



UNIVERSITY OF GEORGIA
EXTENSION



2023 Common Problems Survey of Southern Row Crop Extension Weed Specialists

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SWSS/WSSA Joint Annual Meeting – 2024

San Antonio, TX

Special Thanks to.....

Alabama – Steve Li/David Russell

Arkansas – Tom Barber/Tommy Butts

Florida – Pratep Devkota

Georgia – Stanley Culpepper

Kentucky – Travis Legleiter

Louisiana – Dan Stephenson/Connor Webster

Missouri – Kevin Bradley

Mississippi – Jason Bond

North Carolina – Charlie Cahoon/Wes Everman

Oklahoma – Todd Baughman

South Carolina – Mike Marshall

Tennessee – Larry Steckel

Texas – Peter Dotray/Scott Nolte

Virginia – Mike Flessner/Vijay Singh



Current Day Extension Weed Specialist at UGA (95% Extension/5% Service)

- **Traditional**

- *County Agent #1 Client*
- *Grower Meetings*
- *Newsletters, fact sheets, popular press articles*
- *Trouble-shooting*
- *Telephone*

- **Modern**

- *Applied Research (40-70 field trials)*
 - *Grad students/J-articles*
- *Web-Page/Blog*
- *E-mail/I-Phone (texts)*
- *Pay for almost everything (grants)*

