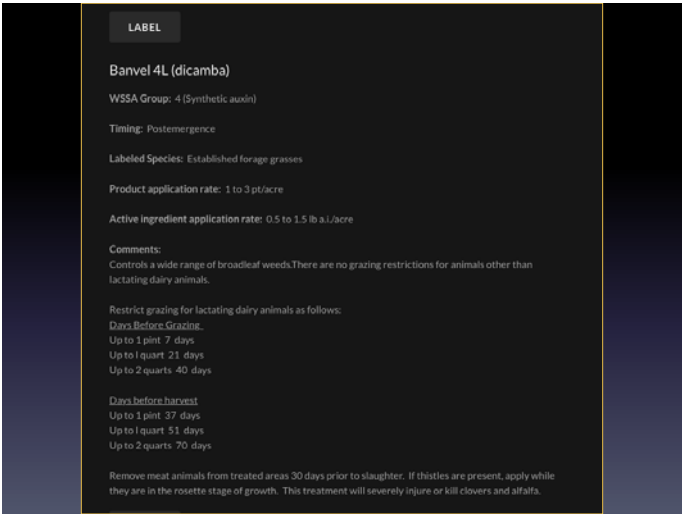
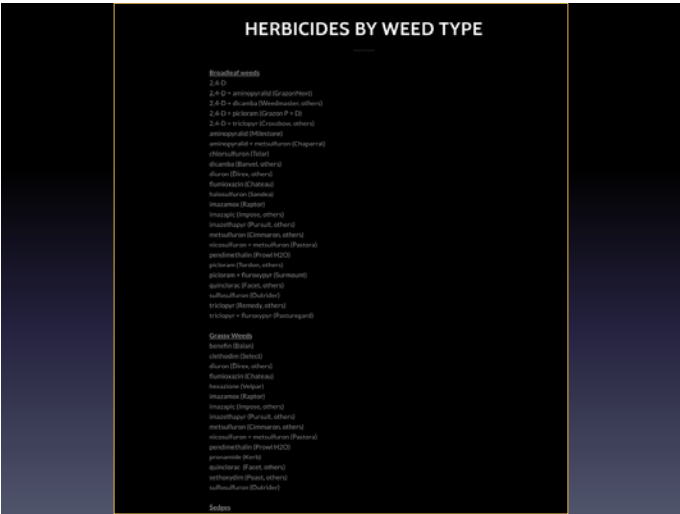


Problem Weed Control

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HERBICIDES BY PASTURE SPECIES

Species	Herbicide	
Bulbionaceae	2:4:D	
	2:4:D + aminopyralid (Grasshopper)	
	2:4:D + dicamba (Weedmaster, others)	
	2:4:D + picloram (Grass P + E)	
	2:4:D + triclopyr (Excelsior, others)	
	aminopyralid (Intrepid)	
	metazachlor (Polar)	
	dicamba (Banvel, others)	
	metazachlor (Savesto)	
	hexachlor (Telqay)	
	pendimethalin (Proval HQD)	
	picloram (Tordon, others)	
	picloram + fluroxypyr (Burndown)	
	trifluralin (Dandelion)	
	triclopyr (Remedy, others)	
triclopyr + fluroxypyr (PastureCare)		
Bromelaceae	2:4:D	
	2:4:D + aminopyralid (Grasshopper)	
	2:4:D + dicamba (Weedmaster, others)	
	2:4:D + picloram (Grass P + E)	
	2:4:D + triclopyr (Excelsior, others)	
	aminopyralid (Intrepid)	
	aminopyralid + metazachlor (Intrepid)	
	metazachlor (Polar)	
	dicamba (Banvel, others)	
	fluroxypyr (Diox, Duron, others)	
	glyphosate (Roundup, others)	
	metazachlor (Savesto)	
	hexachlor (Telqay)	
	metazachlor (Polarol, others)	
	metazachlor + metazachlor (Pastoral)	
pendimethalin (Grasshopper, others)		
pendimethalin (Proval HQD)		
picloram (Tordon, others)		
picloram + fluroxypyr (Burndown)		
trifluralin (Polar, others)		
trifluralin (Dandelion)		
triclopyr (Remedy, others)		
triclopyr + fluroxypyr (PastureCare)		

[illegible]



Early Detection of New Weeds

- Identify the weed species
 - Weed ID books
 - Consult with specialists
- Select control options
 - Easier to control prior to population spreading
 - Mechanical or physical removal often possible
- Review growing conditions and management practices
 - Modifications can reduce spread and growth of weeds
 - Promote competition of the pasture grasses





Smutgrass

Perennial with a bunch-type growth habit.

The ligule is a small fringe of hairs

The seedhead is a spike-like panicle with a black fungus on seeds.

