

Dicamba: What we know & what we do not know

Thomas C Mueller

University of Tennessee

WSSA Stakeholders presentation

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Overview of presentation

- What we know
- What we do not know
- Next steps forward

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What we know about dicamba

- Can move off-target
- Soybeans are hyper-sensitive
- Lower spray pH correlates to more vapor loss
- More apparent emissions at higher temperatures
- New formulations have less vapors, but still some
- Variable stewardship in practice
- Population is watching us.

What we know about dicamba

- From Tennessee: (Larry Steckel)
- TDA completed 40% of official 2017 complaints (136 total)
- 41% could not find source of drift
- When source is known:
 - 27% was applicator error
 - 6 = unapproved tank mix, 6 = rate, 3 = wrong nozzles
- Still many incidents not explained



What we do not know about dicamba

- How to get out of spray equipment
- Research papers on tank cleanout (very few)
- Reminder, Monsanto tank cleanout research?
 - Hydrogen peroxide using fenton's reaction
 - Do not hear much about that
 - Not on the label
- Meaningful research on getting dicamba out of spray equipment
- Difficult to publish (active ingredients not listed)

What we do not know about dicamba

- How do dicamba vapors affect non target plants
- Most “drift” studies are sprayed at 10-15 GPA
- Not “drift” but simulated tank contamination
- Difficult research to do with vapors
 - How to generate dicamba vapors at known concentration?
 - Time of dosing?
- We assume 15 GPA behaves same as vapor...

What we do not know about dicamba

- Atmospheric loading
- Scale of vapor/aerosols loading probably affects plant response
- 4 acres? -40 -400 -4,000 - 40,000 - 400,000
- Cannot conduct this field trial under controlled conditions
- Fields with “no apparent plant response pattern”
 - Have no data to make claims it is due to vapor drift

Next Steps forward

- Researchers address various questions

Thanks from Tom Mueller

- Sincerely appreciate visiting with you today



Questions?