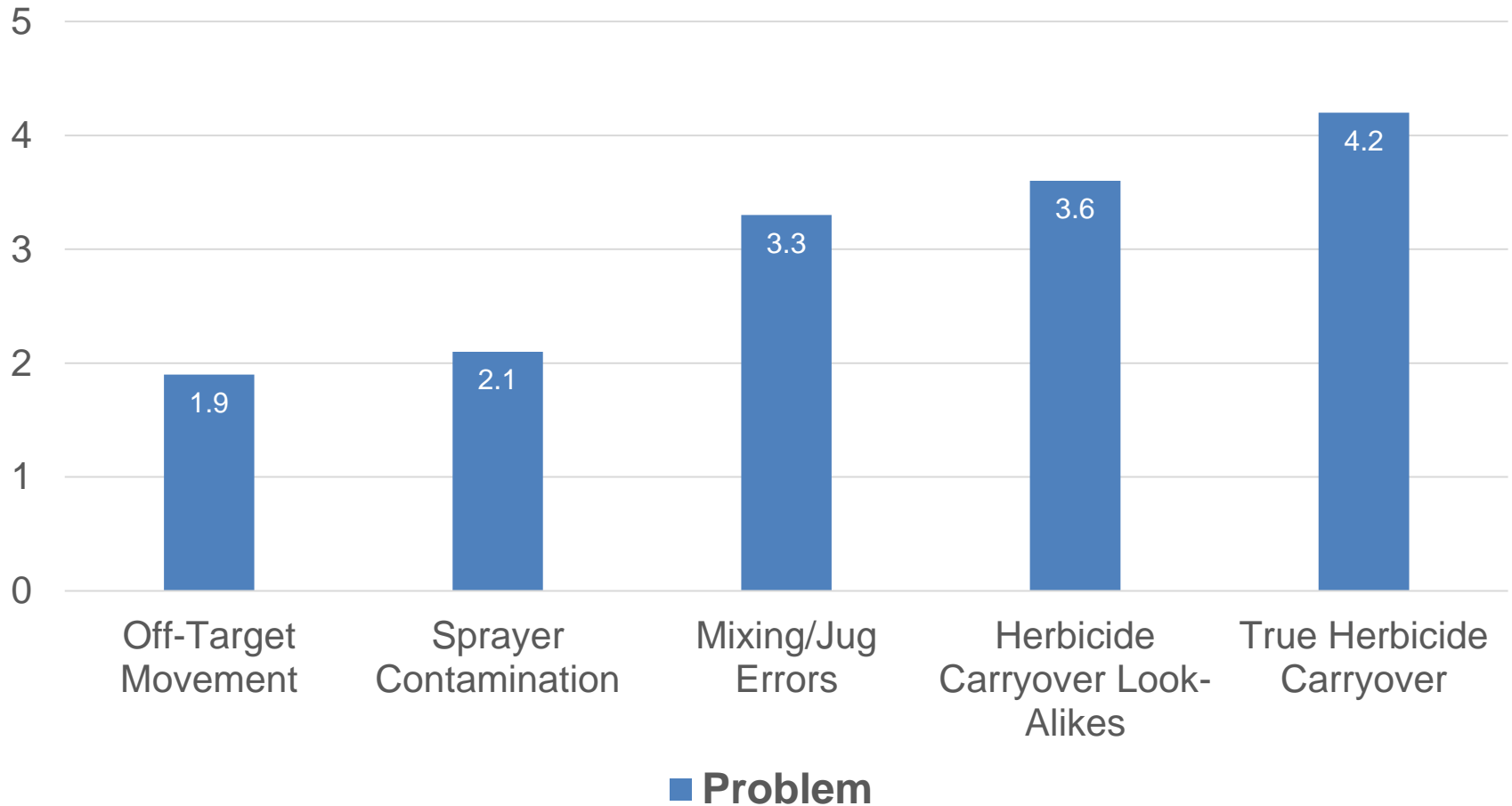


2023 Common Problems Survey

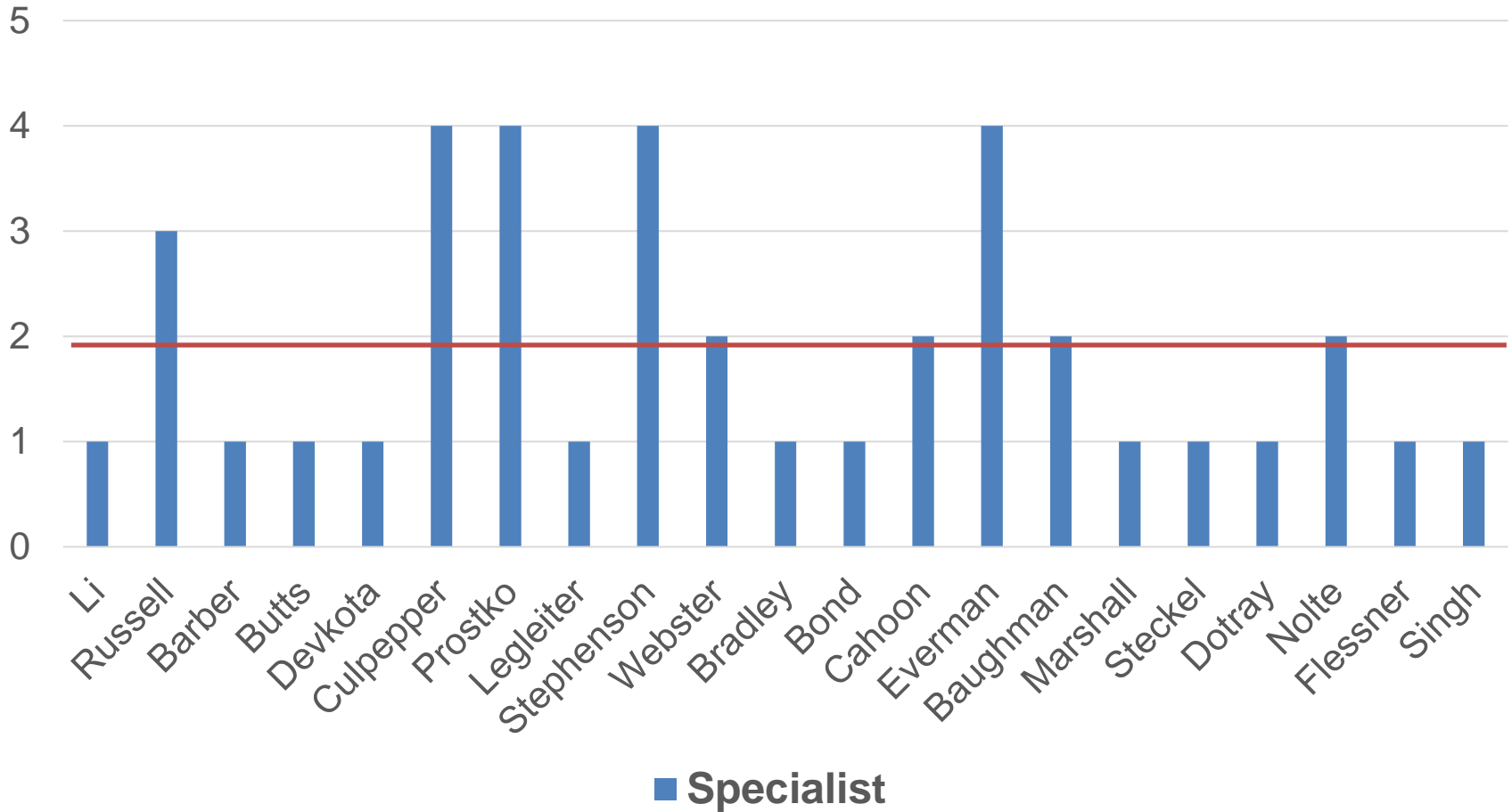
- 1) April 2023
- 2) 21 Southern Row Crop Extension Weed Specialists (14 States)
- 3) Asked to rank these specific 5 problems
 - 1) Scale: 1 = most common to 5 = least common
 - 2) off-target movement, sprayer contamination, mixing/jug errors, herbicide carryover look-alikes, true herbicide carryover

