

Sequential Application Timings for Liberty and Engenia

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West Texas Agricultural Chemical Institute Annual Meeting

September 11, 2019



Introduction

- Objective: Determine optimal window for sequential application of two rates of Liberty and one rate of Engenia
 - 3-, 7-, or 10-days between applications

Herbicides

Engenia- systemic herbicide



Liberty- contact herbicide



Materials and Methods

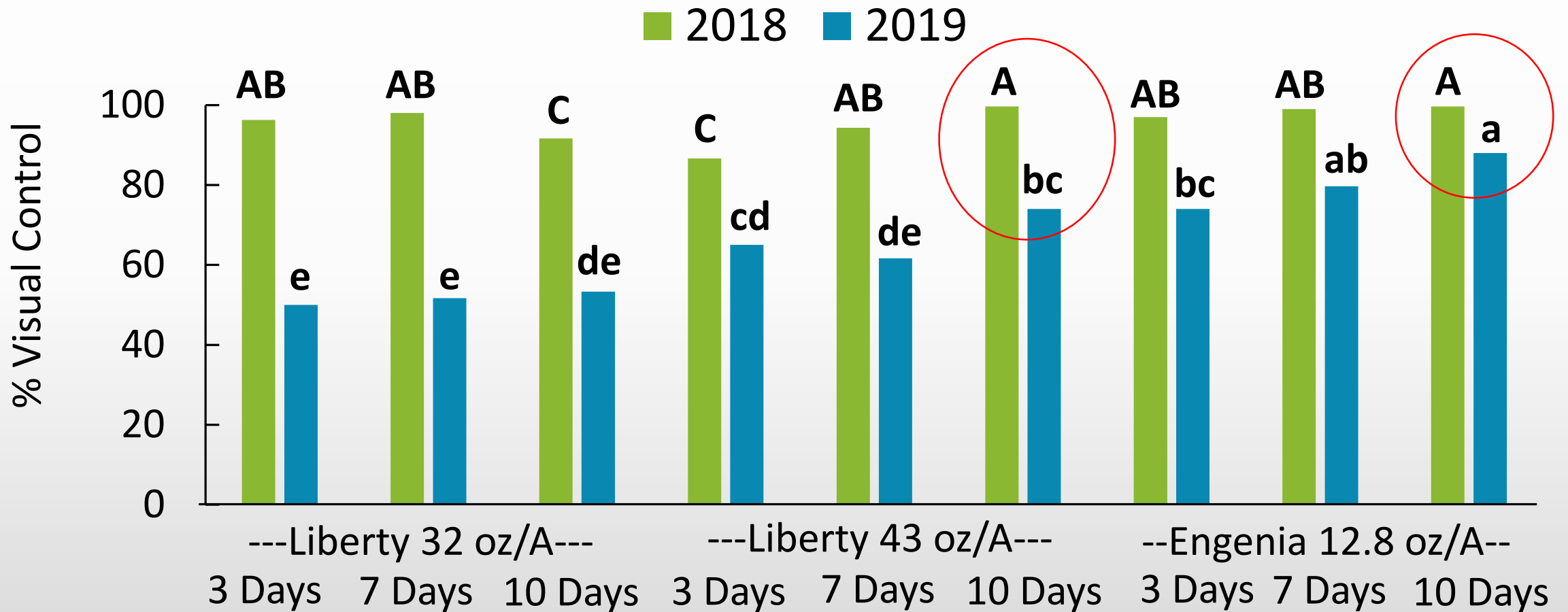
- 2018 and 2019 trial located on Texas A&M AgriLife Research Station, Halfway, Texas
- Ammonium sulfate added to all Liberty treatments
- Crop: cotton
- Weed Size: 3-6 inches
 - 2018: 3-4 inches
 - 2019: 5-6 inches

Application Dates	
<u>2018</u>	<u>2019</u>
June 15 th	June 28 th
June 18 th	July 1 st
June 21 st	July 5 th
June 25 th	July 8 th

Materials and Methods

Initial Application	Sequential Application	Herbicide Rate (oz/A)	A.I. or A.E. lb./A
Liberty	Liberty 3 DAA	32 oz/A	0.64 lb./A
	Liberty 7 DAA		
	Liberty 10 DAA		
Liberty	Liberty 3 DAA	43 oz/A	0.85 lb./A
	Liberty 7 DAA		
	Liberty 10 DAA		
Engenia	Engenia 3 DAA	12.8 oz/A	0.5 lb./A
	Engenia 7 DAA		
	Engenia 10 DAA		

Visual Control - 31 Days after initial application



Visual Comparison

Liberty 43 oz/A, 10-day interval



Engenia 12.8 oz/A, 10-day interval



What's hard to capture in this picture:
numerous 0.5-inch to 1-inch Palmer

Summary



Greater control in 2018 with all treatments



Applications made 10 days apart offered best visual control for both herbicides



Differences in weather and initial weed size could factor into level of control year to year

Acknowledgements

- Thank you to Bayer CropScience for financial support of this project in 2018.
- Thank you to Bobby Rodriguez, Ubaldo Torres, Kyle Russell, and Delaney Foster for their assistance on this project