



College of Agricultural &
Environmental Sciences
UNIVERSITY OF GEORGIA

2025 Pecan Update

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Care of Storm Damaged Trees

- Historically crop load is very light the year following a major storm/Heavy 2 yrs later---**increases alternate bearing**
- **Minimize Nitrogen**
 - 50 lbs/acre max
 - Monitor K,P,Zn
- **Cut back on water if no crop**
 - No need for more than 50-60% full capacity with no crop load



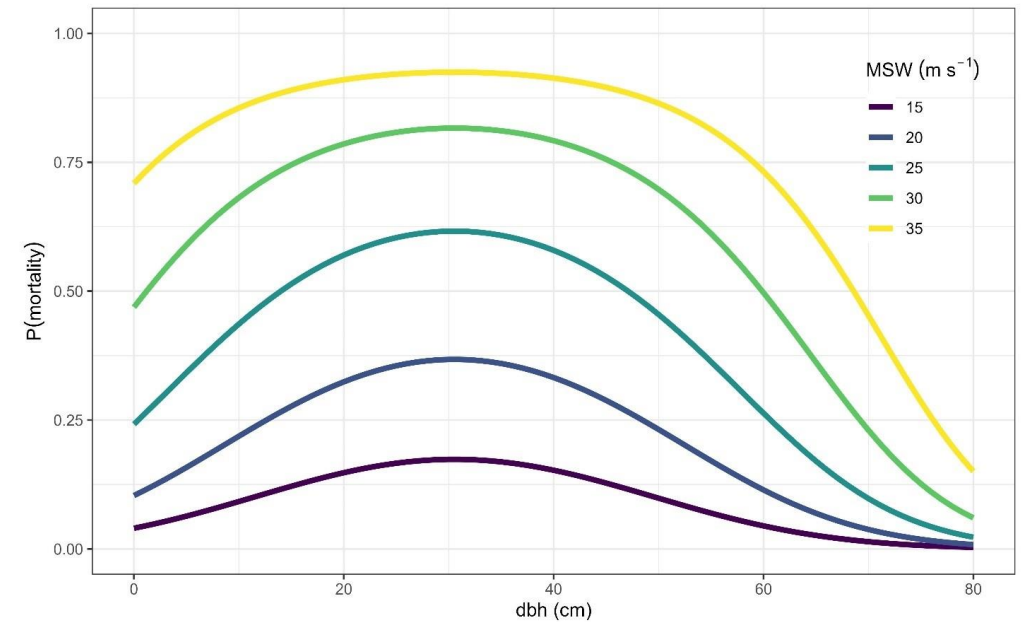
Control What You Can Control

- No reliable export market currently
- Domestic in-shell price low
- Hurricanes on-going threat
- Introduce as much hurricane resistance as we can
- Reduce cost & enhance net income



Living With Storms/Hurricanes

- At wind speeds up around 90 mph all bets are off
- Trees 8-24” in diameter tend to have greatest mortality (12” most vulnerable) up to 60 mph
- What can we control?
 - Tree Root Development—Water, Fertilizer
 - Tree Size---Canopy:Root



Irrigation Recommendations on Young Trees

(<4 yrs)
(14.7 gph emitter)

- April---3 hrs once per week ---45 gal/week
- May---3 hrs twice per week (M & F) ---90 gal/week
- June-Sept—3-4 hrs watering time---one day on, two days off

With 1" rain turn off irrigation for 3 days

MAKE THE ROOTS SEARCH FOR WATER



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Fertilization Recommendations for Young Trees

Balanced Granular Fertilizer **lbs/tree**
(10-10-10, etc.)