2023 Survey of Southern Row Crop Extension Weed Specialists

Common Problems (1 = most common, 5 = least common)



Off-Target Movement



#1 for 57%

Off-Target Movement *glyphosate + metsulfuron*



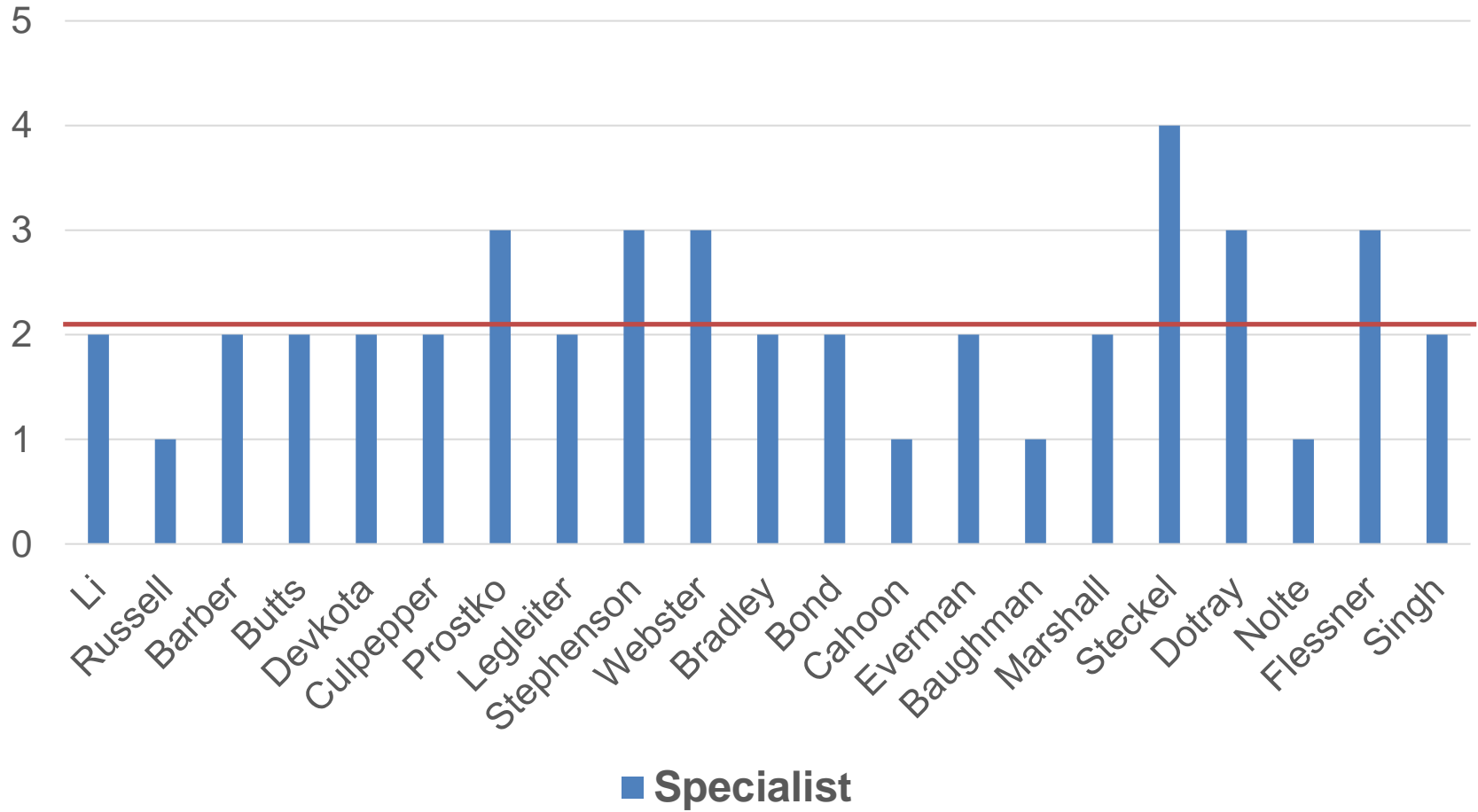


