

Using Pesticides Wisely



Culpepper
Steckel
Gray
York
Li

Training – Data Gaps



1. Survey Results of GA Training

2. Data GAPS Identified by Trainers



Survey question: List primary points from the training that actually help you apply auxins on-target.

Using Pesticides Wisely – Survey Results

1. Understanding sensitivity of crops/plants surrounding treated fields -- i.e. better understanding of the auxin footprint.

How Much Clarity Per Acre Does One Need To Injure A Snap Bean Field?

Clarity 4 L (0.3776 ml)



Pesticide Footprint

Visual Sensitivity Scale for Dicamba in GA-2018

Lower	Moderate	Severe	Extreme
Broccoli Cabbage Kale Mustard Pecan Turnip	Cantaloupe Canola* Cucumber Peach Peanut Squash	Cotton Pepper Tomato Watermelon	Grapes* Lima Bean Southern Pea Snap Bean Soybean Sweet potato* Tobacco*
>1/75X	1/75-1/300X	1/300-1/800X	< 1/800X
Herbicide Rate of Visually Detectable Injury			
For relative comparison, tomato, squash, and watermelon response to Roundup for visual damage would be in the "lower" category.			
Data from literature; all other data generated in over 70 UGA field experiments.			

Using Pesticides Wisely – Survey Results

2. Research showing how far particle drift can go using grower practices!



Using Pesticides Wisely – Survey Results

3. Educational Cooperation – Growers, Extension, Department of Ag, Industry, EPA, Agents, Consultants (*face to face training was/is critical*)



Industry
Partners



PLANT
INDUSTRY

2017 Survey Results – North Carolina

Prefer face-to-face or online training?

Category	Respondents	Face-to-face	Online
	no.	----- % -----	
Grower	1695	95	5
Dealer	150	92	8
Other	134	94	6
Consultant	62	94	6
Applicator	32	84	16
Total	2073	94	6

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Trainers must have an in depth knowledge of both the positives and negatives of the technologies. Unbiased delivery is critical.

UGA's 15 Factors Influencing Success

Spray Tip

Spray Pressure

Sprayer Speed

Boom Height

Tank Cleanout

Drift Control Agent

Proper Formulation

Wind

Land Terrain

Temp/Humidity

Size
of Crop

Buffers

Herbicide Footprint/
Surrounding crops

Volatility

Residue Tolerance

Data Gaps Identified by Trainers

1. Volatility

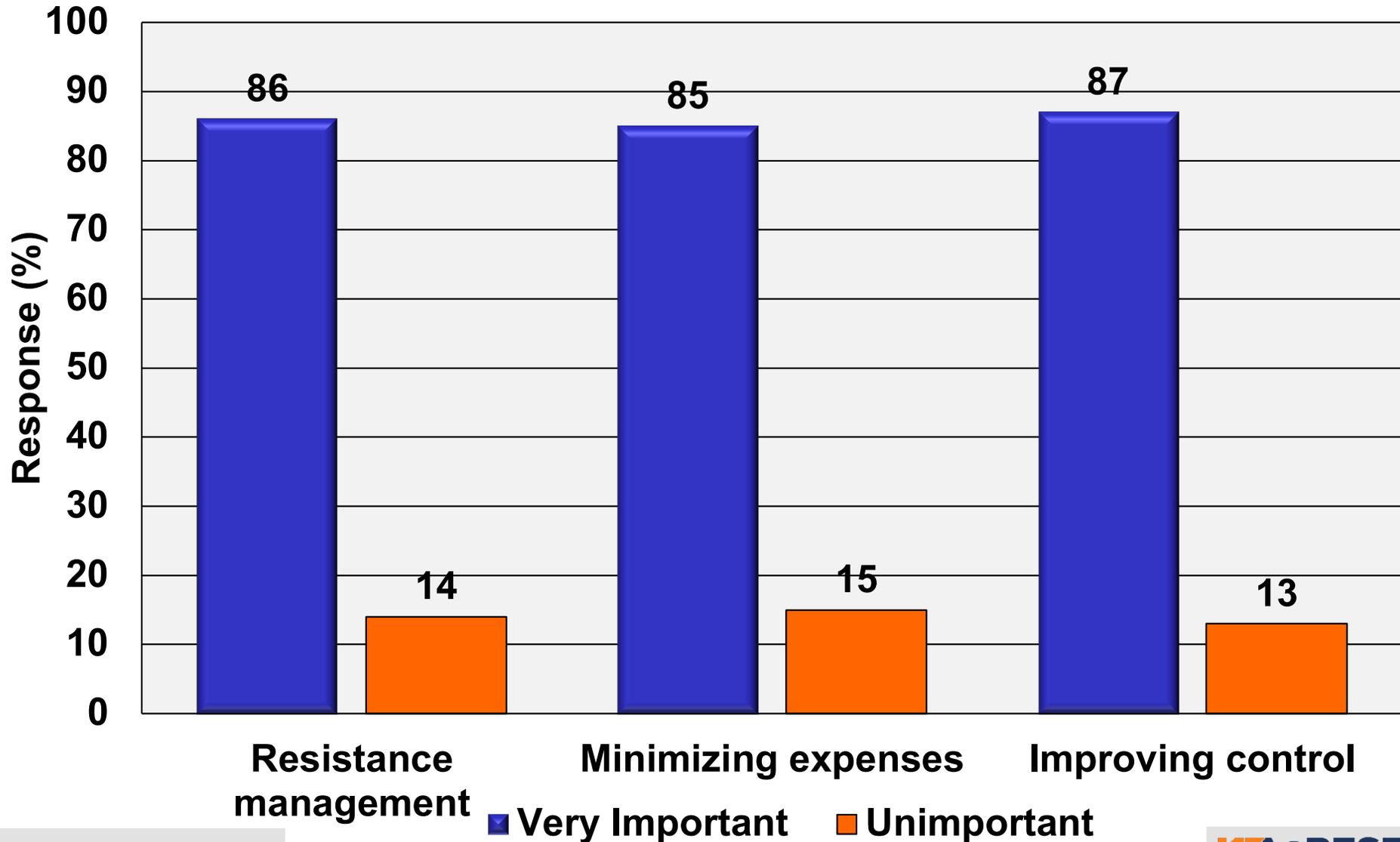
- A. Data you can trust from field
- B. Large acreage
- C. Soil moisture – soil texture – temp