Smutgrass Control


- Avoid overgrazing
- Mow infested areas to reduce seed production
- Correct fertility deficiencies

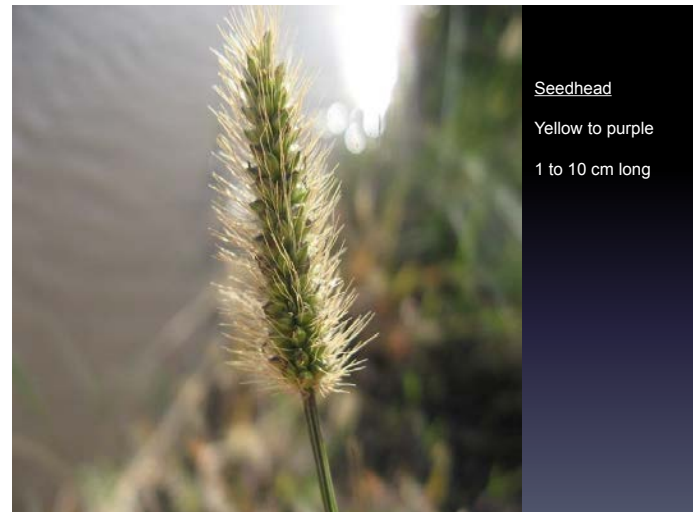
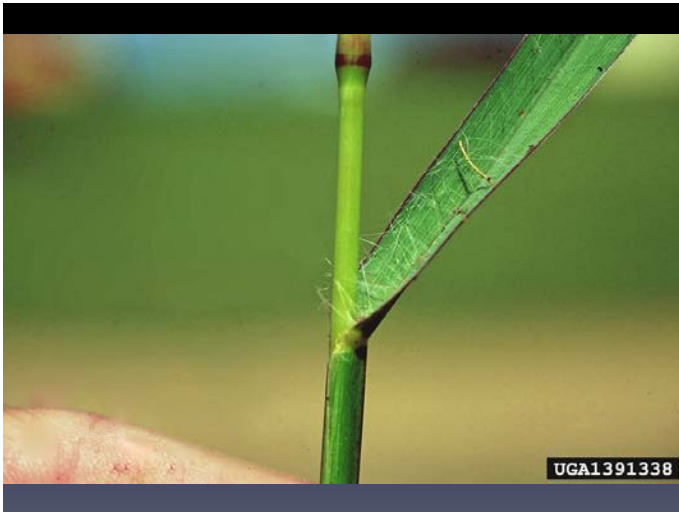


Velpar for Smutgrass

- Group 5 herbicide - Photosystem II inhibitor
- Bermudagrass and bahiagrass only
 - Rates: (2L formulation) 2.75 to 4.5 pints per acre
 - Rates: (75DF formulation) 8 to 12 oz/acre
 - Apply in late spring/early summer
- Grazing restriction: none
- Haying restriction: 38 days after treatment

Knotroot Foxtail



Knotroot Foxtail Control



- Prowl not effective
- Pastora + glyphosate (partial control/suppression)
- Spot treat glyphosate

Current Research

- Fall timings of glyphosate combinations
 - Pastora, Velpar, others
 - Fall timing to maximize total kill on plants
- Sequential preemergence herbicides in spring
 - Control new plants from seed or regrowth from rhizomes
 - Graduate student to pick up this project for two years

Pastora + Roundup Pro in February (ALS-Resistant Ryegrass)



Ryegrass Control

Bermudagrass

- Fall timings
 - Pastora at 1 to 1.25 oz/acre in November/December
 - Impose (Imazapic) at 4 to 6 oz/acre
 - Metsulfuron (60%) at 0.3 to 0.5 oz/acre (erratic control)
- Winter timings
 - Pastora at 1 to 1.5 oz/acre + glyphosate at moderate rates (8 to 12 oz/acre of 4 lb ai/gal product)
- Tall fescue
 - Prowl H2O is only option



Crabgrass Control

Bermudagrass

- Preemergence control critical in hayfields
 - Prowl H₂O (pendimethalin) at 3.1 to 4.2 qt/acre
 - Apply when soil temps are in low 50's
 - Make split applications after 8 weeks
- Postemergence control
 - Pastora: 1 to 1.5 oz/acre (early-POST)
 - Impose: 4 to 8 oz/acre (early to late POST)

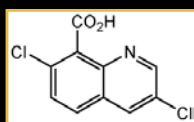


Crabgrass Control

- **Bahiagrass**
 - Prowl applications (PRE control)
- **Tall fescue**
 - PRE: Prowl H₂O in split applications
 - POST: Facet (quinclorac)



quinclorac (Facet)



