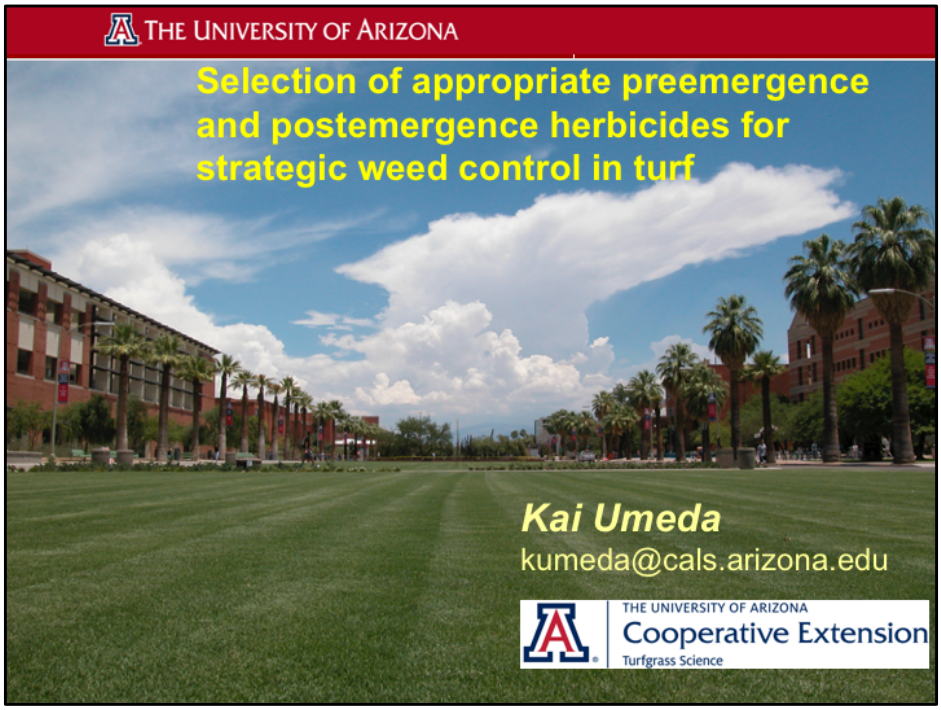
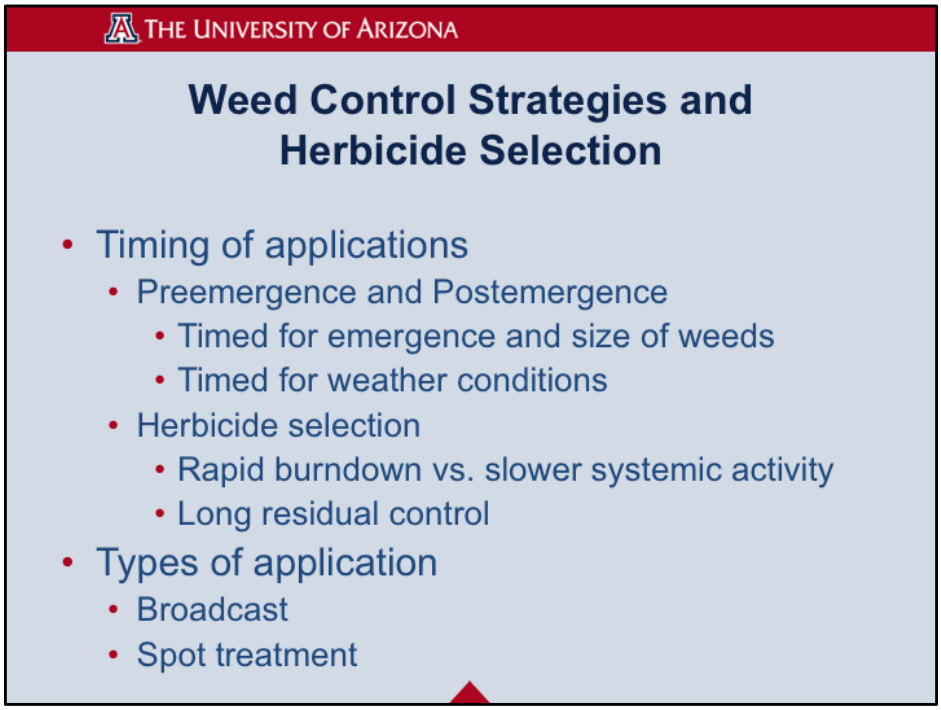


This presentation on 06 June 2019 in Guam for golf course superintendents and landscape professionals describes highlights of weed control research being conducted in the low desert of Arizona that may provoke thoughts and insights for developing and implementing weed control strategies in turf in Guam.



Timing of applications is critical, especially for preemergence herbicides that require mechanical activation or with water – overhead irrigation or rainfall. Dry season applications would render treatments ineffective versus wet season applications that would be activated for weeds stimulated by the rainfall. This would be analogous to Arizona where winter and summer monsoon rains would be effective in activating PRE herbicides if overhead irrigation wasn't reliable.

POST herbicides are always more effective when applied to young, small weeds. Scouting and monitoring sites for weed emergence is critical for effective POST herbicide applications. Often, weeds that are flowering or seeding are most noticeable and too late to be treated.

The severity and extent of a weed infestation would determine a wider treatment area with a boom sprayer or small scattered areas for a spot treatment.

2 weeds common to both Arizona and Guam are goosegrass and purple nutsedge. A major difference is that they are a summer weed in the desert versus being present as a year. around weed in the tropics. In the desert, the SU chemistries are effective against purple nutsedge when applied after the summer solstice when days get shorter and food reserves being produced for tubers development. The herbicides also move downward and result in reduced nutsedge populations.

