

# Weed Management in Vineyards

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Peter Dittmar

Horticultural Sciences





# Postemergence Herbicides

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# Broadspectrum broadleaf control

Herbicide	Bush age	Signal word
Glyphosate	Bearing / Nonbearing	Caution
Paraquat (Gramoxone SL, etc.)	Bearing / Nonbearing	Danger
Ammonium nonanoate (Axxe)	Bearing / Nonbearing	Warning
Diquat (Reglone)	Nonbearing	Caution
Glufosinate (Rely, Cheetah, etc.)	Bearing / Nonbearing	Warning
Pelargonic Acid (Scythe)	Bearing / Nonbearing	Warning
Carfentrazone (Aim) + grass herbicide	Bearing / Nonbearing	Caution

# Changes to paraquat

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- Skull & cross bones on more places on the jug
- Application by operators not applicators
- Product will be sold in “closed systems”
- Additional training required
  - Offered on eXtension
  - Good for 3 years
- Registered crops and use patterns will not change
  - Some registrants may not be able to complete the requirements so some labels may change

# Changes to glyphosate

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- None expected at this time
- Wait and see
- Still an important tool when used appropriately



# Grass herbicides

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- Clethodim

- Select Max, Arrow, Clethodim
- Bearing and nonbearing
- PHI 14 days
- Crop oil or nonionic surfactant

- Fluazifop

- Flusilade
- PHI 50 days
- Crop oil or nonionic

- Sethoxydim

- Poast
- Crop oil or methylated seed oil
- Nonbearing and bearing
- PHI 50 days

# Sedge vs. grass

## Sedge

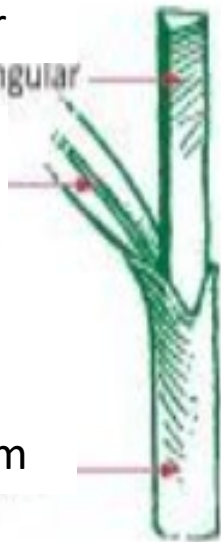
Solid stem,  
triangular

usually triangular

Leaves  
usually flat

usually flat

Fused leaf  
sheath at  
base of stem



Spiral around  
stem

around stem



## Grass

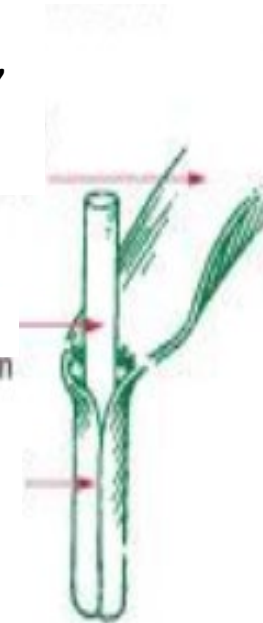
Leaves  
usually flat,  
long and  
narrow

narrow

Round stem

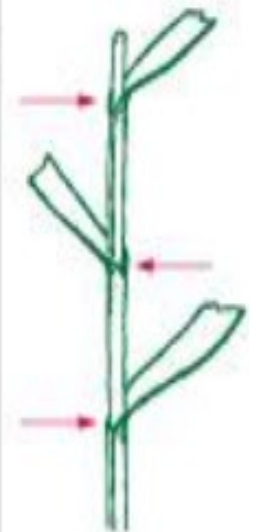
round stem

Overlapping  
leaf sheath  
at base of  
stem



Alternate  
arrangement

arrangement





# Preemergence herbicides

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# Preemergence herbicides

Mode of Action Group #	Active Ingredient	Trade Name
3	Pronamide	Kerb
	Oryzalin	Oryzalin, Surflan
5	Diuron	Direx, Karmex, Diuron
12	Norflurazon	Solicam
14	Flumioxazin	Chateau
15	Napropamide	Devrinol
20	Dichlobenil	Casoron
21	Isoxaben	Gallery
29	Indaziflam	Alion

