



2019 Soybean Weed Control Update

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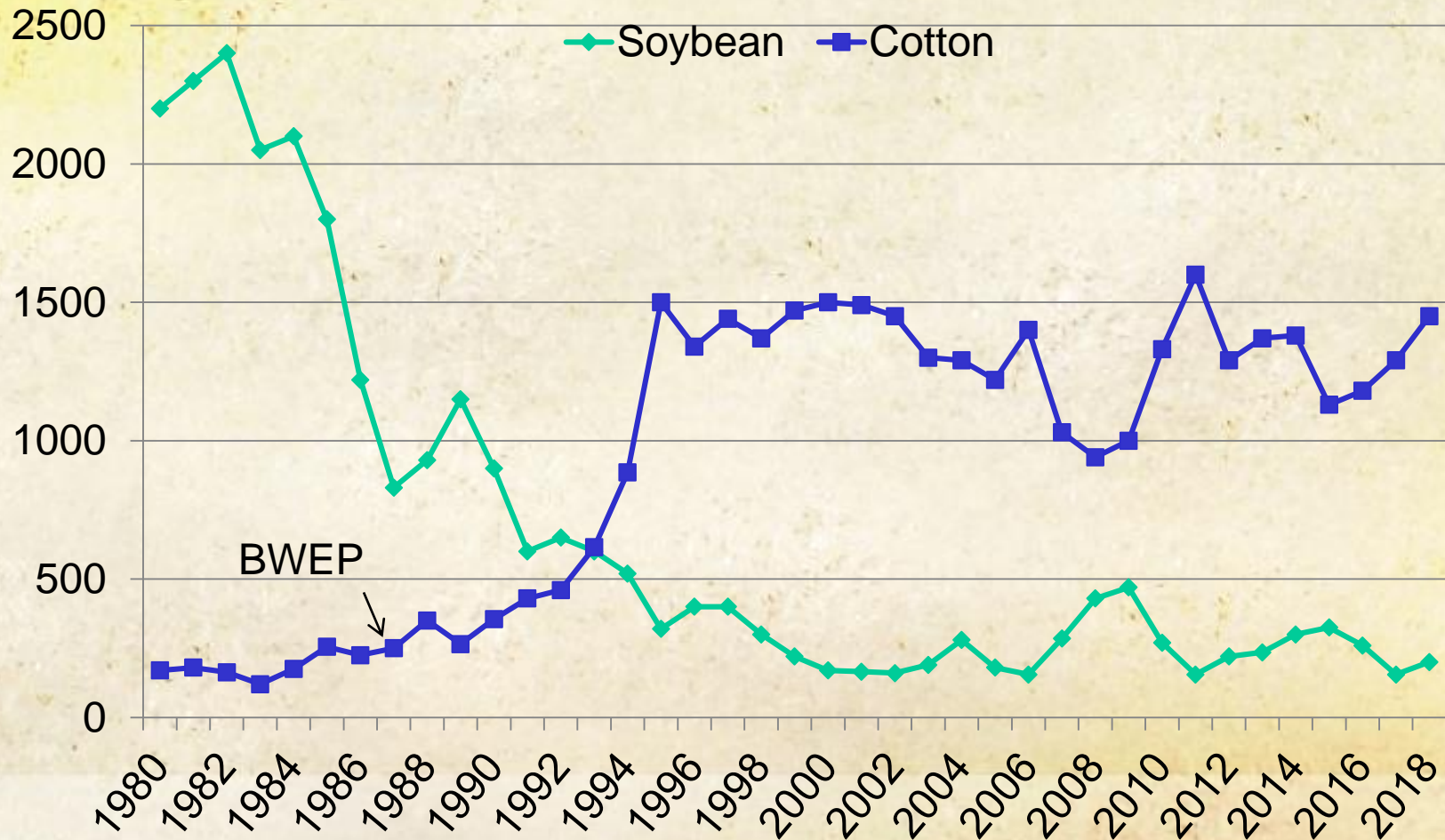


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Soybean/Cotton in Georgia

Planted Acres (X 1000)

1980-2018



Soybean Weed Control



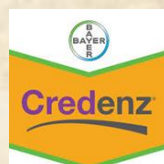
- Start clean, use residuals, timely POST
- Narrow rows (<30")
- Systems
 - *Conventional*
 - *RR (glyphosate)*
 - *LL (glufosinate)*
 - *Xtend (dicamba)*
 - *Enlist (2,4-D choline)*



2018 Georgia Soybean Varieties



Company	Varieties
AgriGold	?
AG South Genetics	747LL, 677LL, 738RR, 700R2X
Asgrow	69X6, 72X7, 7535, 75X6
Bayer/BASF/Credenz	7007LL, 7008LL, 6515LL
Meherrin	SH7418LL
Pioneer	95Y70, P76T54R2, P72A21X
T.A. Seeds	8059R2
Terral	?
UniSouth Genetics	?