2. New spray tips – progress?

3. Tank mixtures

- A. Especially insecticides/fungicides
- B. When a mix is not approved.....
share data on why it isn't

How important are tank-mixtures or premixtures for:



Data Gaps Identified by Trainers

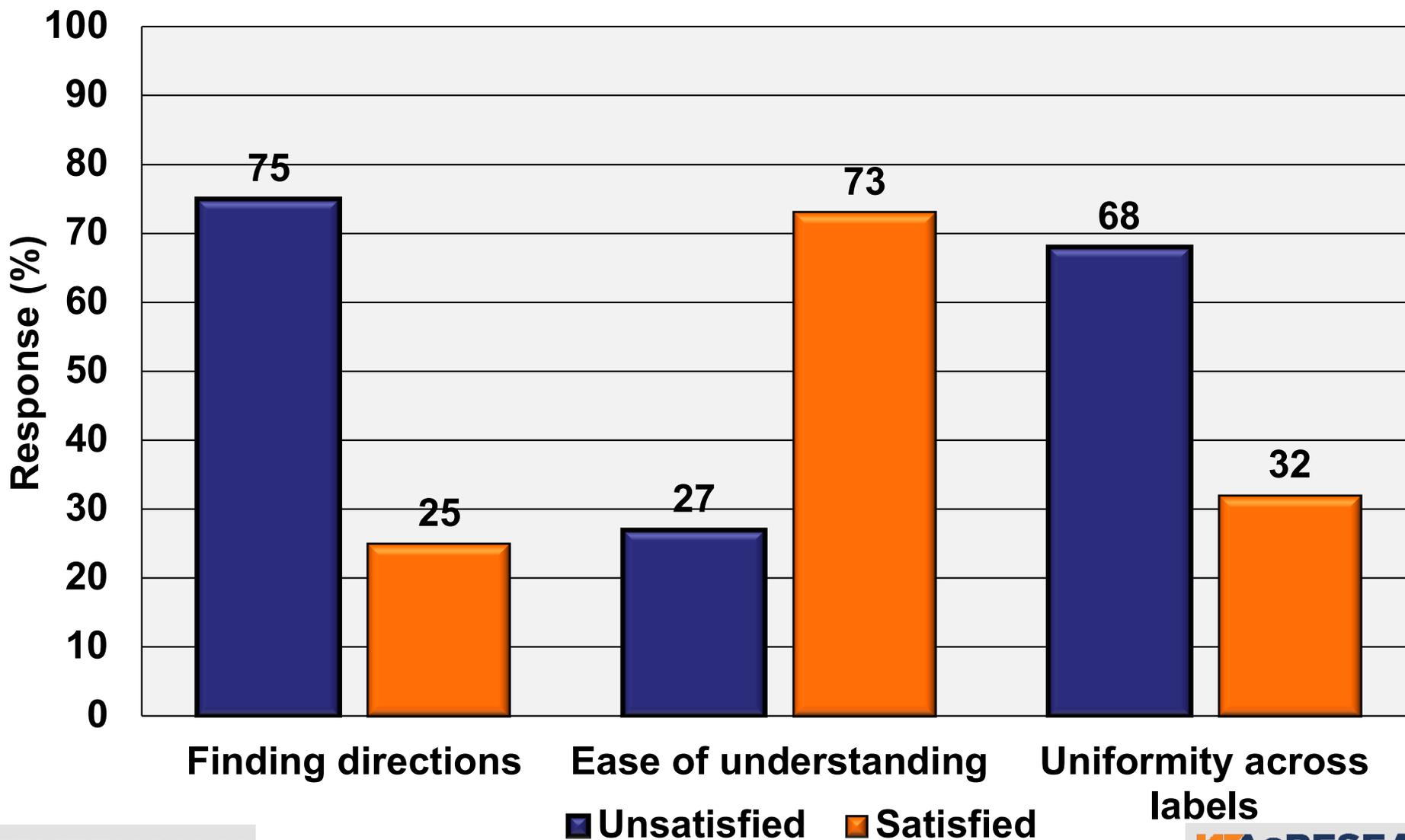
4. Time interval droplets remain in the air at lower wind speeds as influenced by the environment.