# Chateau

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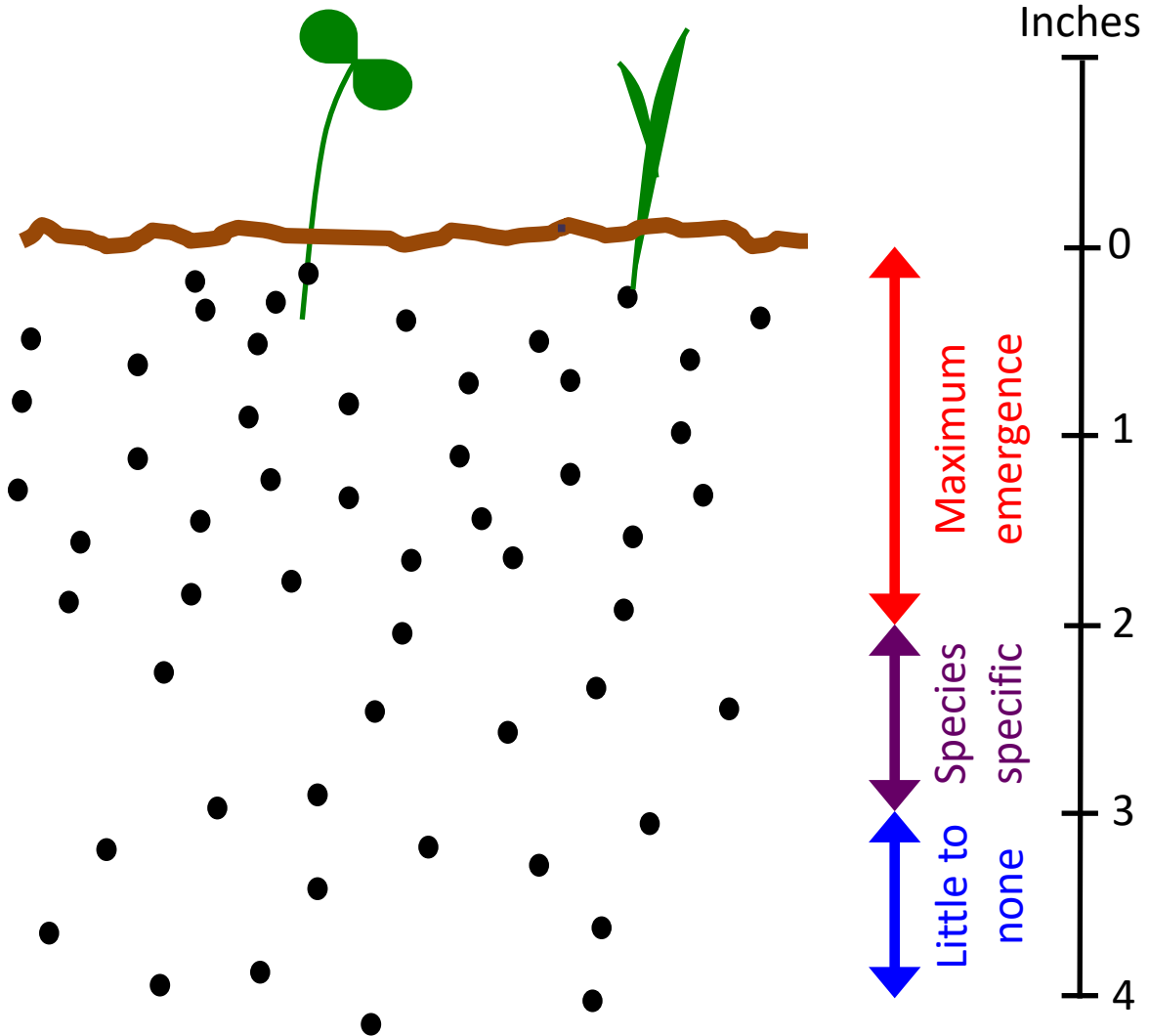
- Active ingredient: flumioxazin
- Maximum of 12 oz/A per 12 months
  - 2 apps. of 6 oz. with minimum of 30 days between apps.
- Can be tank mixed with paraquat, glufosinate, or glyphosate
- Application before flowering because of possible speckling on flowering
- Poor grass control

