

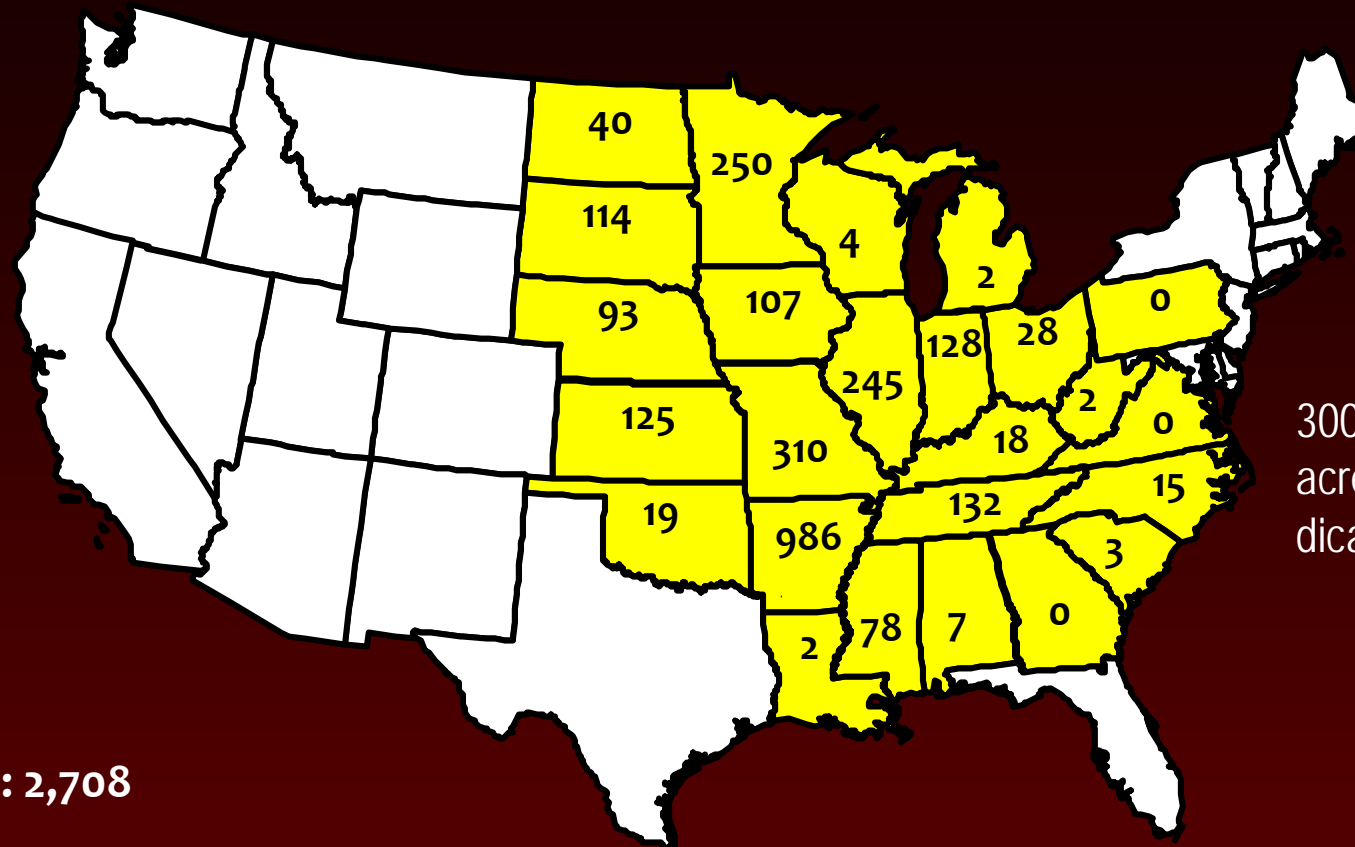


Auxin Herbicides: NC's Concerns



Official Dicamba-related Injury Investigations as Reported by State Departments of Agriculture

(*as of October 15, 2017)



300 to 400 thousand acres treated with dicamba in NC in 2017

***Total: 2,708**

2017 Case Summary

Damaged Crops		Applicator Trained	Buffer Zone	Supp./24c In Hand
Tobacco - 8	Yes	11	2	5
Soybean - 6	No	4	13	8
Peanut - 1				

Impacts of Off-target Deposition

- ▶ Reduced yield
- ▶ Marketability of tobacco, fruits and vegetables (high value crops)

"If we see symptoms, we don't want it."