Started Clean + Activated Residual +
Timely POST = HOMERUN!



SB-01-17
June 16
38 DAP

Old + Cheap + Still Good (i.e. metribuzin)



- Not a PPO (Valor or Reflex)
- Good on pigweed and sicklepod
- Can be applied PPI
 - Dryland fields?
- Issues (Be careful!!)
 - *soil texture, OM, pH*
 - *Varieties*
 - *Rotations*
 - *Company support*
 - *Lack of incentive at dealer level*



TriCor 75DF

Metribuzin 75DF

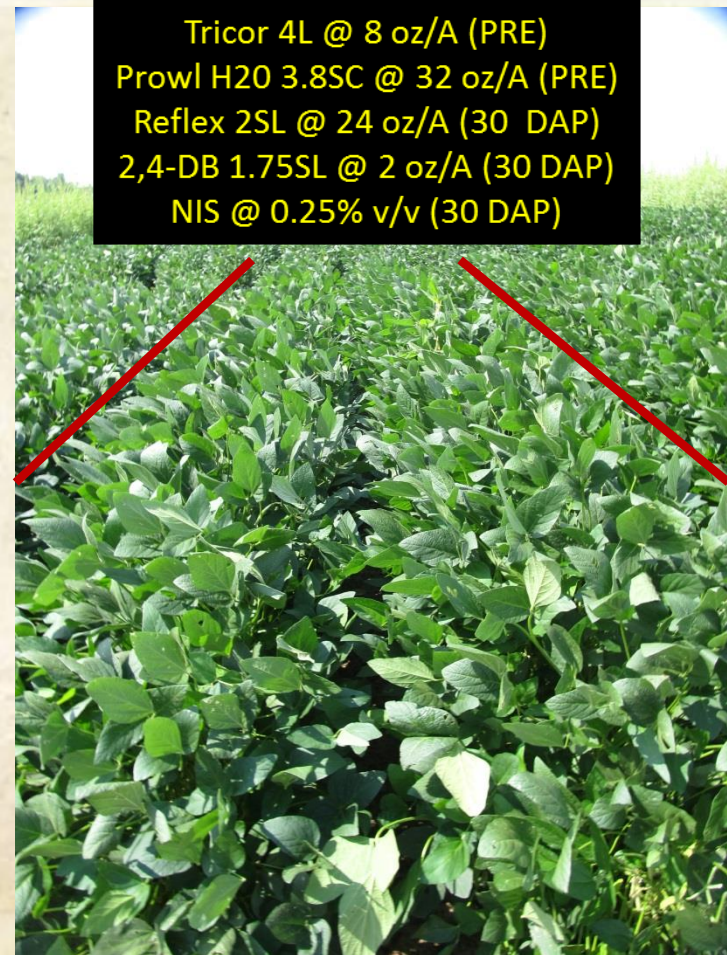


Metribuzin Injury



Soybean Weed Control – 2018

(Conventional System)



Tricor 4L @ 8 oz/A (PRE)
Prowl H2O 3.8SC @ 32 oz/A (PRE)
Reflex 2SL @ 24 oz/A (30 DAP)
2,4-DB 1.75SL @ 2 oz/A (30 DAP)
NIS @ 0.25% v/v (30 DAP)

NTC

SB-07-18
July 26
73 DAP

Soybean Weed Control – 2018

RR System



Metribuzin 75DG @ 5.3 oz/A (PRE)
Roundup Powermax 5.5SL @ 32 oz/A (31 DAP)
Reflex 2SL @ 24 oz/A (31 DAP)



SB-06-18
July 26
73 DAP

NTC

Liberty-Link® Soybeans



LIBERTYLINK® 

Liberty®
Herbicide



FORFEIT 280

- Liberty 2.34SL @ 32-43 oz/A or generics
- VE-R1
- 2 applications (5 days apart)
 - (87 oz/A/year total)
- Tank-mixes with POST grass herbicides may reduce grass control
 - Assure (10-21%); Fusilade (8-12%); Poast (25-41%); Select (4-22%)
- Residuals still needed
- **15 GPA, medium-coarse droplet size, small weeds, 9 am - 6 pm**