# Alion

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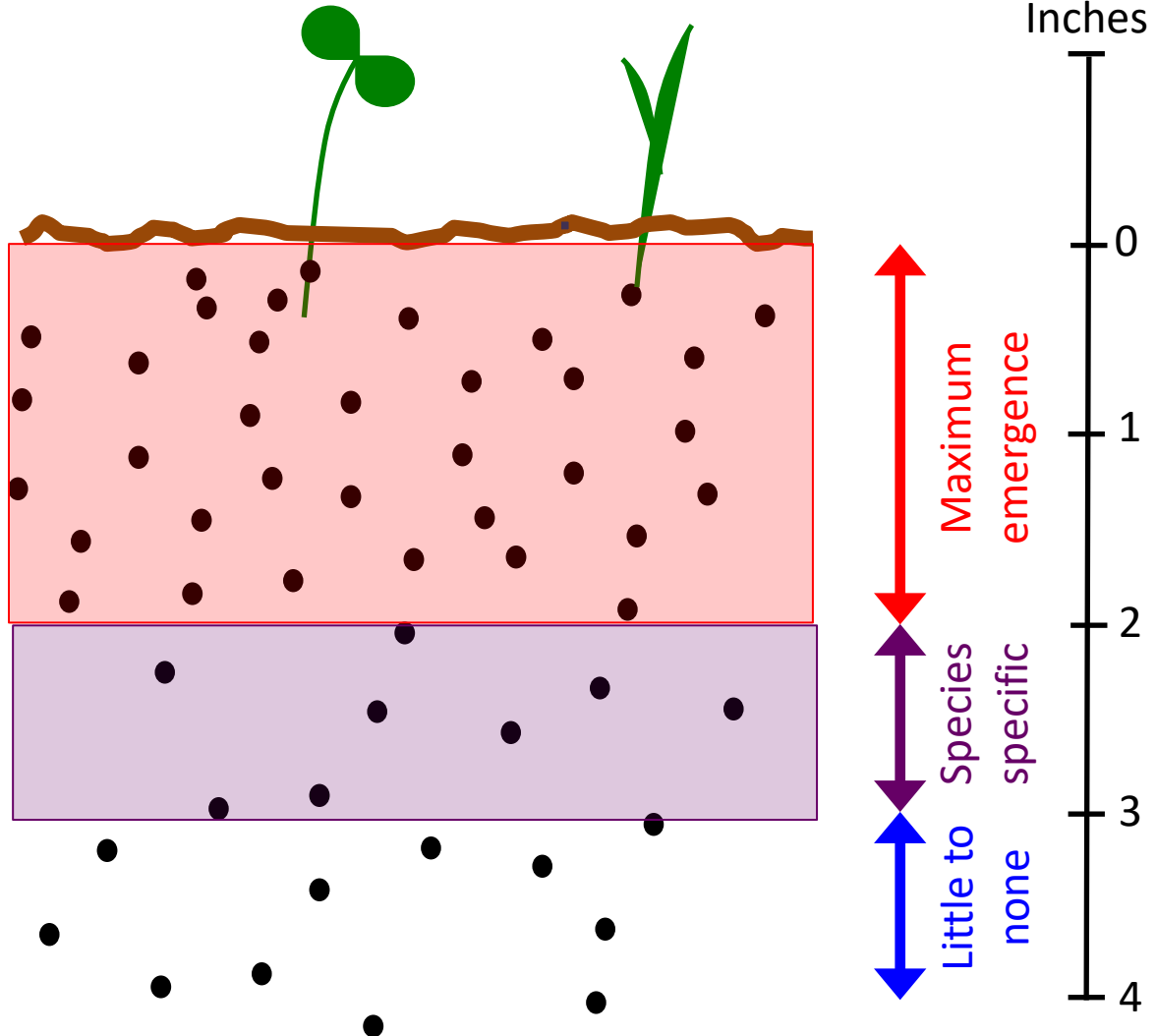
- Active ingredient: indaziflam (Group 29/L)
- 3.5 to 5 fl. oz./A.
- Do not apply more than 7 fl. oz./A./yr.
- Spanish nettle, chickweeds, pigweeds, horseweed, filaree, crabgrass, goosegrass, guineagrass
- Do not apply to sand
- Vines must be established for 3 year