- Restrictions
 - **Harvesting:** Do not cut within 7 days after treatment
 - **Grazing:** No waiting period following application
- **Advantages**
 - POST crabgrass and annual foxtail control in fescue and bermudagrass
 - Alternative mode of action to Pastora
- **Disadvantages**
 - Apply to grassy weeds that are 1 to 2 tiller or smaller
 - Maximum use rate is 64 fl oz/acre per year



Vaseygrass

-Warm-season perennial weed

-Native to South America



Vaseygrass

Cultural control

- Mowing - suppress vegetative growth of vaseygrass and reduce seed production.
- Grazing - when plants are young.
- Fertilizations after herbicide use



Vaseygrass Control

- **Bermudagrass**
 - Impose (imazapic) for young plants and suppression of mature populations.
 - Pastora + glyphosate requires two applications but may be injurious to bermudagrass during summer months.
 - Mowing ~ 3 weeks before herbicide applications may improve control
- Spot treatments or wick-bar applications of glyphosate can control vaseygrass.
- **Perennial peanut** - Impose (imazapic) for selective control of vaseygrass.

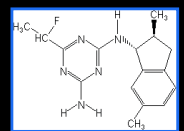


Recommendations for Johnsongrass Control

- **Bermudagrass**
 - POST: Pastora, Impose, Outrider*
- **Bahiagrass** – Outrider
- **Legumes** (depending on species – see PCH)
 - POST: Poast, SelectMax, Raptor, Impose
- **Tall Fescue**
 - No Selective control options

Make treatments in fall (if possible), use NIS at 0.25% v/v, mow and treat ~3 weeks later

indaziflam



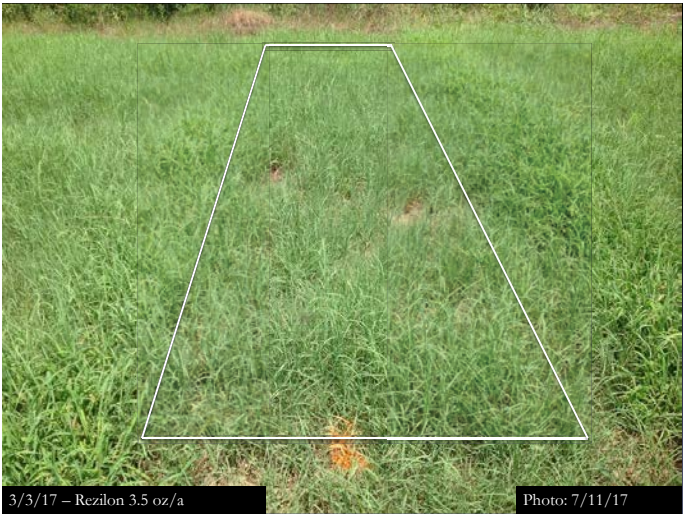
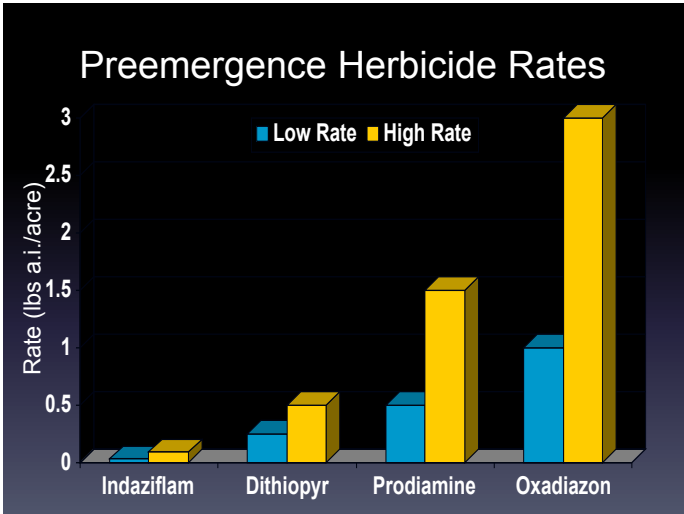
Trade Name: Rezilon, others

■ **Mode of action:** Cellulose synthesis inhibition

■ **Tolerant pasture grasses:** bermudagrass and bahiagrass

■ **Research at UGA**

- Pasture grass tolerance and weed control
- Currently in process of registration



Indaziflam in Pastures

- **Control of troublesome weeds**
 - Goosegrass, crabgrass, foxtails
 - Early POST activity
- **Resistance management**
 - Alternative mode of action to Prowl H₂O
 - Rotation with Prowl (spring + fall)
 - Ryegrass resistance to POST herbicides

Label in review by EPA for pastures..... Stay tuned

Questions