Year	April		June
1	0		0
2	0.5 lb		0.5 lb
3	1 lbs		0.5 lb
4	2 lbs		1 lb

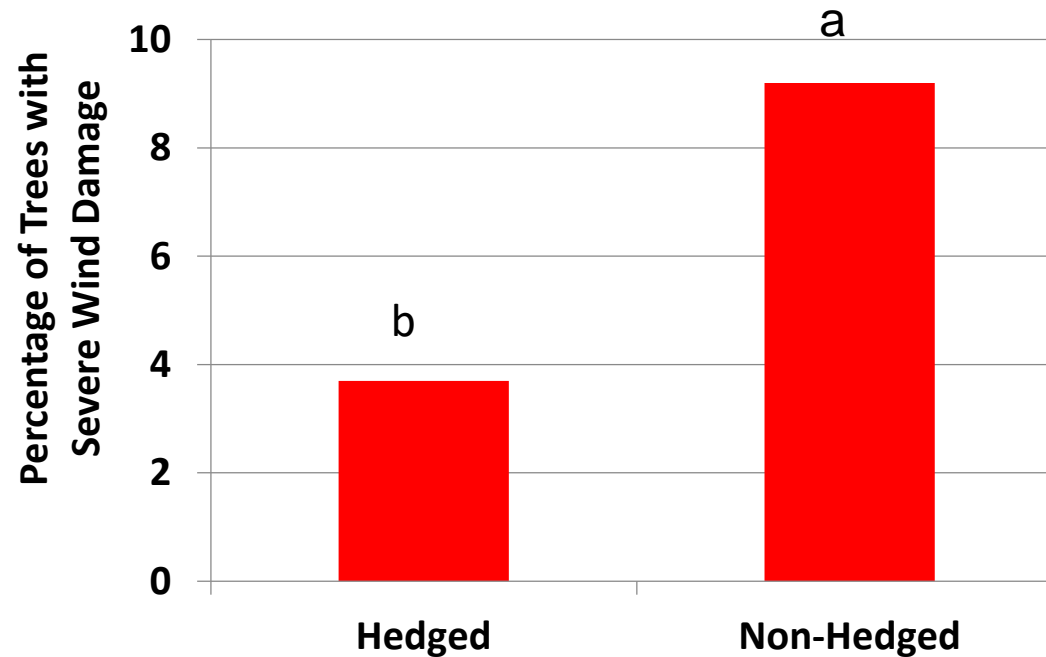
N Injection via irrigation **lbs/acre**
(28%, etc.)

Year	April	May	June
1	0	0	0
2	2.5 lbs	0	2.5 lbs
3	2.5 lbs	0	2.5 lbs
4	4 lbs	2.5 lbs	2.5 lbs

40 lbs P, 40 lbs K, 5 lbs Zn sulfate Broadcast toward tree row/herbicide strip



Effect of Hedge Pruning on Wind Damage Tropical Storm Irma, 2017



Severe Wind Damage = Trees blown down/snapped/or large scaffold limbs broken



Hedge Pruning in The Southeastern U.S. Summary

- For production, hedging works best on prolific varieties that fruit on interior of canopy
 - Creek, Caddo, Sumner, Cape Fear, Pawnee
- Hedge on 4-year cycle (Dormant or Summer*)
 - Always hedge Cape Fear, Byrd, Pawnee Dormant Season
 - Every other middle every 4th year
 - Every 4th row
- Sides 6-7' from trunk
- Top at row width or 40' max (when you hedge 1 side, also hedge top)

Hedging by Alternate Middles

Year	Middle 1	Middle 2
1	Cut	No
2	No	No
3	No	Cut
4	No	No
5	Cut	No

Hedging by Row

Year	Row 1	Row 2	Row 3	Row 4
1	Cut	No	No	No
2	No	Cut	No	No
3	No	No	Cut	No
4	No	No	No	Cut