Off-Target Movement *glyphosate + carfentrazone*



Miller Co.
August 2023
0.089 ppm glyphosate

Sprayer Contamination



Laurens Co. - 2023



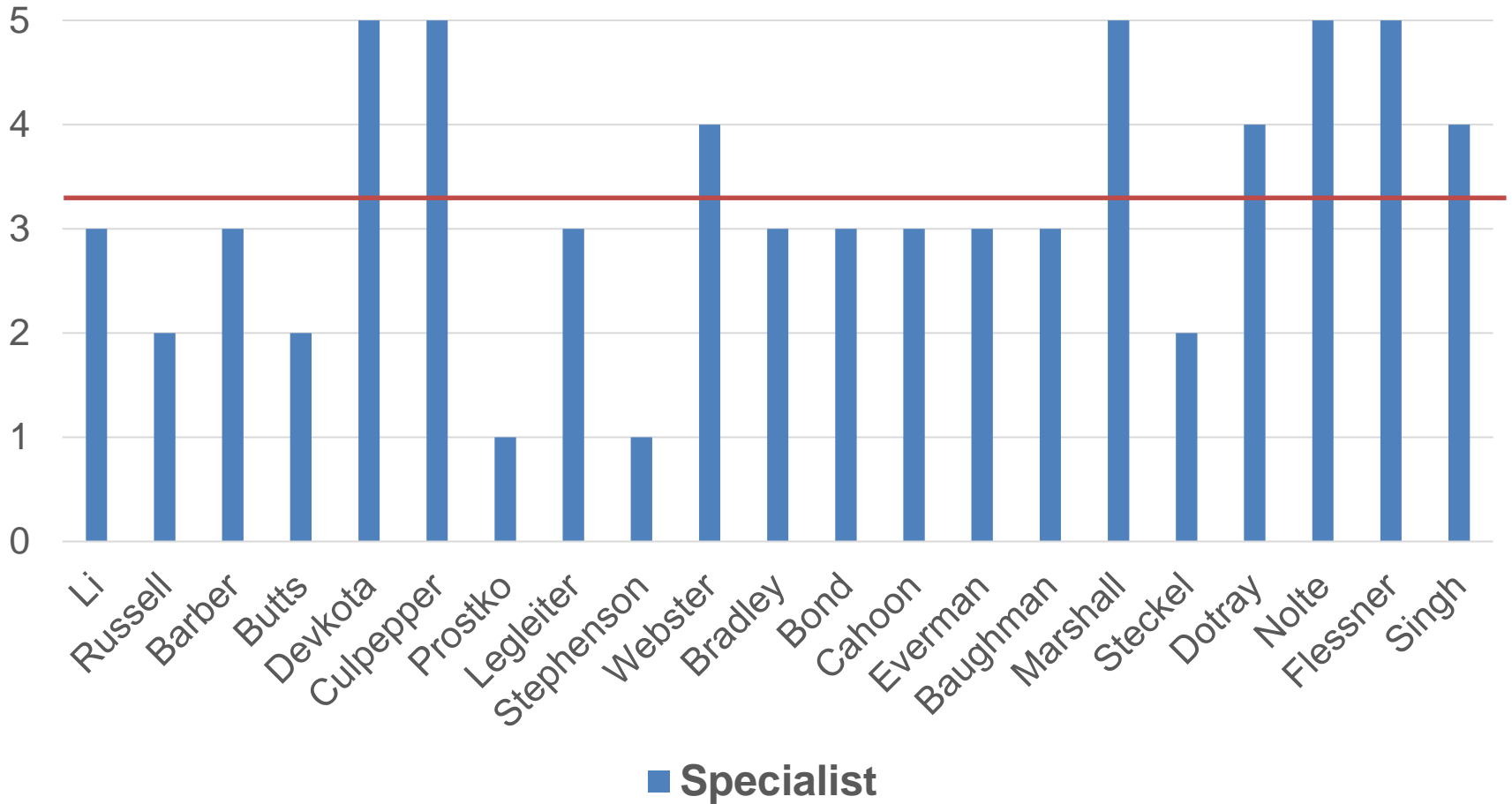
Valor (flumioxazin) Sprayer Contamination