PRE herbicide applications in the late spring (April) generally work well in the desert when Ronstar (oxadiazon) is applied. Lesser populations can be controlled with DNA's that are applied earlier in the spring (Feb-mar) for crabgrass. POST applications of foramsulfuron (Revolver, Tribute Total) work well against goosegrass in the desert as herbicide resistance has not yet been observed or experience. Topramezone (Pylex) works against goosegrass but causes severe bleaching of the bermudagrass turf. Other newer herbicides such as Manuscript (pinoxaden), Xonerate (amicarbazone), arylex (Corteva), and Specticle (indaziflam) or Sureguard (flumioxazin) are finding critical niches for problem weeds.

Bleaching herbicides for bermudagrass control in cool-season turfgrasses

- Pylex (topramezone) and Tenacity (mesotrione)
  - Postemergence
  - Combined with Turflon Ester, Sencor, quinclorac to alleviate bleaching

Creeping bentgrass green
Perennial ryegrass collar

Pylex is unique in controlling encroaching bermudagrass into cool-season creeping bentgrass greens and …

Bleaching herbicides for goosegrass control in bermudagrass

- Pylex (topramezone) and Tenacity (mesotrione)
  - Postemergence
  - Combined with Turflon Ester, Sencor, quinclorac to alleviate bleaching

Pylex controls goosegrass POST in bermudagrass turf. Temporary bleaching occurs for 2-3 weeks after treating. Combinations of other herbicides are being investigated to alleviate the bleaching effect.

Postemergence goosegrass control with ALS-inhibiting herbicides

- Tribute Total – foramsulfuron + halosulfuron + thiencarbazone
- Revolver - foramsulfuron

Foramsulfuron controls goosegrass effectively in the desert. Resistance is occurring the tropics.

Annual multiple applications of ALS-inhibiting herbicides

- Tribute Total – foramsulfuron + halosulfuron + thiencarbazone
- Revolver – foramsulfuron
- Monument - trifloxysulfuron

	Ryegrass pre-overseed (late October)	Ryegrass transition (April – June)	Goosegrass (June – July)	Purple nutsedge (July – August)
Tribute Total foramsulfuron halosulfuron	- - -	1.0 oz 0.012 lb 0.02 lb	3.2 oz 0.04 lb -	3.2 + 3.2 oz - 0.062 + 0.062 lb
Revolver foramsulfuron	17.7 oz 0.025 lb	8.8 – 17.4 oz 0.013 – 0.025 lb	17.4 – 26.2 oz 0.025 – 0.038 lb	-
SedgeHammer halosulfuron	- -	- -	- -	1.3 + 1.3 oz 0.062 + 0.062 lb
Monument trifloxysulfuron	0.35 – 0.53 oz 0.016 – 0.025 lb	0.1 – 0.35 oz 0.005 – 0.016 lb		0.53 + 0.53 oz 0.025 + 0.025 lb

Product rates in oz/A and active ingredient rates in lb a.i./A

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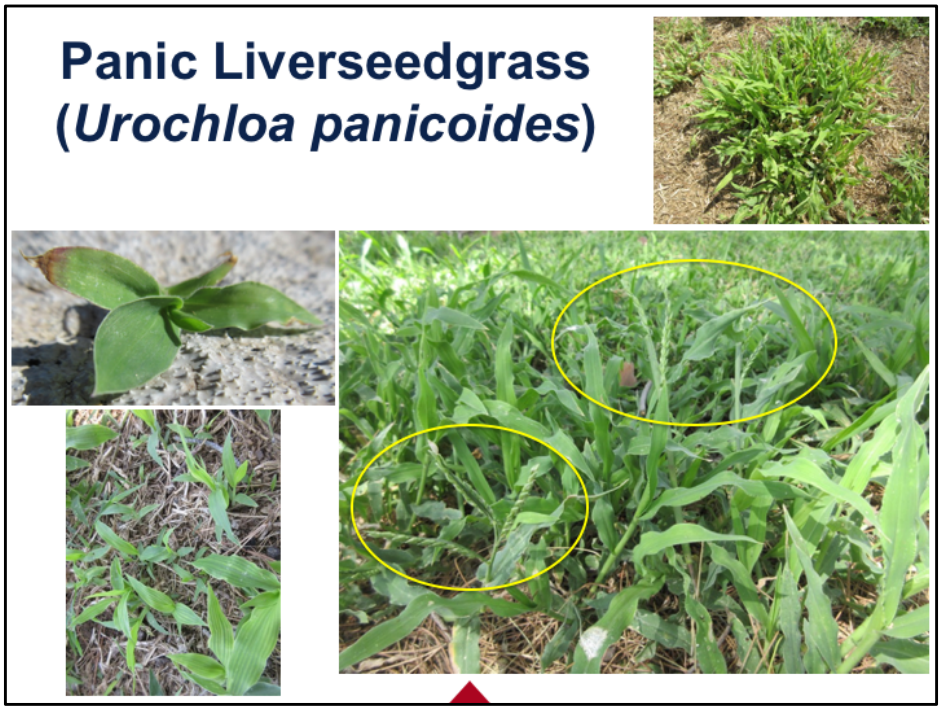
Multiple applications of the SU's or ALS-inhibiting herbicides in the low desert over the course of the calendar year causes potential for fears of resistance development by weeds to the class of herbicides. The use of lower rates for easier to control weeds or for transition contribute to exposures to weeds that would require higher rates for more effective control. Nutsedge would be exposed to low doses over the course of the year if it is growing in the presence of overseeded ryegrass.



Liverseedgrass in the Phoenix, AZ area is growing as a problem weed in lesser maintained turf areas. Its been compared to signalgrass of other areas. Since 2016, various POST and PRE herbicides have been evaluated to determine efficacy against the weed.

In 2018 and 2019, observations in the Phoenix area showed that the weed began emergence in early March. Seedheads would appear as early as late May.

Results of POST1 Herbicides Efficacy on Liverseedgrass

Table 1. Comparison of postemergence herbicides for liverseedgrass (UROPA) control.