Mature Tree N Fertilization

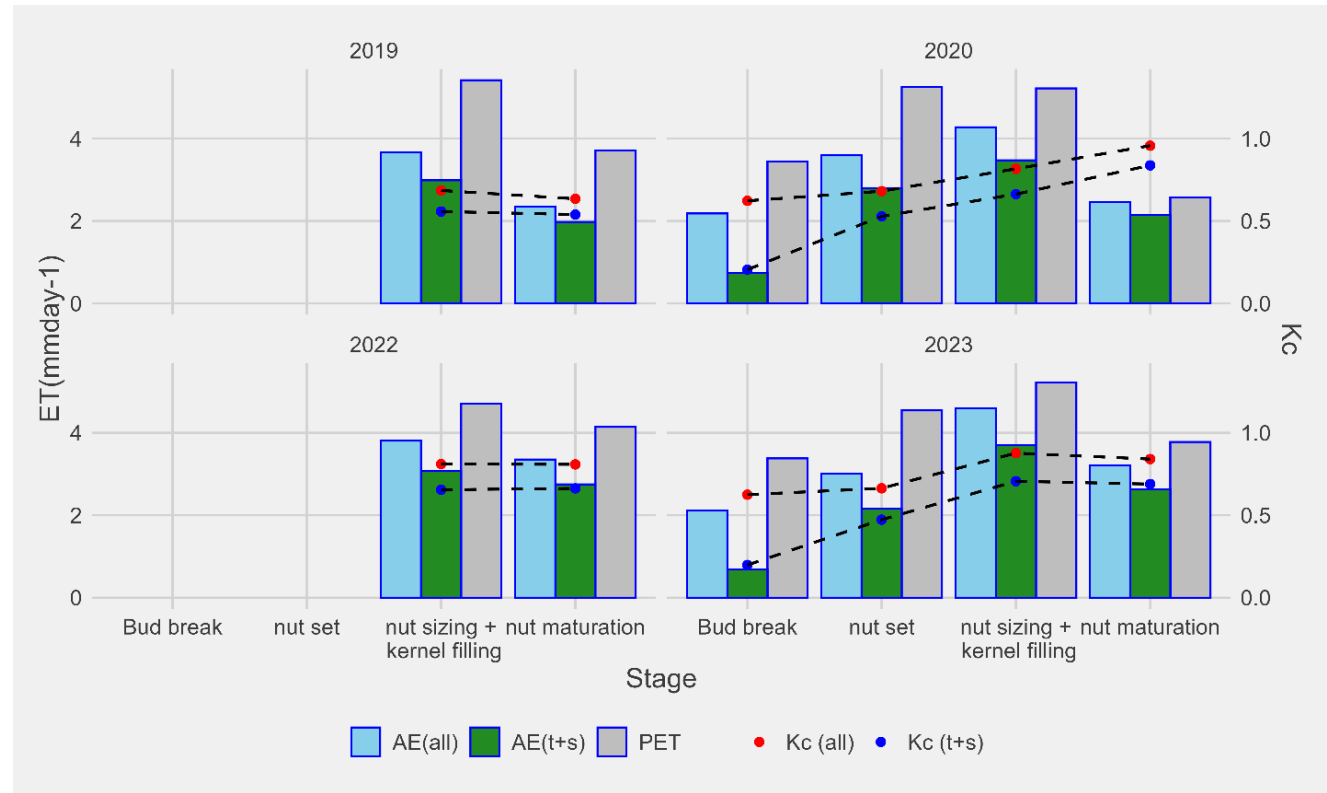
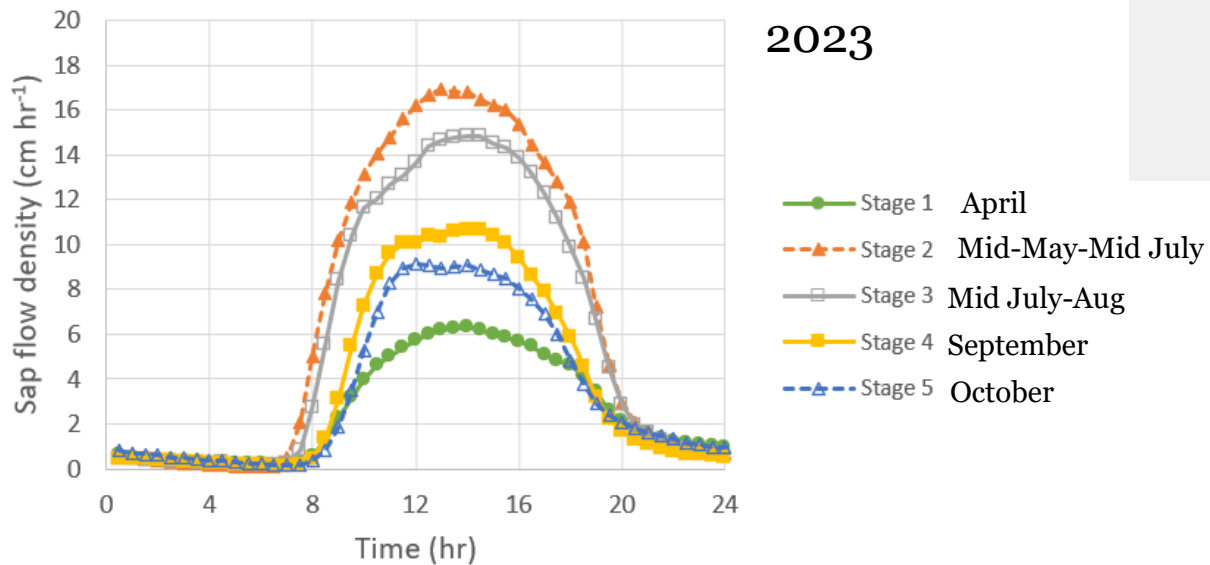
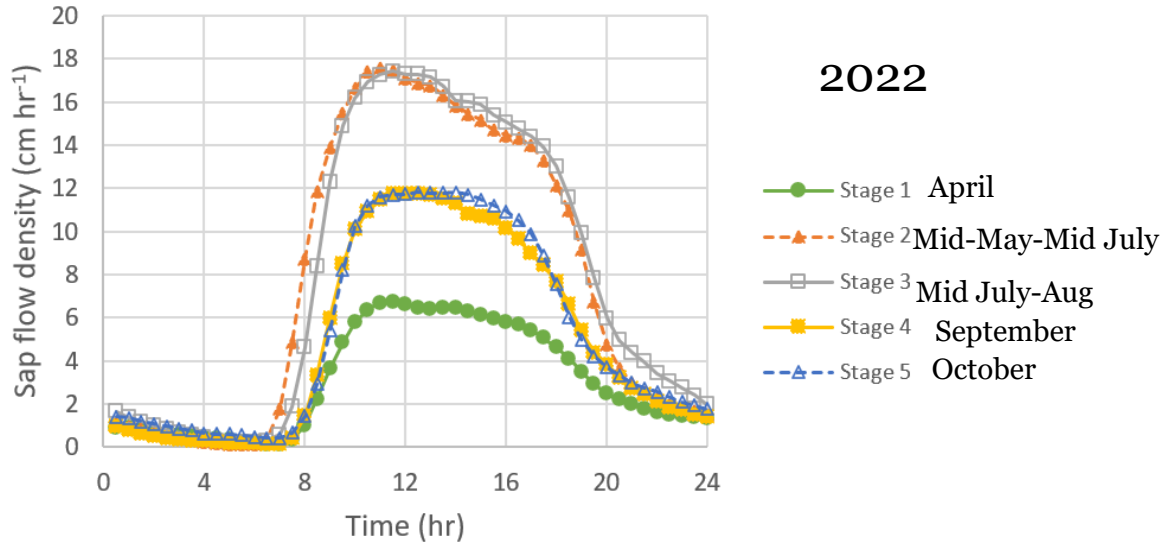
- Apply 50-100 lbs N
- **Inject liquid N**
 - 3 applications beginning in April (10 day intervals)
 - 1 application in June or late August if heavy crop
 - No more than 25 lbs N/acre/injection
- **Direct dry broadcast applications toward herbicide strip**
 - Base total acreage applied on width of spread, not on total size of orchard
 - Use rate of 75-125 lbs/acre on treated area only
 - Use split applications



