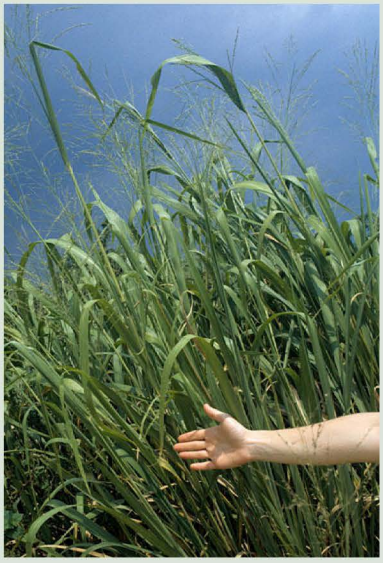
Guineagrass (*Urochloa maxima*)

POACEAE FAMILY



GROWTH HABIT

Guineagrass (*Urochloa maxima*) is a robust, densely tufted perennial grass generally growing 4 to 7 feet tall. Stems are thick with some hairs and often densely hairy nodes. **Flowering** occurs in mid-summer. Without a seed head, the plant appears almost identical to sugarcane. **Leaf** blades are flat, linear, up to 3 feet long, hairy, and coarse textured. Leaf sheath is also hairy with dense patches at the junction with the leaf blade. Ligules are membranous and not more than ¼ inch. **Flowers** grow on many-branched, erect or slightly nodding panicles with 3 to 7 whorled lower branchlets. Main branch grows up to 2 feet and side branches grow out to 8 inches. **Spikelets** are clustered on the branchlets, short-stalked, green to purplish, oblong, with blunt or pointed tips, and mildly hairy. Seeds are white and dull with a distinctly wrinkled surface.

DISTRIBUTION IN FLORIDA

Found throughout the state but primarily in peninsular Florida.

Table 1. Herbicide options for Guineagrass.
Herbicides are expressed on a (% v/v) by product basis.
The label is the law. Always refer to product label before use.

HERBICIDE ACTIVE INGREDIENTS	PRODUCT(S)	Recommended Approach	
		FOLIAR	PRE-EMERGENT
FLUAZIFOP-P-BUTYL	FUSILADE II	0.5%[1]	NR
GLYPHOSATE	ROUNDUP CUSTOM (OR ANOTHER GLYPHOSATE)	1.5%-3%	NR
GLYPHOSATE + IMAZAPYR	ROUNDUP + ARSENAL OR HABITAT	2% + 0.5%	NR
IMAZAPYR	ARSENAL OR HABITAT	0.5-2%	NR
INDAZIFLAM	ESPLANADE 200 SC	NR	5-7 oz/A[2] OR 0.07-0.1%
SETHOXYDIM	POAST, GENERICS	1.5%[1]	NR

NR= Not Recommended

[1] **Graminicides are most effective on seedlings and control declines with Guineagrass age.**

[2] **Indaziflam only controls germinating seeds. It has no foliar activity.**

NOTES SECTION

Herbicide Notes for Guineagrass

- Always consult the herbicide label for specific concentration recommendations.
- Glyphosate at 1.5% with excellent coverage works well but it may be necessary to increase to 2% where complete coverage is not possible.
- Imazapyr is effective as a standalone treatment but can also be tank mixed with glyphosate. There is no data to support better control with the tank mix.
- Indaziflam provides good preemergent activity against Guineagrass seedling emergence. It is most useful for restoration when other creeping native perennials may recolonize sites via roots and rhizomes. Indaziflam may be tank mixed with glyphosate and imazapyr to prevent rapid recolonization by new seedlings.
- The graminicides are most effective on seedling Guineagrass. Efficacy diminishes as plants mature.

Adjuvant Considerations: Surfactants are often required for foliar treatments to improve herbicide absorption. Graminicide treatments are improved with the use of crop oil or a methylated seed oil. A non-ionic surfactant is useful for both glyphosate and imazapyr. No surfactant is needed for indaziflam if applied alone. For any glyphosate treatment, a water conditioning agent can prevent a loss of efficacy due to hard water.

Seasonality of Treatments: Guineagrass growth is most aggressive during the summer wet season. Treatments should be applied by early flowering to prevent seed production if possible. Treatments applied after mid-August will generally be too late to prevent seed production.

Specific Hydrologic Considerations: Guineagrass is often most abundant in well drained upland sites, but can tolerate wet conditions for a limited time. Herbicides labeled for aquatic use are generally not needed.

Specific Considerations for each Herbicide for Potential Non-Target Damage

- Glyphosate is nonselective and will injure or kill other vegetation. Directed sprays are recommended for infestations surrounded by desirable native plants.
- Imazapyr may injure or kill many other species and should not be used near desirable vegetation, especially oaks.
- Indaziflam may kill emerging seedlings of many native grasses and some native forbs, but its profile of potential non-target damage in Florida is largely unknown. Reseeding native species following indaziflam is not recommended.
- The graminicides may injure native grasses but can be applied over the top of many native forbs and non-grass monocots without injury.

Retreatment Interval Consideration:
Guineagrass produces copious seed which may germinate throughout the spring, summer and fall. Effective control generally depends upon followup treatments to stop new seedling recruitment. Seed viability is not well understood as Guineagrass has undergone extensive breeding efforts due to its use as a forge species. Aggressive treatment programs are recommended with monitoring and retreatment multiple times in the first two to three years. The seedbank longevity is not well understood but seedlings have been observed to germinate for over one year. Following aggressive management for a few years, excellent long-term control has been achieved.

Calculations for % v/v: *(Volumes must be in the same units, i.e., gallons, ounces, liters, etc).*

% v/v = (Volume of herbicide product/ total herbicide plus carrier volume) * 100%

Reference Table for % v/v

% V/V	Ounces of herbicide to add for 1 gallon (128 oz) total mix size
0.25	0.32
0.5	0.64
1.0	1.28
2.0	2.56
5.0	6.4
10.0	12.8
20.0	25.6