



Homeowners Guide to Zoysiagrass Management in Florida

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Zoysiagrasses (*Zoysia* spp.) are warm-season grasses adapted to a variety of soil types in Florida and they have good shade, salt, and traffic tolerance. When properly managed, they produce a dense turf stand that is resistant to weed invasion. However, zoysiagrass maintenance is different from other Florida lawn grasses, and improper maintenance generally leads to undesirable results. For more information on zoysiagrass species and cultivars, refer to ENH11, *Zoysiagrass for Florida Lawns* (<https://edis.ifas.ufl.edu/LH011>).



Establishment

- Zoysiagrasses are generally established vegetatively (sod, plugs, or sprigs).
- *Zoysia japonica* has commercially available seeds.
 - » Generally, seeded cultivars do not perform as well as the vegetative cultivars.
 - » Seeds requires light for germination and cannot be covered with soil, so an erosion cloth is needed.
 - » Best time to seed is during the period from April to July.
- Keep soil moist until the grass is well rooted, then watering should be reduced to an as-needed basis.
 - » Sodded areas should be watered at least twice per day with ¼ inch of water until the sod is held fast to the soil by new roots (usually 2–3 weeks), after which watering should be reduced to an as-needed basis.
- For more information, refer to ENH02, *Preparing to Plant a Florida Lawn* (<https://edis.ifas.ufl.edu/lh012>), and ENH3, *Establishing Your Florida Lawn* (<https://edis.ifas.ufl.edu/lh013>).

Nutrition

Fertilizer applications should be made following the Florida-Friendly Landscaping™ Best Management Practices (BMP),

Florida Urban Turf Fertilization Rule (5E-1.003 F.A.C.), and state and local regulations.

- Annual nitrogen fertilization recommendations for different geographic regions in Florida can found in Table 1.
- Depending on geographic location, annual fertilization recommendations should be split into 3-6 applications and applied when the turfgrass is actively growing.
- Phosphorus levels are best determined by soil testing, and it is often not necessary to add phosphorus fertilizer to a lawn after establishment in Florida.
- Potassium fertilizer should be applied at equal rates to nitrogen.
- In general, the first fertilizer application should be early to mid-April in central and north Florida, respectively.
 - » Do not fertilize before the turf becomes fully green in the spring or too late in the year after growth has subsided.
- South Florida, applications may be made throughout the year due to year-round growth.
- Homeowners are encouraged to initiate a program based on the guidelines in Table 1, and then adjust this over time based on the turfgrass response.
- For more information, refer to ENH1089, *Urban Turf Fertilizer Rule for Home Lawn Fertilization* (<https://edis.ifas.ufl.edu/ep353>), and ENH979, *Homeowner Best Management Practices for the Home Lawn* (<https://edis.ifas.ufl.edu/ep236>).

Mowing

- No more than 1/3 of the leaf blades should be removed with any mowing.
- Grass clippings should be left on the lawn.

- Medium- to coarse-textured zoysiagrasses – 1.75-2.5 inch mowing height.
- Fine-textured zoysiagrasses – 0.25-1 inch mowing height, requires frequent mowing.
- For more information, refer to ENH10, *Mowing Your Florida Lawn* (<https://edis.ifas.ufl.edu/lh028>).

Watering

- An established, mature grass should be irrigated on an as-needed basis.
- If green grass is desired, apply irrigation (1/2-3/4 inch of water per application) when moisture stress occurs (leaf blades begin to wilt or turn a blue-gray color).
- Zoysiagrass responds to drought by turning brown and going dormant and can stay dormant for extended periods of time.
 - » Allowing the zoysiagrass to go off-color is an acceptable water-conserving method.
 - » Once rainfall or irrigation resumes, it will regain its green color.
- How often the water is applied, not how much, should change seasonally.
- Follow any local watering restrictions and adjust irrigation accordingly.
- For more information, refer to ENH9, *Watering Your Florida Lawn* (<https://edis.ifas.ufl.edu/lh025>).

Thatch Management

- Zoysiagrasses generally develop a thick thatch layer in the years after establishment.
 - » Proper nitrogen fertility and mowing heights help prevent thatch buildup.
- If a thick thatch layer occurs, it may be removed mechanically (vertical mower or power rake).

Pest Management

- Zoysiagrass can generally resist weed invasion due to its thick, dense growth habit. However, if weeds are a persistent problem, use herbicides labeled for zoysiagrass.
 - » For more information, refer to ENH884, *Weed Management in Home Lawns* (<https://edis.ifas.ufl.edu/ep141>).
- A serious insect pest is the hunting billbug, which causes the turf to die in irregular-shaped patches. Other

insect pests include mole crickets, white grubs, and sod webworms.

- » For more information, refer to ENY300, *Insect Pest Management on Turfgrass* (<https://edis.ifas.ufl.edu/ig001>).
- The major disease problem is large patch, which can be problematic with excessive applications of soluble nitrogen and irrigation. Other common diseases include dollar spot and rust.
 - » For more information, refer to SS-PLP-14, *Turfgrass Disease Management* (<https://edis.ifas.ufl.edu/lh040>), PP-233, *Homeowner's Guide to Fungicides for Lawn and Landscape Disease Management* (<https://edis.ifas.ufl.edu/pp154>), and https://edis.ifas.ufl.edu/topic_turf_diseases.
- Nematodes may be another pest; however, this is not well documented.
 - » For more information, refer to ENY006, *Nematode Management in Residential Lawns* (<https://edis.ifas.ufl.edu/ng039>).

Local UF/IFAS Extension offices can assist with pest identification and management recommendations. Additionally, a healthy, vigorous lawn is the best approach to pest control.

Reference and More Information on Zoysiagrass Lawns

ENH11, *Zoysiagrass for Florida Lawns* (<https://edis.ifas.ufl.edu/LH011>).

Table 1. Annual nitrogen fertilization recommendations for zoysiagrass in three regions of Florida.

Location ¹	Nitrogen Fertility Recommendations ² (lbs N/1000 sq ft/year)
North Florida	2-3
Central Florida	2-4
South Florida	2.5-4.5

¹North Florida is considered north of Ocala, Central Florida is from Ocala to State Road 60, and South Florida is south of State Road 60.

²Homeowner preferences for lawn quality and maintenance level vary; therefore, a range of fertility rates are recommended. Additionally, effects within a localized region and microenvironmental influences (i.e., shade, drought, soil conditions, and irrigation) necessitate ranges of fertility rates. Recommendations also assume that grass clippings are recycled.