Treatment	Rate (lb a.i./A)	UROPA control (%) 15 Jun	23 Jun	30 Jun	12 Jul	04 Aug
Untreated check		0 b	0 b	0 b	0 a	0 a
Quinclorac	0.75	3 b	15 b	15 ab	23 a	20 a
Quinclorac + Sulfentrazone + 2,4-D + Dicamba	1.54	8 b	17 b	27 ab	30 a	25 a
Metsulfuron	0.038	7 b	10 b	30 ab	17 a	17 a
Sulfosulfuron	0.094	8 b	8 b	20 ab	17 a	10 a
Topramezone	0.022	63 a	68 a	68 a	55 a	32 a

Treatments applied on 02 June and 15 June 2016.
Means followed by the same letter within a column are not significantly different by Tukey's HSD.

Summer applications of various herbicides were not effective.
POST1 and POST2 results including Pylex and Tenacity.

Results of POST2 Herbicides Efficacy on Liverseedgrass

Table 2. Evaluation of combinations of postemergence herbicides for liverseedgrass (UROPA)

Treatment	Rate (lb a.i./A)	UROPA control (%)					
		23 Jun	30 Jun	18 Jul	04 Aug	10 Aug	29 Aug
Untreated check		0 c	0 b	0 c	0 d	0 c	0 b
Mesotrione + Metribuzin*	0.16 + 0.188	47 b	50 a	82 a	10 cd	20 bc	8 b
Mesotrione + Simazine	0.16 + 0.25	43 b	60 a	82 a	22 b	83 a	68 a
Mesotrione + Sulfentrazone	0.16 + 0.25	53 ab	57 a	77 ab	22 b	63 ab	28 ab
Mesotrione	0.16	63 a	57 a	65 b	18 bc	72 a	10 b
Topramezone	0.022	47 b	57 a	78 ab	50 a	57 ab	43 ab
Topramezone + Quinclorac	0.022 + 0.75	47 b	77 a	72 ab	53 a	72 a	73 a

Treatments applied on 16 June, 12 July, and 04 August 2016.
*Metribuzin not applied on 04 August.
Means followed by the same letter within a column are not significantly different by Tukey's HSD.

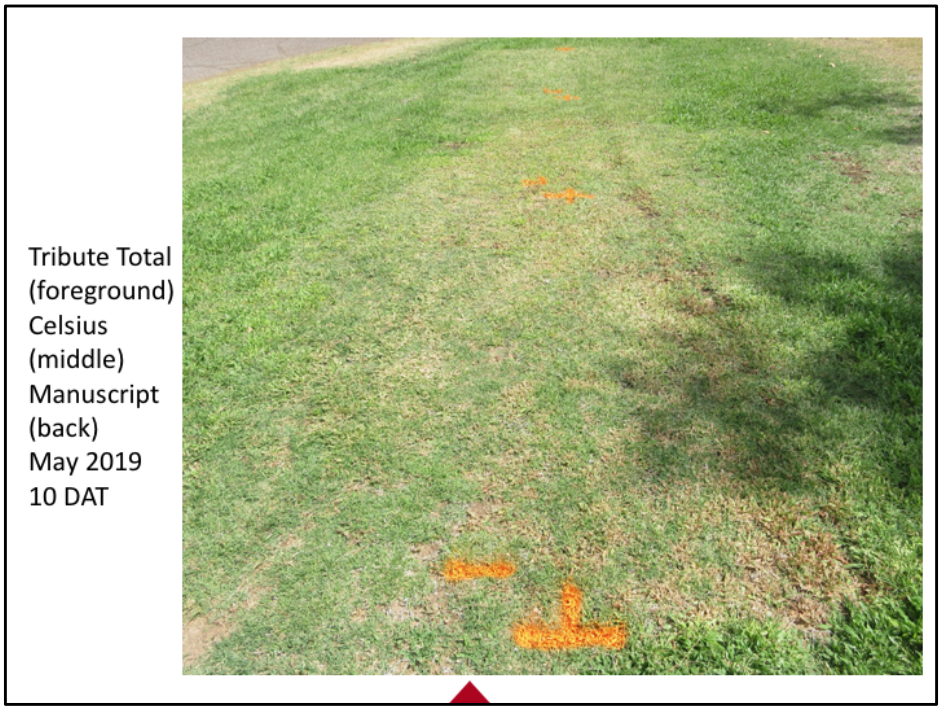
POST herbicide treated bleaching. topramezone & mesotrione effects

Table. Postemergence herbicide control of liverseedgrass, Phoenix, AZ, 2018

Treatment	Rate (lb a.i./A)	UROPA Control				
		22 Jun	29 Jun	06 Jul	10 Jul	17 Jul
		---------- % ----------				
untreated check		0 b	0 c	0 c	0 e	0 b
halosulfuron + foramsulfuron + thiencarbazone	0.062 + 0.04 + 0.02	81 a	74 a	75 a	85 a	79 a
iodosulfuron + dicamba + thiencarbazone	0.004 + 0.13 + 0.02	79 a	35 b	35 b	63 b	26 b
pinoxaden	0.06	61 a	10 c	21 b	9 de	3 b
pinoxaden	0.12	78 a	15 bc	31 b	24 cd	3 b
amicarbazone	0.24	18 b	15 bc	68 a	28 c	6 b

All treatments applied sequentially on 12 June 2018 followed by 29 June.
Pinoxaden treatments included adjuvant A12127 at 0.5% v/v, all other treatments included Latron CS-7 at 0.25% v/v.
Means followed by the same letter within a column are not significantly different by Tukey-Kramer HSD.

Sequential POST applications of Tribute Total, Celsius, Manuscript, and Xonerate demonstrated activity on liverseedgrass in 2018. Tribute Total was most commercially acceptable . This exploratory work prompted further investigation into 2019, currently.



Single POST treatments demonstrating efficacy in late spring against liverseedgrass.

Results of Early PRE Herbicides Efficacy on Liverseedgrass

Table 3. Early winter preemergence herbicide application for liverseedgrass (UROPA) control .