1/250th X

1/1000th X



NC 24(c) Labels for Dicamba Products 2018

- **Training Requirements**
- Prior to applying this product postemergence in-crop on dicamba-tolerant cotton or dicamba-tolerant soybeans for the 2018 growing season, all dicamba applicator(s) including commercial applicators, private applicators, and non-certified applicators working under their direct supervision must complete dicamba or auxin-specific training. Training must be completed annually before each growing season. The training: “**Auxin herbicides - Best Management Practices**” must be approved by the North Carolina Department of Agriculture and Consumer Services (NCDA&CS). For more information on this training, contact the NCDA&CS at 919-733-3556 or your local County Cooperative Extension Service office.
- **Record Keeping Requirements**
- In addition to the record keeping requirements on the label:
- all applicators must complete each record within **72 hours** of completing the application
- include the name of each applicator who made the application
- a record must be kept for every individual application.” (each field). As an example, applications made to 5 different fields require 5 separate records of application, even if those applications are made on the same day.

NC 24(c) Labels for Dicamba Products 2018

- **Sensitive Species**
- Failure to follow label requirements could result in severe injury or destruction to desirable sensitive broadleaf crops and trees when contacting their roots, stems or foliage.
- Before making an application, the applicator must survey the application site for neighboring non-target susceptible crops; for example, tobacco, tomatoes, grapes, watermelon, sweet potato, peanut, pepper, beans, non-dicamba tolerant cotton, and non-dicamba tolerant soybean. The applicator must also consult applicable sensitive crop registries to identify any commercial specialty or certified organic crops that may be located near the application site.
- **DO NOT** apply this product when the wind is blowing toward adjacent dicamba susceptible crops, including but not limited to: tobacco, grapes, watermelon, sweet potato, peanut, pepper, beans, non-dicamba tolerant cotton, and non-dicamba tolerant soybean, commercially grown tomatoes, fruit trees, flowers, ornamentals, peas, potatoes, sunflower, EPA crop group 8 (fruiting vegetables such as tomato, pepper, eggplant, others) and EPA group 9 (cucurbit vegetables such as cantaloupe, cucumber, squash, watermelon, others), and other broadleaf plants, including plants in a greenhouse.

