Dakota has a unique climate that is different than other soybean producing states. During the application season we typically have low humidity. The dry/less humid environment can significantly increase product evaporation and potential off target movement. June temperatures can often be unpredictable, and climb into the 80s and even 90s. Any high temperatures experienced during this time can greatly increase the chance of product volatility and potential off target movement. To safeguard against this, we have placed a temperature restriction on when applications can be made.



# Changes for 2018 Season

## **North Dakota Specific Use Restrictions:**

Applications can only be made from one hour after sunrise to one hour before sunset



# Changes for 2018 Season

## **North Dakota Specific Use Restrictions:**

Applicators must maintain a speed of 12mph or less while applying product



# Changes for 2018 Season

## **North Dakota Specific Use Restrictions:**

Any applicator working under the supervision of a certified private applicator will also be required to complete Dicamba specific training before applying product



# Changes for 2018 Season

## **North Dakota Specific Use Restrictions:**

Applications must be made with a minimum of 15 gallons of spray solutions per acre



# Changes for 2018 Season

## **North Dakota Specific Use Restrictions:**

No applications can be made using 80 degree or less spray nozzles



# Changes for 2018 Season

## **Best Management Practices**

- Consider utilizing pre-emergence weed management strategies
- Avoid relying solely on post-emergence applications of Dicamba for weed control



# Changes for 2018 Season

**Remember for your spray records ND Law states:**

- Restricted use applications and/or commercial applications need to be filled out within 24 hours of the application.
- Records need to be maintained for 3 years on all restricted use/commercial applications.



# Summary

- **No applications can be made after June 30<sup>th</sup> or after the first bloom (R1 growth phase), whichever comes first**
- **No applications can be made if the actual air temperature or the National Weather Service Forecasted high for the day exceeds 85 degrees Fahrenheit**
- **Applications can only be made from one hour after sunrise to one hour before sunset**
- **Applicators must maintain a speed of 12 miles per hour or less**
- **Any applicator working under the supervision of a certified private applicator will also be required to complete the Dicamba specific training before applying the product**
- **Applications must be made with a minimum of 15 gallons of spray solution per acre**
- **No applications can be made using 80-degree or less spray nozzles**

# Questions and Discussion?



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