Treatment	Rate (lb a.i./A)	UROPA control (%) 28 Mar	18 Apr	04 May	22 May	08 Jun	12 Jul
Untreated check		0 b	0 b	0 c	0 b	0 c	0 b
Indaziflam[1]	0.05	96 a	90 a	85 a	87 a	50 abc	8 b
Flumioxazin[1]	0.38	88 a	85 a	82 ab	77 a	50 abc	48 ab
Dithiopyr[1]	0.5	93 a	90 a	73 ab	75 a	20 bc	27 ab
Dimethenamid[1]	1.5	81 a	57 a	63 ab	68 a	23 bc	20 ab
Pendimethalin[2]	3.0	99 a	95 a	95 a	90 a	85 ab	83 a
Prodiamine[3]	3.0	99 a	95 a	95 a	90 a	90 a	88 a
Oxadiazon[2]	4.0	96 a	78 a	40 bc	17 b	0 c	0 b
Dimethenamid + Pendimethalin[2]	1.5 + 2.0	98 a	93 a	90 a	87 a	77 ab	33 ab

Early winter applications on 19 December 2016.
Liverseedgrass control rated during spring 2017.
[1]Treatments sprayed in 50 gpa water.
[2]Treatments spread as granules.
[3]Treatment spread as granule coated fertilizer.
Means followed by the same are not significantly different by Tukey-Kramer HSD.

PRE herbicides applied in December or February showed efficacy against liverseedgrass. Pendulum and Barricade were effective against liverseedgrass for 7 months.

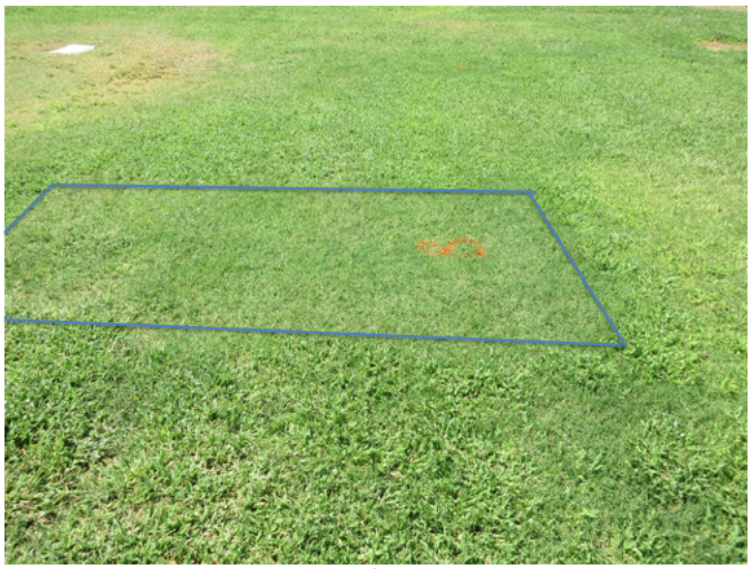
Results of Late PRE Herbicides Efficacy on Liverseedgrass

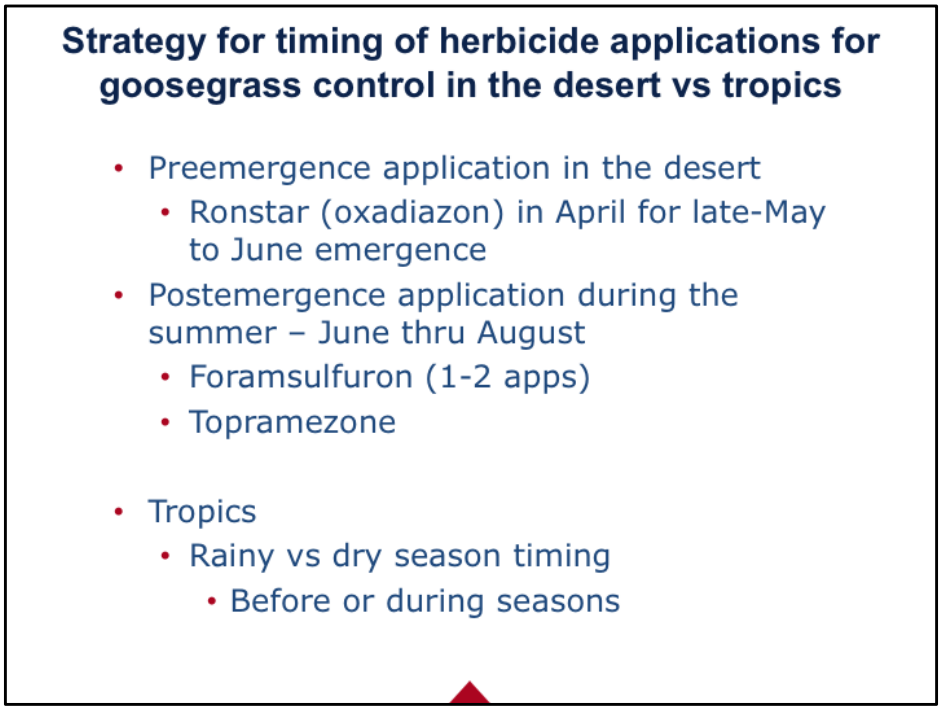
Table 4. Late winter preemergence herbicide application for liverseedgrass (UROPA) control.

Treatment	Rate (lb a.i./A)	UROPA control (%) 28 Mar	18 Apr	04 May	22 May	08 Jun	12 Jul
Untreated check		0 c	0 c	0 c	0 d	0 b	0 b
Indaziflam[1]	0.05	82 ab	73 ab	65 ab	65 ab	20 b	0 b
Flumioxazin[1]	0.38	90 ab	77 ab	75 a	17 cd	13 b	0 b
Dithiopyr[1]	0.5	75 b	80 ab	75 a	50 bc	30 b	5 b
Dimethenamid[1]	1.5	85 ab	82 ab	73 a	65 ab	30 b	17 b
Pendimethalin[2]	3.0	85 ab	77 ab	88 a	85 a	80 a	73 a
Prodiamine[3]	3.0	97 a	92 a	92 a	90 a	85 a	85 a
Oxadiazon[2]	4.0	82 ab	57 b	33 bc	0 d	0 b	0 b
Dimethenamid + Pendimethalin[2]	1.5 + 2.0	96 ab	93 a	93 a	92 a	87 a	75 a

Late winter applications on 24 February 2017.
Liverseedgrass control rated during spring 2017.
[1]Treatments sprayed in 50 gpa water.
[2]Treatments spread as granules.
[3]Treatment spread as granule coated fertilizer.
Means followed by the same are not significantly different by Tukey-Kramer HSD.

