





Prevention and Cultural

- Reduce the sources
- Clean equipment
- Good cover to reduce seedling
 establishment
- Maintain good growth of desirable species

Biological

monocultures

- 1. Limited success with natural pests
- 2. Isolated pathogens, but no effective control
- 3. Grazing is probably not feasible
- 4. Waiting on the bug folks????

Mechanical

- 1. Small infestations can be removed with repeated, aggressive tillage
 - Limited to open (non-forested) sites
 - Deep plow or disk, several times during season
 - Desiccates rhizomes & exhaust food reserves
 - Cut to a depth of at least 12 inches



Herbicide MAT	Rate	6 MAT ²	12 MAT	6 MAT	12
	kg/ha			% ⁴	
-					
Fluazifop	0.56	75	48	50	5
	0.28	48	15	21	0
	0.14	30	20	44	0
Glufosinate ³	2.24	43	30	80	65
	1.12	33	10	33	33
	0.56	25	5	10	23
Glyphosate	4.48	53	25	100	(86)
	2.24	53	13	99	Se Contraction
	1.12	45	18	96	46
Imazameth ³	0.12	10	20	60	45
	0.06	3	5	30	26
	0.03	15	5	8	5
Tmazapyr	2.24	83	58	90	96
	1.12	83	23	84	(88)
	0.56	65	15	88	89
Nicosulfuror	n 0.07	15	20	38	25
	0.03	20	15	29	0
	0.015	13	23	29	0

Application timing and control of cogongrass					
	May	August	November	February	
Imazapyr	69	77	87	70	
Glyphosate	27	50	63	58	

Imazapyr and Glyphosate Movement in Cogongrass Under Different Light Levels						
Light	<u>Glyph</u>	osate	Imazap	<u>yr</u>		
Level	Shoots	Roots	Shoots	Roots		
3%	5	0.60	13	0.5		
9%	11	12	16	11		
30%	12	12	18	11		
60%	10	17	13	10		

Chemical

- 1. Broadcast applications for large areas
 - ✓ Glyphosate at 2 to 4 lbs-ai/A
 - ✓ Imazapyr at 0.5 to 1.0 lbs-ai/A
- 2. Spot treatment for smaller areas
 - ✓ Glyphosate 2 to 3% solution
 - ✓ Imazapyr 0.5 to 1% solution
- 3. Use surfactant at 0.25%
- 4. Adhere to planting restrictions for imazapyr, may cause residual damage





Recent Studies on Cogongrass

- Initiated in fall 2009
- Chito Branch preserve Hillsborough Co.
- 2-3 feet at time of treatment
- Unless otherwise specified, non-ionic surfactant included at 0.25% v/v
- Visual ratings

"Arsenal vs. Plateau"						
Imazapyr Imazapic						
) <u>3</u>	32oz	<u>64oz</u>	<u>128oz</u>			
)	12	22	23			
0	54	48	55			
8	65	52	72			
0	73	80	90			
	<u>Imaza</u> <u>)</u>) 0 8 0	Imazapic) 32oz) 12 0 54 8 65 0 73	Imazapic 64oz) 32oz 64oz) 12 22 0 54 48 8 65 52 0 73 80			

Journey and Plateau

Herbicide	Rate (oz.)	2 months	6 months	12 months
Journey	32	32	22	26
Plateau	12	12	2	2
Plateau	24	25	17	48
Plateau +	12+64	92	76	(80)
Glyphosate				
Arsenal +	32+64	95	94	(84)
Glyphosate				
Clearcast	64	20	22	5
Clearcast	128	27	60	30
Glyphosate	96	95	82	71
Arsenal	48	30	98	(97)

Cogon–X and MSO					
Herbicide	Rate (oz.)	2 months	6 months	12 months	
Cogon-X	32	3	0	0	
Glyphosate	32	85	10	6	
Glyphosate	96	95	87	78	
Cogon-X + Glyphosate	32+32	90	23	23	
Cogon-X + Glyphosate	32+96	97	85	67	
Cogon-X + Arsenal	32+32	63	96	93	
Arsenal+NIS	128	78	99	97	
Arsenal+MSO 1%	96	71	99	95	
Arsenal+MSO 2%	48	78	99	95	



% Cover – 40 months					
	Grass Only	Grass/Forb Mixture	Control – No Planting		
<u>No Glyphosate</u> Native Species Cogongrass	62 38	81 19	12 88		
<u>Glyphosate</u> Native Species Cogongrass	91 9	93 7	68 32		





Chemical

- 1. Broadcast applications for large areas
 - ✓ Glyphosate at 2 to 4 lbs-ai/A
 - ✓ Imazapyr at 0.5 to 1.0 lbs-ai/A
- 2. Spot treatment for smaller areas
 - ✓ Glyphosate 2 to 3% solution
 - ✓ Imazapyr 0.5 to 1% solution
- 3. Use surfactant at 0.25%
- 4. Adhere to planting restrictions for
 - imazapyr, may cause residual damage

Integrated

- 1. For best results combine:
 - ➤ Burning
 - Tillage (mechanical disturbance)
 - Chemical applications
- 2. Burn or mow before herbicide application
 - Remove excess thatch and older leaves
 - Initiates regrowth from rhizomes, reduces rhizome biomass