Tattnall Co. - 2023

- ❑ Stine 9818-32N
- ❑ Possible linuron sprayer contamination
- ❑ Linex 4L @ 24 oz/A applied to V3-V4 (12") tall field corn (P1197VYHR) caused a 22-32% yield reduction.
 - ❑ *Richburg et al. 2020. Weed Technology 34:277-283.*
- ❑ **2.3 ppm of linuron was detected in tissue sample**



Mixing/Jug Errors





Glyphosate/Peanut



**6.8 ppm
glyphosate
Detected*

*Jeff Davis Co.
July 2023*

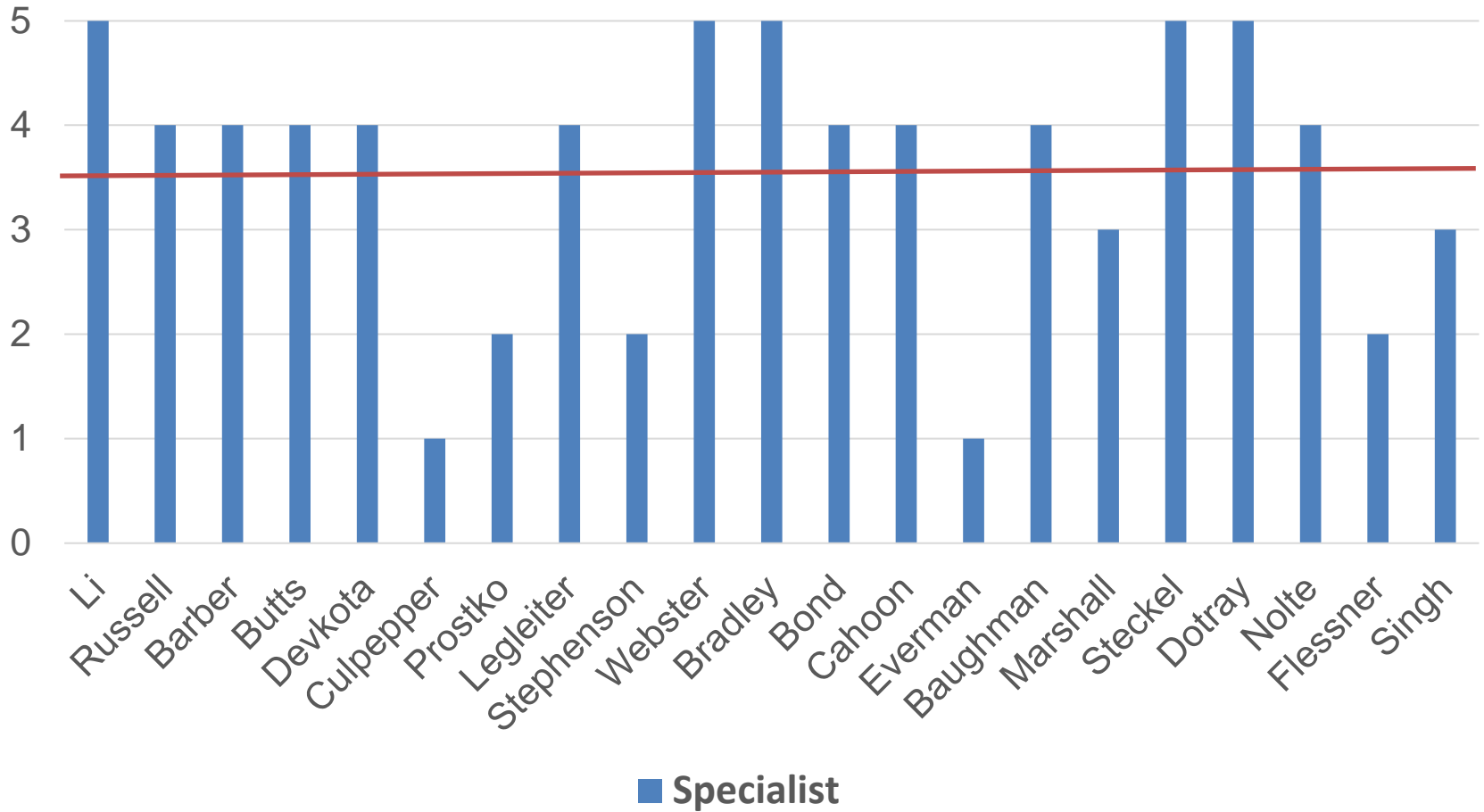
Jugs and Jugs?



Jugs and Jugs? (~\$1 million mistake)