Prodiamine liverseedgrass control in July (7 MAT)

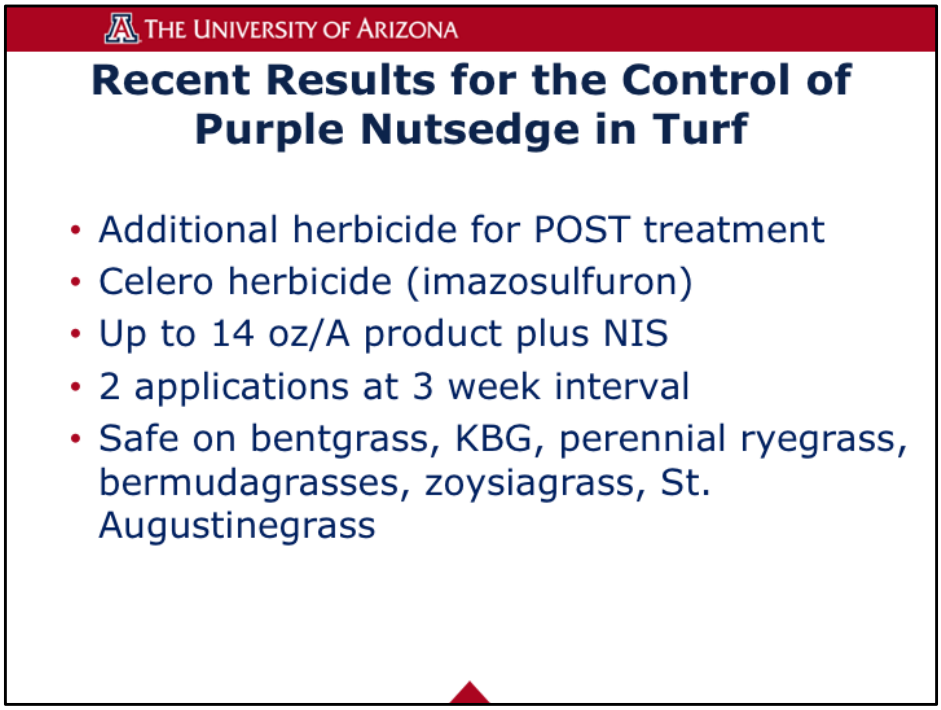




The timing of application of a PRE herbicide for goosegrass control should be when the most germination and emergence occur - beginning of the rainy season possibly. The weed is probably emerging year around os an optimum time would be difficult unless actual monitoring is conducted.

POST treatments should also coincide with the greatest presence of the youngest most recently emerged goosegrass. Critical to efficacy would be treating goosegrass not stressed during the dry season.

Rotating among different modes of action may help with slowly reducing infestations – PRE Ronstar, POST Revolver, POST Pylex.



The SU's or ALS-inhibiting herbicides most effective against purple nutsedge are:
SedgeHammer
Image
Monument
Certainty
Katana
TributeTotal
Dismiss South
Celero
Vexis (pyrimisulfuron) coming soon

Non- SU herbicides – Dismiss CA (sulfentrazone) and MSMA (golf courses only)

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Nutsedge Control
Celero herbicide

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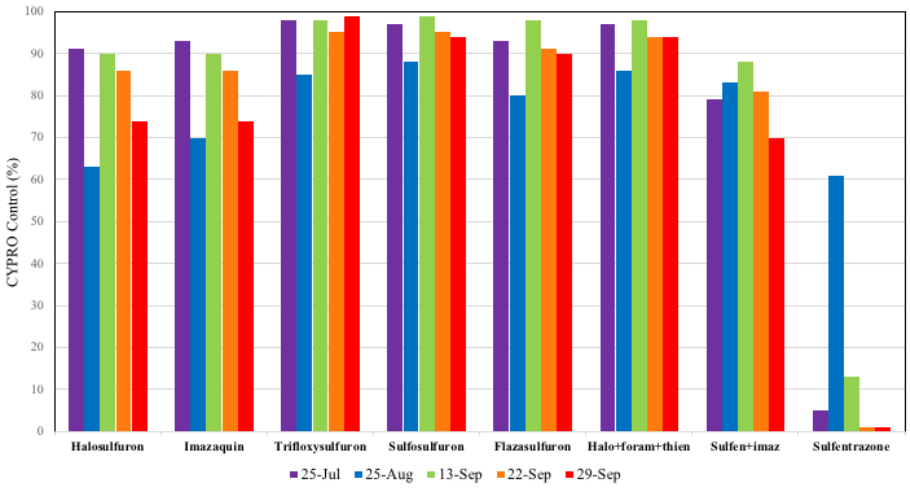
Results of nutsedge POST herbicide efficacy field trial
Raven Golf Course, Phoenix, AZ, 2017



Sequential applications of herbicides applied on 06 July and 25 August 2017 (7 WAT-1).
All treatments included surfactant Latron CS-7 at 0.25% v/v.

The strategy utilizing SU herbicides is to effectively get the applied herbicide to translocate to the developing tubers that give rise to the next generations. If not timed effectively, the tubers could be stimulated to sprout and promote more emergence of new plants during the other parts of the year.
Nutsedge plants under stress – lack of moisture during dry season may result in less efficacy.