Simplifying Soil Fertilizer Decisions

	Soil	Leaf	Decision
P	<40 lbs/acre	----	Broadcast
P	>40 lbs/acre	<0.12	Narrow Band
P	>40 lbs/acre	>0.12	Do Not Apply
K	<125 lbs/acre	----	Broadcast
K	>125 lbs/acre	<1.1 %	Narrow Band
K	>125 lbs/acre	>1.1%	Do Not Apply
Zn	<15 lbs/acre	----	Broadcast
Zn	>15 lbs/acre	<50 ppm	Inject Zn EDTA
Zn	>15 lbs/acre	>50 ppm	Do Not Apply
Soil pH	>6.0	----	Do Not Apply

Pecan Water Use in Georgia



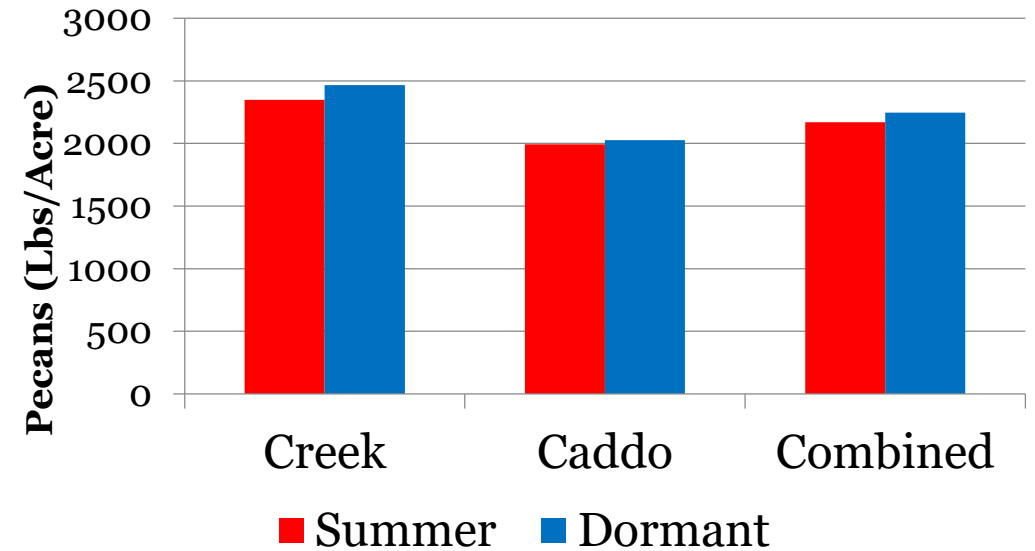
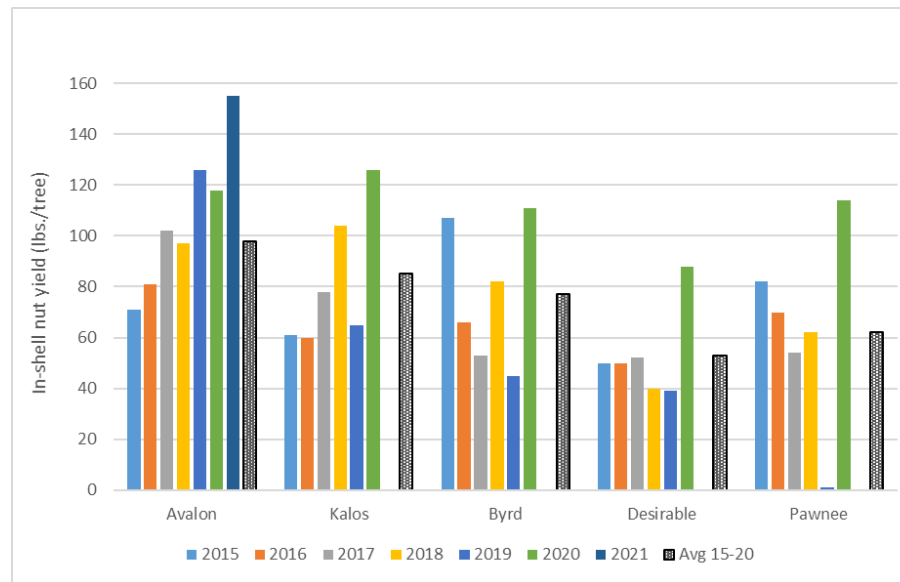
Mature Tree Irrigation Schedule

<u>Month</u>	<u>% Full Capacity</u>	<u>Gallons/acre/day</u>	
April	6.4%	231	65% reduction =4 hrs/wk
Early May	12.8%	462	50% reduction =8 hrs/wk
Late May	27%	936-1080	
June	36%	1296-1440	
July	45%	1620-1800	
August	100%	3600-4000	
September	100%	3600-4000	
October	40%	1620-1800	