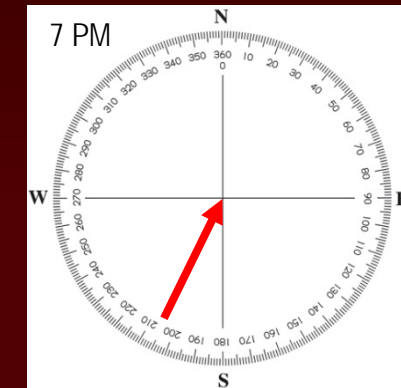
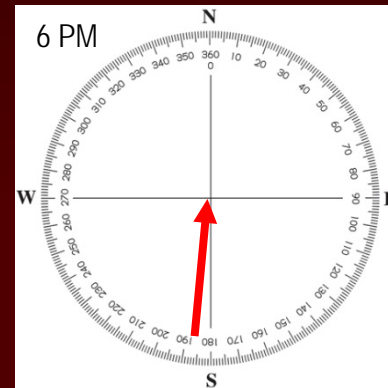
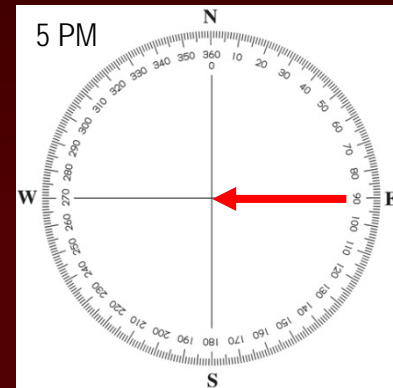
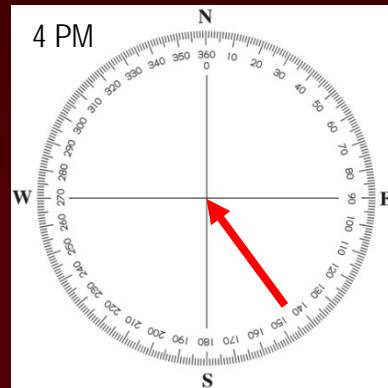
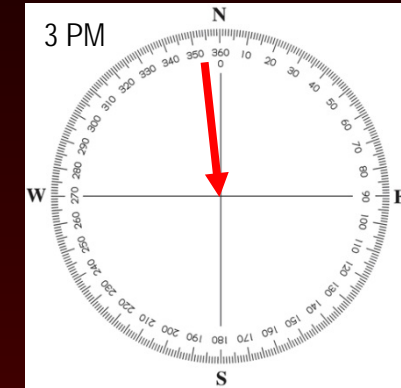
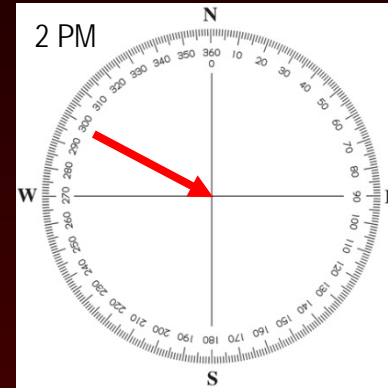
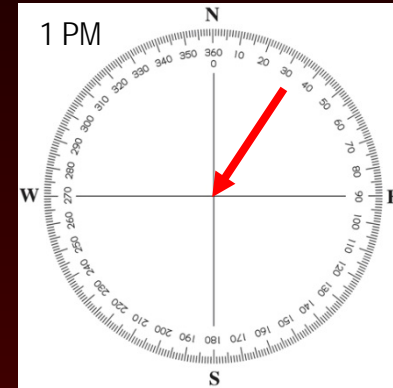
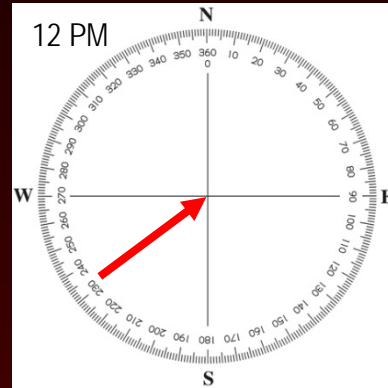
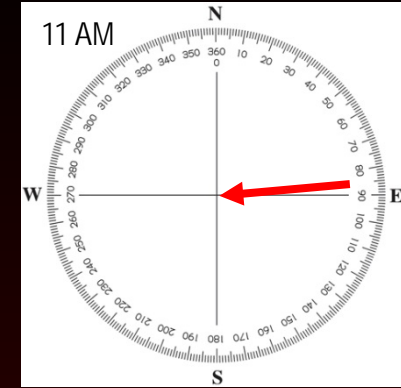
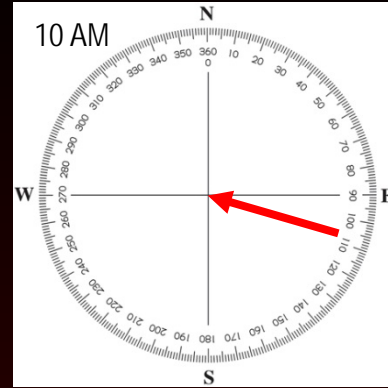
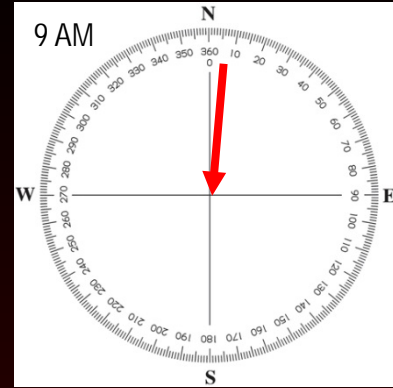
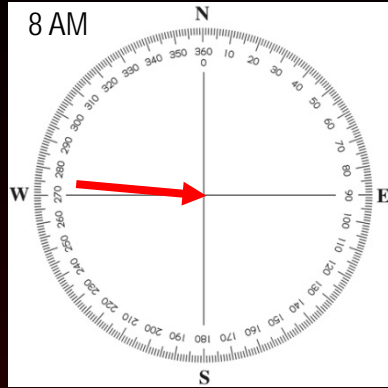
Wind Speed

- ▶ Federal labels and/or NC SLN labels of auxin-containing herbicides registered for Enlist and Xtend crops specify application during specific wind speeds
 - Wind should be 3-10 MPH
 - Do not spray if wind < 3 MPH or > 10 MPH
 - Maximum wind speed should be obvious; stronger winds mean more drift; doubling wind speed doubles to quadruples drift distance