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Application limitations for herbicides in turf

Herbicide	Limitations	Turfgrasses
imazaquin *Image 70 DG*	No limit stated on label	Bermuda, St. Augustine, seashore paspalum, zoysia
halosulfuron *SedgeHammer 75 WG*	4 applications /year Do not exceed 5.3 oz/A (0.25 lb a.i.) per 12 month period	Bermuda, St. Augustine, seashore paspalum, zoysia, kikuyu, bahia, centipede, creeping bent, tall & fine fescue, KY blue, perennial rye
halosulfuron + foramsulfuron + thiencarbazone *Tribute Total WDG*	Do not apply more than a total of 6.4 oz/A per year	Bermuda, zoysia
trifloxysulfuron *Monument 75 WG*	Maximum yearly application rate of 1.7 oz/A	Bermuda, zoysia (Not for home use in CA)
sulfosulfuron *Certainty 75 WDG*	Combined total of all treatments must not exceed 2.66 oz/A per year	Bermuda, St. Augustine, seashore paspalum, zoysia, kikuyu, bahia, centipede, buffalo
flazasulfuron *Katana 25 WG*	Maximum yearly application rate is 9 oz/A per year (0.14 lb a.i./A)	Bermuda, zoysia, buffalo, seashore paspalum, centipede
imazosulfuron *Celero 75 WDG*	Do not apply more than 0.66 lb/A per application	Bermuda, St. Augustine, zoysia, centipede, creeping bent, tall & fine fescue, KY blue, perennial rye
sulfentrazone *Dismiss CA 4 SC*	Limit of 12 prod oz/A per 12 month period	Bermuda, St. Augustine, seashore paspalum, zoysia, kikuyu, buffalo, centipede, carpet, creeping bent, fine & tall fescue, KY blue, perennial rye, roughstalk blue (lower rates for cool grasses)
sulfentrazone + imazethapyr *Dismiss South 4SC*	Do not exceed maximum rate per acre based on turfgrass variety	Bermuda, zoysia, buffalo, kikuyu, bahia, centipede

Herbicides for nutsedge control have variations in turf safety and label limitations for total number or amount of product allowed to be used.
Sulfentrazone is not translocated in the plant but causes foliar burndown only, similar to MSMA.

Herbicide Resistant Weeds

- Development of herbicide resistance
  - 496 cases globally (2019, Sosnoskie, https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=29069)
    - 148 broadleaved weeds, 107 grasses
    - 163 herbicides
  - 161 cases in U.S.
    - 52 ALS inhibitors, 17 EPSPS (glyphosate)
  - 30 cases in California
    - watergrasses (*Echinochloa* spp.)
    - horseweed, fleabane (*Conyza* spp.)
    - Italian ryegrass (*Lolium* spp.)
  - Palmer amaranth in Arizona field crops first observed glyphosate resistance in 2011

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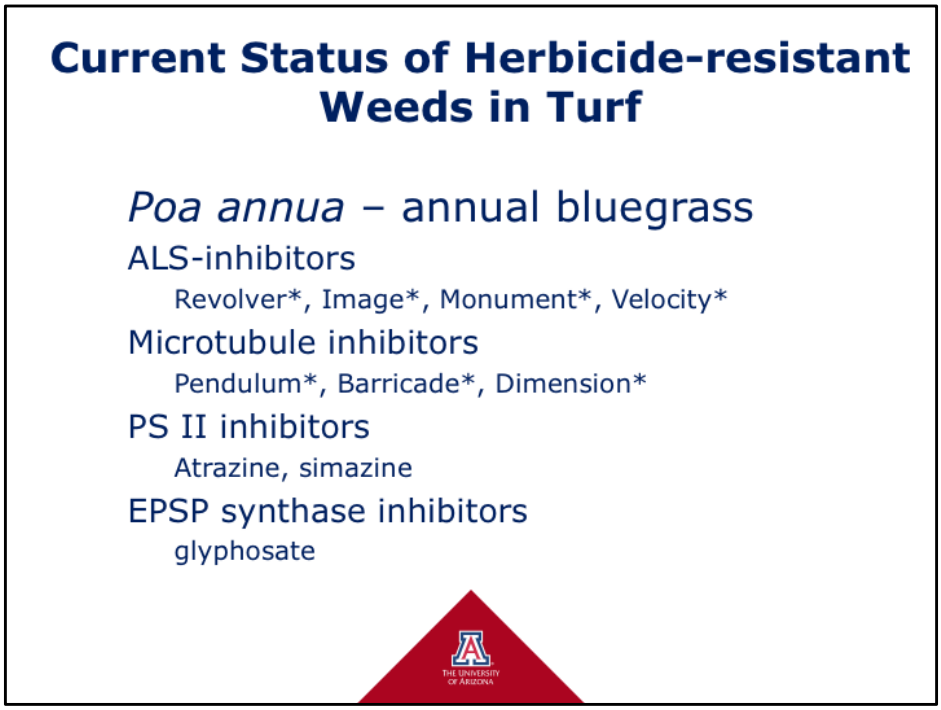
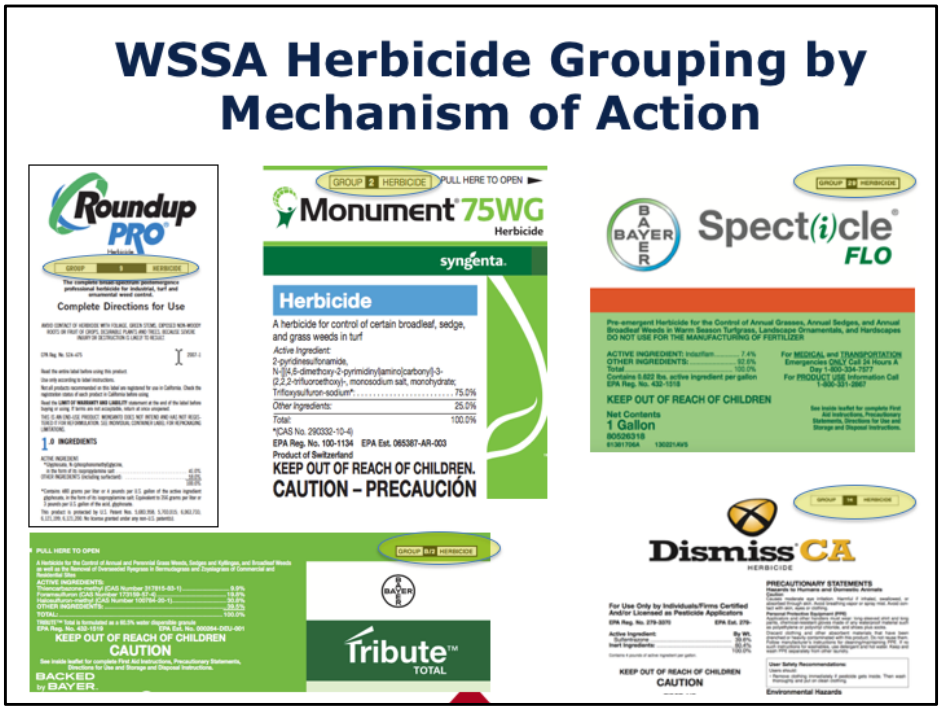
Cause for concern of the growing resistance problem.
The ALS- inhibitors or SU herbicides have developed a high number of resistance by many weeds since only the 1980's