Spray Tip Classification by Droplet Size - Liberty



Category	Symbol	Color Code	Approximate VMD ² (Microns)
Extremely Fine	XF	PURPLE	< 60
Very Fine	VF	RED	61-105
Fine	F	ORANGE	106-235
Medium	M	YELLOW	236-340
Coarse	C	BLUE	341-403
Very Coarse	VC	GREEN	404-502
Extremely Coarse	XC	WHITE	503-665
Ultra Coarse	UC	BLACK	>665

¹Estimated from sample reference graph in ASBAE/ANSI/ASAE Standard S572.1

²VMD = Volume median diameter

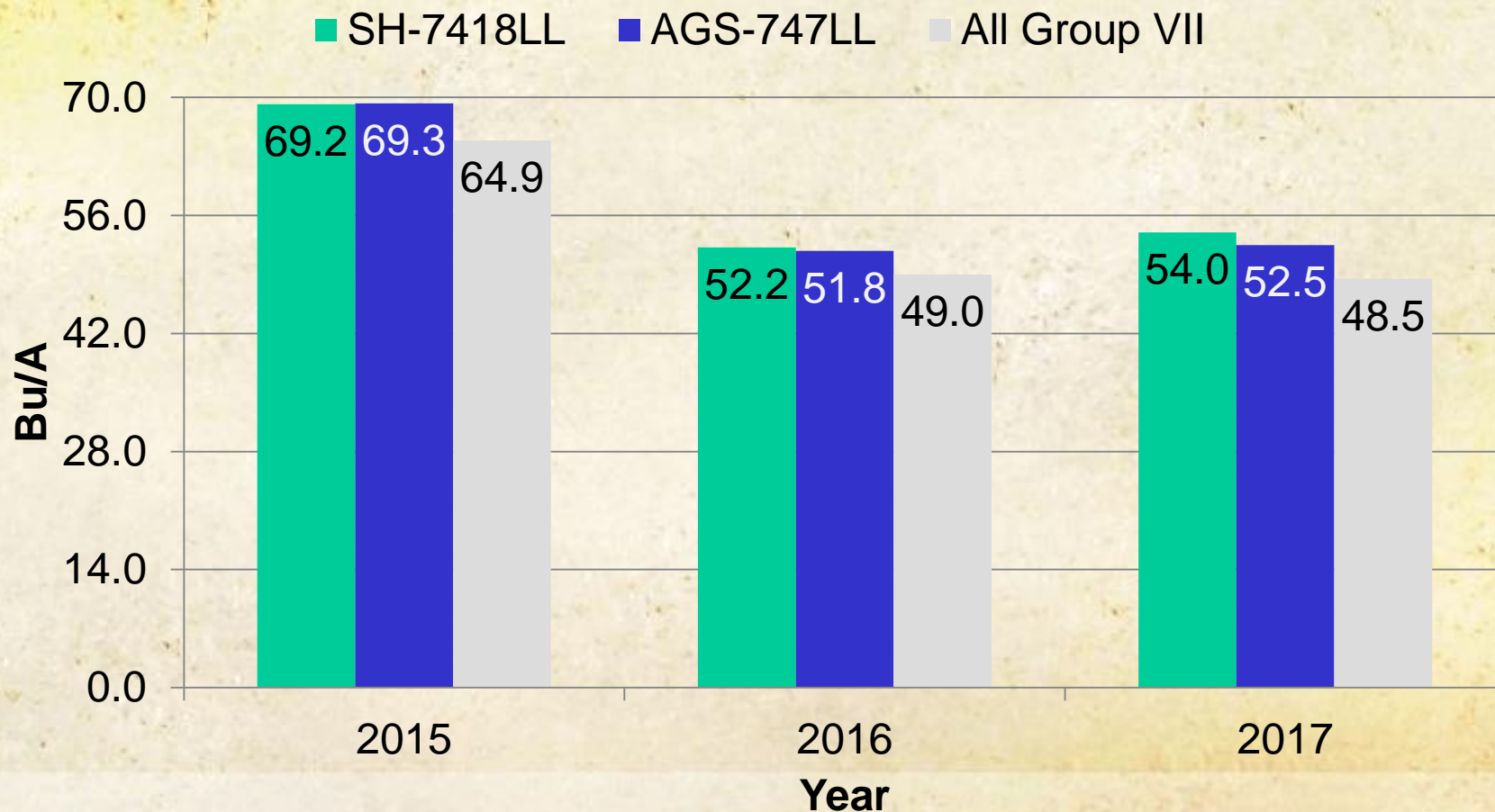
Liberty-Link Soybean Varieties



- Getting better and better!
- G13LL-7 and G13LL-44 developed by UGA Soybean Breeding Team
 - *Group VII's*
 - AGS 747LL (G13LL-7)
 - AGSouth
 - Southern Harvest 7418LL (G13LL-44)
 - Meherrin
- Others