July 19, 2016

Rocky Mt., NC



Instructions for Completing Record Keeping Form

Instructions for Completing Record Keeping Form

Jerry Cashwell
Sprayer Operator - Applicator's Name

1

Bernard Cashwell #78246
Certified Applicator's Name and Certificate/License Number

3

1/31/18 #1065
Training Date and ID Number

2

1/31/18 #1067
Training Date and ID Number

4

Crop and Location	Mo/Day/Yr	Product Name	EPA Registration Number	Size of Treated Area (Acres)	Total Amount Applied
5	6	7	8	9	10
Soybeans - Pete's Field	7/4/18	Engenia	7969-345	20	256 ounces

****Attach Receipts of Purchase, Full Product Labels, and Section 24(c) Label**

- 1 Sprayer Operator - Applicator's Name:** Write the name of the sprayer operator – each operator should maintain a separate sheet for record keeping.
- 2 Training Date and ID Number:** Enter the date that the operator attended training and the ID Number on the Certificate of Completion.
- 3 Certified Applicator Names and Certificate/License Number:** Enter the name and number of the certified applicator who purchased the auxin product and supervised the sprayer operator.
- 4 Training Date and ID Number:** If applicable, enter the date that the certified applicator attended training and the ID Number on the Certificate of Completion.
- 5 Crop and Location:** Fill in the crop being treated along with the general name of the field or USDA (FSA) Field Number. Each field shall be recorded as a separate record.
- 6 Month, Day, and Year:** Enter the date of each application.
- 7 Product Name:** Enter the product name of the auxin herbicide being applied.
- 8 EPA Registration Number:** Enter the EPA Reg. No. of the auxin herbicide. It is located below the ingredients statement on most labels. It is not the same as the EPA establishment number (for example, EPA Reg. No. 241-337).
- 9 Size of Area Treated:** Enter the size of the treated area in acres.
- 10 Total Amount Applied:** Recorded as the total quantity of auxin herbicide used — *not the quantity after water or carrier added*. Calculated by multiplying the rate of product by the size of area treated for example 12.8 oz./acre x 20 acres = 256 oz.

Followed label recommendations each time.
Spray System Cleanout Procedure Used

11

TT11004 @ 30lbs Pressure
Nozzle Type and Pressure

12

Time, Air Temperature, Wind Direction and Speed Begin	Time, Air Temperature, Wind Direction and Speed End	Tank Mix Products (other herbicides, adjuvants, etc.) Brand and Reg Number	Application Timing (pre-emergence, number of days after planting, etc)	Sensitive Crop Registry/Awareness Method and Buffer Distance*	Cleanout Completed
13	13	14	15	16	17
9:30 (AM/PM)	11:00 (AM/PM)	Honcho K6 EPA Reg # 524-445 Ensure Elite	Post-emergence 28 days after planting	Checked FieldWatch and Observed Area on 7/3/18	Sprayer was cleaned 7/1/18 and cleaned 7/5/18
83 °F	87 °F				
WSW 5 mph	SW 7 mph				

- 11 Spray System Cleanout Procedure:** Document procedure used to ensure the sprayer is clean prior to use and cleanout method utilized after the application is finished. See "Spray System Equipment Clean-out" section of the label.
- 12 Nozzle Type and Pressure:** Record of the spray nozzle manufacturer/brand, type, orifice size, and operating pressure used during each application of the product. Refer to the herbicide label for specifications.
- 13 Time, Air Temperature, Wind Direction and Wind Speed:** Record the time you began the application and the end time of the application. Also record the air temperature, wind speed and wind direction at boom height at the time the application began and ended at each field.
- 14 Tank Mix Products:** List of all products (pesticides, adjuvants, and other products) that the applicator tank mixed with the auxin products for each application. Include EPA Reg. No. in the case of any pesticides.
- 15 Application Timing:** Record whether the applicator applied this product pre-emergence or the number of days after planting if the applicator applied this product post-emergence.
- 16 Sensitive Crops Awareness and Buffer Distance*:** Document that the applicator surveyed neighboring fields or consulted specialty crop registry for any sensitive areas or sensitive crops prior to application. At a minimum, records must include the date the applicator consulted the specialty crop registry or surveyed neighboring fields and the name of the specialty crop registry the applicator consulted. *For Xtendimax – calculate buffer distance and include sensitive areas within buffer.
- 17 Clean Out Completed:** Enter the date that system cleanout was completed.