There are many cases of resistant weeds in turf.

Current Status of Herbicide-resistant Weeds in Turf

- *Eleusine indica* – goosegrass
  - ALS-inhibitors
    - Revolver*, Image*, Monument*, Velocity*
  - Microtubule inhibitors
    - Pendulum*, Barricade*, trifluralin
  - PS II inhibitors
    - Sencor*
- *Digitaria ischaemum* – smooth crabgrass
  - ACCase inhibitors
    - Fenoxaprop (Acclaim*)
- *Digitaria sanguinalis* – large crabgrass
  - ACCase inhibitors
    - Sethoxydim



The Weed Science Society of America and the global Herbicide Resistance Action Committee identify herbicides by their mechanism of action so that end-users can more easily recognize and differentiate products that can and should be used against weeds in turf in a strategic manner. The Herbicide Handbook published by the WSSA (http://wssa.net) lists about 200 herbicides that are categorized by their mechanism of action.

A numerical or alphabetical categorization identifies each herbicide on its brand label.

Factors for Potential Herbicide-resistant Weeds in Turf and Landscapes

- Typical herbicide use patterns in the desert
  - Over-reliance on "yellow" herbicides in turf

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Summer grass and spurge control				Summer grass and spurge control		*Poa* control Pre-overseed		*Poa* control non-overseed		*Poa* control sequential application

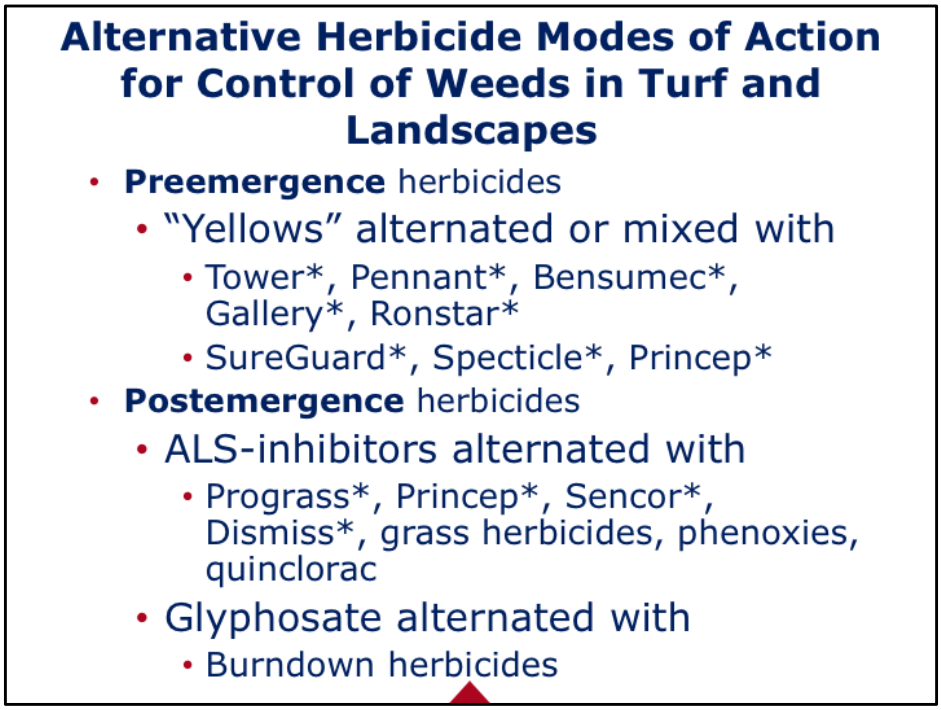
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Summer grass and spurge control					Summer grass and spurge control sequential				Winter weed control	

These next 2 slides demonstrate the multiple times of application of DNA's and SU herbicides on turf in the desert region in Arizona, The over-reliance on the 2 mechanisms of action – PRE DNA's and POST SU's can lead to potential development of weed resistance. Alternative chemistries and strategies must be incorporated to reduce the stress on the over-reliance on the 2 chemistries.

Factors for Potential Herbicide-resistant Weeds in Turf and Landscapes

- Typical herbicide use patterns in the desert
- Multiple uses of ALS-inhibiting herbicides

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
					Purple nutsedge control				Poa control Pre-overseed		Poa/ ryegrass control cleanup application
			Spring transition								



Alternatives for PRE herbicide weed control instead of continual use of DNA's. Rotating or strategic use against specific weeds can break the weed exposure to the same chemistry in a calendar year.
POST weed control can be alternated with PRE applications or in tandem or tank-mix to alleviate continual exposures to the same chemistry – SU's.
Glyphosate resistance can be addressed by using burndown herbicides that may necessitate more applications frequently.