Herbicide Carryover Look-Alikes



Pierce Co. - 2023



pH = 5.0; P was very high; K, Mg, Ca were all low

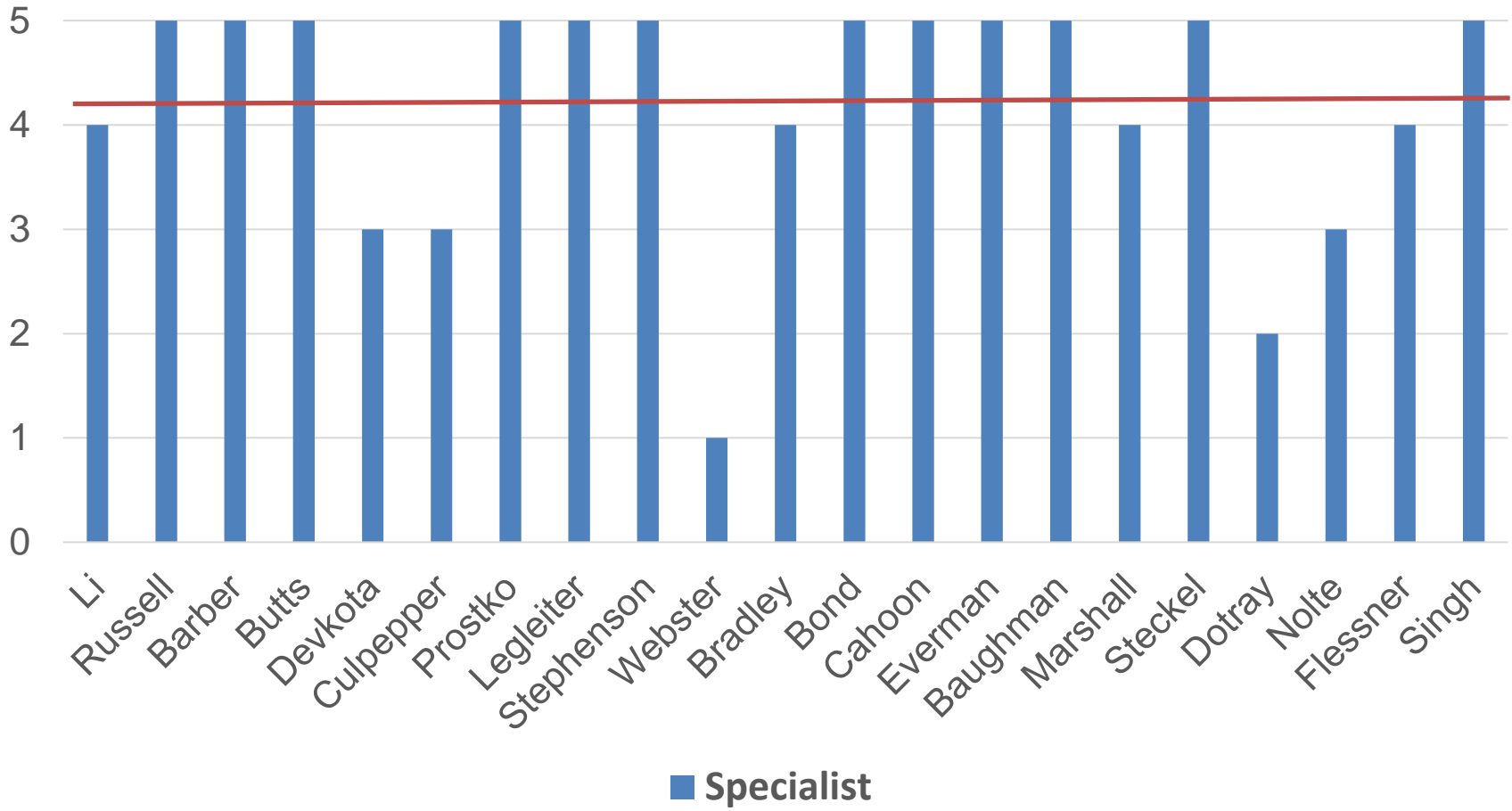
Macon Co. - March 2023



□ Nematodes

- Root-knot = 100-140
 - *100 is threshold*
- Stubby = 170-200
 - *40 is threshold*
- Lesion = 50-210
 - *200 or more is threshold*

True Herbicide Carryover



#5 for 57%

Imazethapyr (Newpath) Carryover to Provisia or Conventional Rice



Imazapic (Cadre) Carryover to Cotton



Picloram (Grazon P+D) Carryover to Peanut



Specialists with Same Rankings

- 1) Li/Bradley
- 2) Barber/Legleiter/Bond
- 3) Prostko/Stephenson
- 4) Cahoon/Baughman



Generally, all of these problems are self-inflicted and could be minimized!

- Off-Target Movement
 - *nozzles, pressure, MPH, GPA, boom height, DRA's, formulation, situational awareness*
- Sprayer Contamination
 - *proper cleaning (label), hose type (rubber or polyethylene), separate sprayers*
- Mixing/Jug Errors
 - *Non-labeled jugs, head in tank, color coded jugs/labels?, no assumptions*
- Carryover Look-Alikes
 - *soil test, nematode test, grid-sampling is not absolute*
- True Herbicide Carryover
 - *follow labeled crop rotation restrictions, local experts/experience, sprayer calibration, overlap*

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Questions/Comments



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