Statewide Average Yield of UGA Developed LL Soybeans*



*Source: UGA OVT (6 locations/year, irrigated)

Soybean Weed Control – 2018

Liberty System



Surveil 48WG @ 2.8 oz/A (PRE)
Liberty 2.34SL @ 29 oz/A (23DAP)
Everprex 7.62EC @ 16 oz/A (23 DAP)



SB-05-18
July 30
54 DAP

NTC

2,4-D/Dicamba Technologies



2,4-D choline



dicamba

Enlist Soybeans (2016)



NTC



Surveil 48WG @ 2.83 oz/A (PRE)
Enlist Duo 3.33SL @ 75 oz/A (34 DAP)
Dual II Magnum 7.64EC @ 16 oz/A (34 DAP)
AMS @ 2.5% v/v (34 DAP)



Soybean Weed Control – 2018

Xtend System



Tricor 4L @ 8 oz/A - PRE
Roundup PowerMax 5.5SL @ 32 oz/A – 30 DAP
Xtendimax + VG 2.9SL @ 22 oz/A – 30 DAP
Warrant 3ME @ 48 oz/A – 30 DAP
Intact @ 0.5% v/v – 30 DAP

SB-07-18
July 26
73 DAP

NTC

SB-01-18

August 3

**XTEND (dicamba)
System (PRE + POST)**

**LIBERTY
System (PRE + POST)**



Off-Target Dicamba Problems



Dicamba Perspective – 2018



- Only 4 “official” complaints to GA Dept. of Ag and no dicamba residues were detected (1-blueberry, 1-soybean, 2-non-DT cotton).
- I am personally aware of 24 “incidents” that were handled between 2 parties involved (1-tobacco, 8-soybean, 9-peanut, 4-cotton, 1-crepe myrtle, 1-apple). **More than last year for me.**
- Got to keep working on this!



Important Dicamba Label Updates for 2019 - Soybean



- Xtendimax, Fexapan, Engenia formulations
- Only certified applicators can **purchase** and **apply**
- **Records generated within 72 hours of application and kept for 2 years**
- Minimum of **15 GPA**
- POST applications no later than R1 or 45 DAP
- Only 2 POST applications can be made (7 days apart)
- Sensitive crops must be surveyed and documented
 - **Sensitive crop/residential areas downwind – DO NOT APPLY**
- Applications between 1 hour after sunrise to 2 hours before sunset
- 110' downwind buffer + 57' omni-direction buffer around other sides of field in counties where endangered dicot species exist
- Additional clean-out instructions/warnings
- Spray mixture pH > 5.0

Endangered Species Information



- **Protecting Endangered Species from Pesticides**
 - <https://www.epa.gov/endangered-species>
 - **Bulletins Live! Two**
 - <https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins>
- **U.S. Fish & Wildlife Service**
 - <https://www.fws.gov/endangered/>

Table 1. Water pH and major cation concentrations of South Georgia Wells from July 1, 2014 to May 2, 2017^a.

Value	pH	Cation Concentration (ppm)					AMS/100 gals (lbs) ^b
		Ca	Fe	K	Mg	Na	
Median	7.7	30.17	<0.1	1.52	4.66	5.89	0.37
Minimum	4.5	1.9	<0.1	<0.5	0.22	<0.5	0.03
Maximum	8.59	126.23	14.45	97.1	35.10	97.22	2.92

^aDr. Jay T. Lessl, Program Coordinator, UGA Soil, Plant & Water Laboratory, 1146 water well samples.

^blbs of AMS/100 gallons of water needed to overcome potential hard water antagonism. Based upon the following equation developed at North Dakota State University: $(0.002 \times K \text{ ppm}) + (0.005 \times Na \text{ ppm}) + (0.009 \times Ca \text{ ppm}) + (0.014 \times Mg \text{ ppm}) + (0.042 \times Fe \text{ ppm})$.

QUESTIONS?



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