Preemergence Herbicide Control of Grass Weeds in Turf and Landscapes

Herbicide	MOA Group	
Benefin	3	
Dithiopyr Dimension*	3	*Poa* & crab – fall/spring
Oryzalin Surflan*	3	
Pendimethalin Pendulum*	3	
Prodiamine Barricade*	3	*Poa* & crab – fall/spring
Trifluralin	3	
Oxadiazon Ronstar*	14	Goosegrass – late spring
Isoxaben Gallery*	21	Broadleaved weeds
Metolachlor Pennant*	15	
Dimethenamid Tower*	15	
Bensulide Bensumec*	8	

The DNA's typically offer effective control of most grasses and some small-seeded broadleaved weeds. To prevent potential development of resistance, if possible, rotate among different modes of action.

In turf, prodiamine and dithiopyr are used for *Poa* control prior to overseeding. They are again used for crabgrass control in the spring.

Monitoring grass weed populations may allow changing chemistries or utilizing POST applications of other herbicides.

Pennant and Tower may offer different chemistries on grass weeds that DNA's are continually used.

Postemergence Non-selective Herbicide Control of Weeds in Turf and Landscapes

Herbicide		MOA Group
Glyphosate	Roundup*, etc.	9
Glufosinate	Finale*	10
Diquat	Reward*	22
Pelargonic acid	Scythe*	26

Non-selective POST herbicides can be effective on non-overseeded bermudagrass in the winter.
Glyphosate may cause injury if bermudagrass is showing any green.
Multiple applications may be needed if winter rains bring on more germinating broadleaved weeds and *Poa*.
Repeat applications may be needed when burndown herbicides don't effectively control larger weeds as does glyphosate.

PRE / POST Herbicide Control of Weeds in Turf and Landscapes

Herbicide		MOA Group
Indaziflam	Specticle*	29
Flumioxazin	SureGuard*	14
Simazine	Princep*	5

Control of Poa in dormant non-overseeded bermudagrass now has effective options by using Specticle* (indaziflam) or SureGuard* (flumioxazin). Both are effective against small, 1-2 leaf sized *Poa*, and controls most weeds through the winter and well into the spring.

All 3 of the PRE /POST options represent different modes of action and can be integrated into a strategy where overseeding may be skipped occasionally.

Postemergence Herbicide Control of Weeds in Turf and Landscapes

Grass Herbicides		MOA Group	
Clethodim	Envoy*	1	Landscape
Sethoxydim	Segment*	1	Landscape
Fluazifop	Fusilade*	1	Landscape
Pinoxaden.	Manuscript*	1	Turf
Ethofumesate	Prograss*	8	Turf
Amicarbazone	Xonerate*	5	Turf
Methiozolin	PoaCure*	30	Turf
Quinclorac	Drive*, etc.	4	Turf

Broadleaved Turf Herbicides		MOA Group
2,4-D		4
Dicamba	Vanquish*, etc.	4
Clopyralid Fluroxypyr	Lontrel* Vista*	4 4
Triclopyr	Turflon Ester*	4
Sulfentrazone	Dismiss CA*, Q4 Plus*, etc.	14
Carfentrazone	QuickSilver*, SpeedZone*, etc.	14

Different modes of action can be used against various grass and broadleaved weeds, especially in turf.
The grass herbicides, “FOPS” and “DIMS” are very good against bermudagrass growing in ornamentals.
Prograss* (ethofumesate), Xonerate* (amicarbazone), and PoaCure* (methiozolin) are being further investigated for use against *Poa* in the desert turf on golf courses.
Quinclorac (Drive*, etc.) products have been effective against crabgrass and southwestern cupgrass in turf.

The broadleaved turf herbicides generally are pre-mixed by various companies and are very good in overseeded winter turfgrasses.
Temperature restrictions limit use on warm-season turf due to some phytotoxicity.
New arylex chemistry fits with the phenoxy products and weed control spectrum is yet to be determined.

ALS-inhibiting Postemergence Herbicides in Turf

Herbicide	MOA Group
Foramsulfuron (Revolver*, Tribute Total*)	2
Trifloxysulfuron (Monument*)	2
Sulfosulfuron (Certainty*)	2
Flazasulfuron (Katana*)	2
Halosulfuron (SedgeHammer*, Tribute Total*)	2
Metsulfuron (Manor* & others)	2
Rimsulfuron (TranXit*)	2
Iodosulfuron (Celsius*)	2
Bispyribac-sodium (Velocity*)	2
Penoxsulam (Sapphire*)	2
Imazaquin (Image*)	2
Imazasulfuron (Celero*)	2
Imazethapyr (Dismiss South*)	2

The most diverse and broadspectrum ALS-inhibiting herbicides are being adopted for many uses year-around in turf.
Low doses Monument*, Certainty*, Katana*, Manor*, Tribute Total*, and TranXit* can be used for spring transition to remove overseeded ryegrasses from bermudagrass.
Higher rates of Monument*, Certainty*, Katana*, and Tribute Total* are very effective against purple nutsedge in the late summer.
The ALS-inhibitors control other weeds and undesirable vegetation in turf, overseeded and non-overseeded, so their use is extended over the winter, spring, summer, and fall.
The potential for herbicide resistance is very possible for this mode of action family.

Strategies with New Herbicides to Avert the Development of Weed Resistance

- Prevent and monitor weeds in turf and landscapes for herbicide resistance
- Culturally manage turf and landscapes
  - Encourage vigorous and healthy plants
  - Efficiently manage water
- Rotate available herbicide chemistries
  - Use label rates
  - Don't cut rates

Strategies with New Herbicides to Avert the Development of Weed Resistance

- Preemergence herbicides
  - Follow label rates
  - Do NOT cut rates
  - Apply sequential applications
  - Rotate chemistries
- Postemergence herbicides
  - Treat young weeds
  - Follow label rates
  - Rotate chemistries
  - Use tank-mixes
- Integrate PRE and POST herbicides in a management strategy


Thank You
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