Varieties

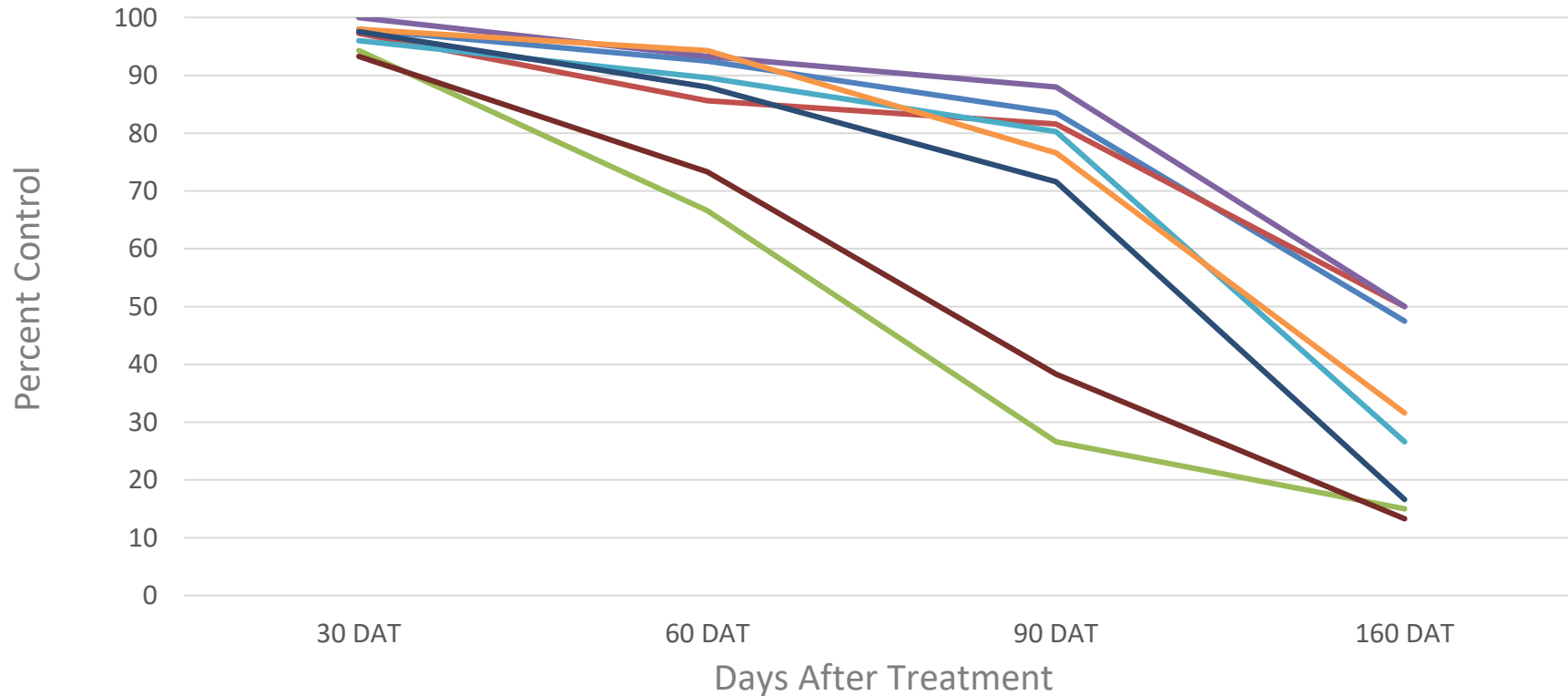
- Interplanting
 - Avalon, Creek, Excel, Sumner, Zinner
- New Orchard
 - Avalon, Creek, Lakota, Excel, Caddo



	5 yr avg yield	Count	% Kernel	5 yr avg price
Lakota Yrs 10-14	94 lbs/tree	60	58	\$2.02

2024 Pre-Emergent Herbicide Control

p = 0.160



Alion - 5oz Alion - 3.5 oz BrakeOn - 43 oz BrakeOn + Matrix
Chateau - 6 oz Chateau - 12 oz Pindar + Surflan Simazine + Surflan



160 Days After Treatment (DAT)

	<u>% Control</u>	<u>Program Cost / acre *</u>
1. BrakeOn 21oz + Matrix 4oz	50%	\$170.02
2. Alion 5 oz	47.5%	\$209.30
3. Alion 3.5 oz**	50%	\$161.48
4. Chateau 12 oz	31.6%	\$81.28
5. Chateau 6 oz	26.6%	\$73.42
6. Pindar 2pt + Surflan 2qt	16.6%	\$211.20
7. Brake On 43 oz	15%	\$184.10
8. Simazine 3qt + Surflan 2qt	13.3%	\$170.12
Glyphosate 2qt + Glufosinate 24oz		\$178.00

p = 0.160



*UGA Ag Econ Department prices for 2025 includes post-emergent @ \$22.28

** 2024 application followed by 2 applications of same rate in 2023

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