# Incorporating preemergence



# Incorporating preemergence

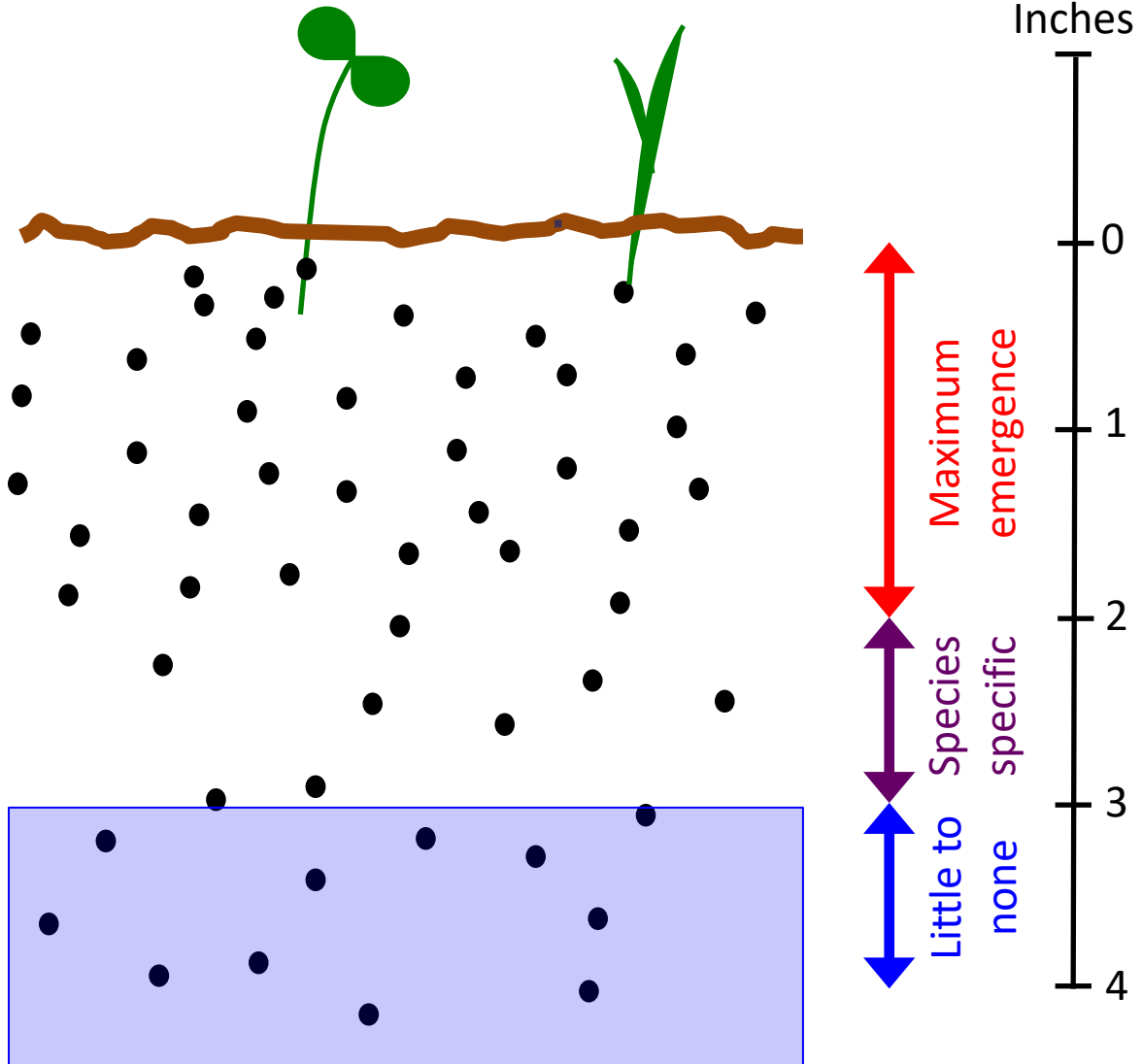
- Incorporate 2 to 3 inches deep
  - Cultivation
  - Irrigation
  - Rainfall
- Within 24 hours



# Incorporating preemergence

- Incorporate 2 to 3 inches deep
  - Cultivation
  - Irrigation
  - Rainfall
- Within 24 hours

TOO  
DEEP



# Organic weed control

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# Organic options

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- Handweeding
- Mulches
- Flaming
- Cover crops in the row middles
- OMRI approved herbicides
- Axxe certification
  - Label and OMRI certification are different use patterns
  - Need two more locations

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Dr. Peter Dittmar  
pdittmar@ufl.edu  
352-273-4771