5. Movement of product in water after rain

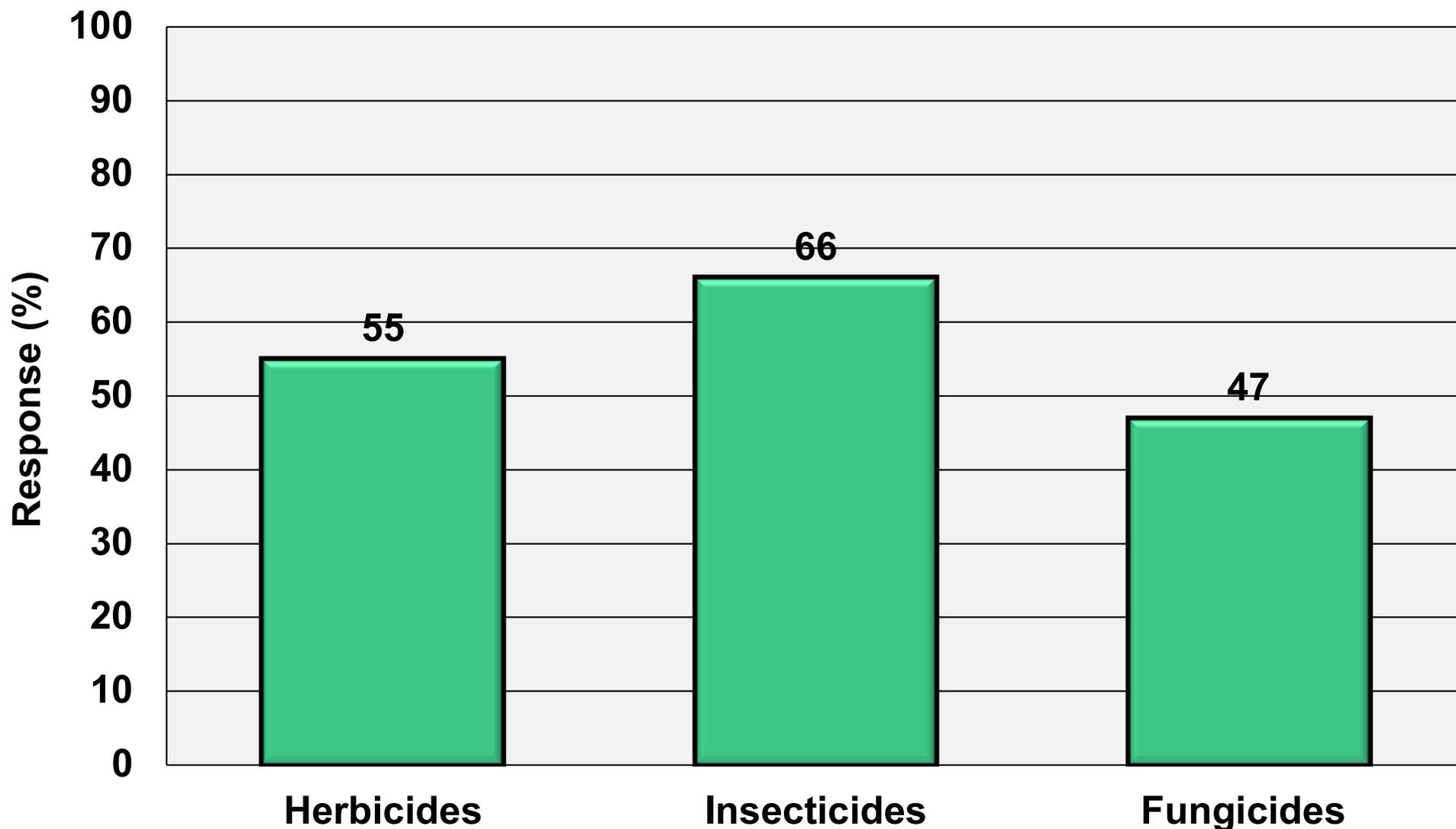
“Do not make application of this product if rain is expected in the next 24 hours”

6. Nearly all trainings are based on the label.....

Please rate your overall satisfaction level with pesticide labeling based on:



How effective are pesticide labels in curbing pest resistance?



Labels Need A Make Over

SHORT-TERM GOAL

1. Smart labels.....easy/simple fast

MID-TERM GOAL

1. Regionalized label recommendations
 - A. *Better info – stewardship/resistance*
 - B. *Help address risk cup issues*
2. Move toward prescription recommendations

Stewarding Pesticides

Cooperation, Science And Education



Industry
Partners

