



Spray Calibration & Surfactant Efficacy

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Background

- ▶ Virginia Tech, Class of 2017
- ▶ Started career with Helena immediately after graduation
 - ▶ Agrintelligence Specialist (2017-2020)
 - ▶ Became a sales rep in 2021



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Choosing The Right Spray Volume

- ▶ How spray volumes can change?
 - ▶ Early season vs. Late season
 - ▶ Water volumes typically should increase as foliage increases
- ▶ Spray volume can vary depending on chemicals being applied
 - ▶ Be sure to check product labels or consult your sales rep for this information
- ▶ What spray volume are you wanting to obtain?
- ▶ Has your current spray volume produced good results?

Herbicide Sprayers

- ▶ 4 things needed for sprayer calibration
 - ▶ # of seconds to drive 88 feet (MPH)
 - ▶ Spray pattern measured in feet
 - ▶ Ounces per nozzle per minute
 - ▶ # of nozzles being used

- ▶ Multiply how long it takes to cover 1 acre by GPM to obtain GPA

Using Fertilizer with Herbicides

- ▶ Nutrients like P are immobile if fertilizer is not incorporated
- ▶ Soil applications can be very beneficial to long term crop health
 - ▶ Although they are extremely important, we can't grow a crop with just foliar fertilizers.
- ▶ Not all fertilizers will mix with herbicides
 - ▶ Nutrients antagonizing chemicals
 - ▶ Chelation on micros
- ▶ Fertilizer will take the place of some water volume

Fungicide/Insecticide Sprayers

- ▶ 3 things needed for sprayer calibration
 - ▶ # of seconds to drive 88 feet (MPH)
 - ▶ Vine row spacing (feet between vines)
 - ▶ Minutes to spray 500 gallons

- ▶ Multiply how long it takes to cover 1 acre by GPM to obtain GPA.

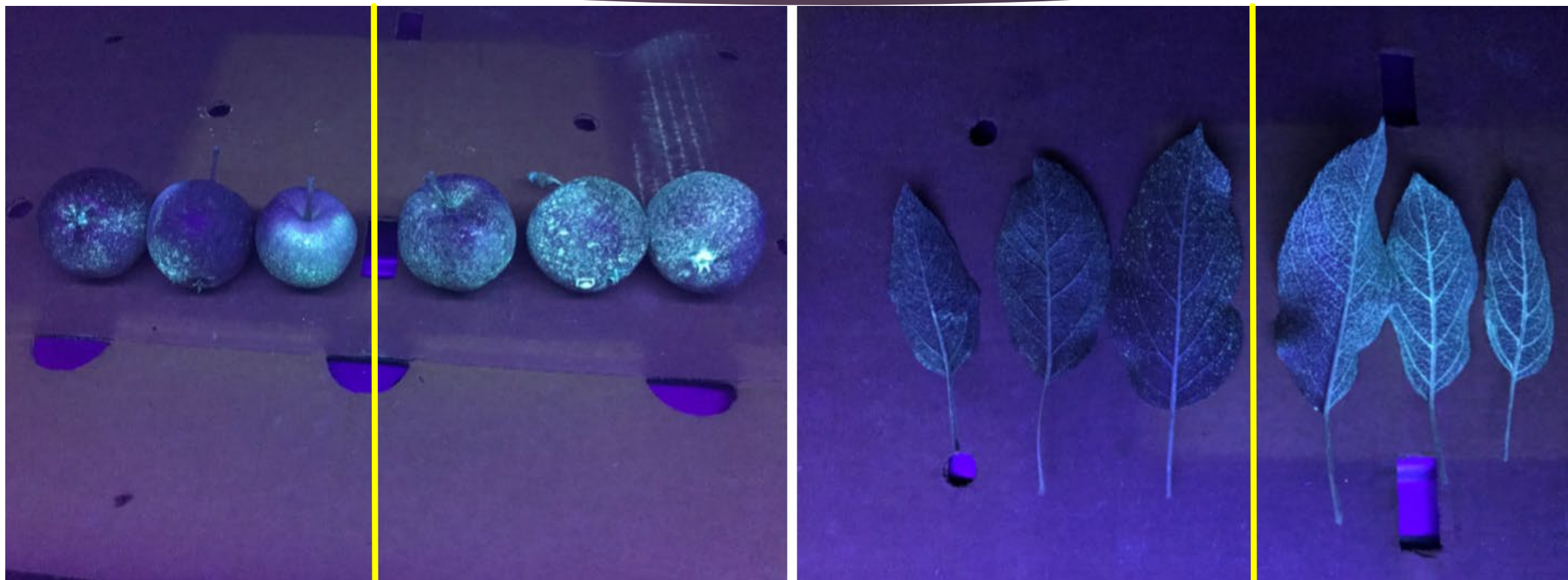
Advantages To Yearly Calibration

- ▶ Important to calibrate sprayers yearly to ensure accurate rates
- ▶ If MPH on tractor is slightly off, you could be applying a totally different rate
- ▶ It is very easy to adjust spray volume if necessary when you know the current volume
- ▶ Your chemicals will do a much better job!

Surfactants

- ▶ Fungicide Surfactants:
 - ▶ Cohere (Sticker)
- ▶ Herbicide Surfactants:
 - ▶ Dyne-Amic (Spreader/Penetrator)
 - ▶ Grounded (Pre-emerge control)
- ▶ Be sure to protect your chemicals as much as possible!

Cohere with fungicides



Summary

- ▶ Calibrate Sprayers yearly
- ▶ Use surfactants to your advantage when applying chemicals
- ▶ Get more bang for your buck on chemicals/fertilizers
- ▶ Contact me with any questions!
 - ▶ Cole Davis – (828) 417-1674



Questions???