

Natalgrass

Rhynchelytrum repens syn. *Melinis repens* (Willd.) Poaceae



Biology



- Native to Africa
- Introduced as a forage species in late 1800's in Florida, but poor quality precluded widespread use
- Can be classified as a short-lived perennial grass

Distribution and Impacts

- Found throughout much of central and south Florida
- Prefers dry soils, waste lands and perennial crops
- Readily infests abandoned areas, roadsides, unimproved pastures
- Displaces native vegetation, prevents natural succession

Natalgrass Distribution in Florida



Identification

Mature Plant

- Perennial grass, 1 to 3 feet tall
- Bunch-type grass, branching culms that root at the nodes



Leaves

- Leaves are linear
- 8 to 12 inches long
- Grow from erect clumps



Panicle

- Flowers are pink-purple, borne in panicles 4 to 8 inches long
- Covered with reddish hairs, turning gray/silver with age
- Seeds extremely viable, wind-dispersed – major mechanism of spread



Management

Preventative

Cultural

Mechanical

Biological

Chemical

Preventative



1. Remove existing plants, before seeds are produced
2. Prevent movement of plant material, such as seed contaminated fill dirt, into areas not infested with natalgrass
3. Rouge out plants in abandoned areas

Cultural



1. Programs to educate farmers, ranchers and the general public about the problems associated with natalgrass and proper identification
2. Dense groundcover, native or pasture, will deter the growth of natalgrass seedlings

Biological



1. There are no known biological control agents available for natalgrass management in Florida or the southeastern U.S.

Mechanical



1. Can be removed with repeated, aggressive tillage
 - Limited to open (non-forested) sites
 - Disk several times during season – need to repeat for emerging seedlings from soil seedbank
 - Desiccates plants & exhaust food reserves
2. Burning effective in removing above ground biomass, may enhance chemical control measures – but will not provide control!!

Chemical



1. Broadcast applications for large areas
 - ✓ Glyphosate at 2 to 4 lbs-ai/A
 - ✓ Imazapyr at 0.5 to 1.0 lbs-ai/A
2. Spot treatment for smaller areas
 - ✓ Glyphosate – 2 to 3% solution
 - ✓ Imazapyr – 0.5 to 1% solution
3. Use surfactant at 0.25%
4. *Adhere to planting restrictions for imazapyr, may cause residual damage*

Integrated



1. For best results combine:
 - Burning
 - Tillage (mechanical disturbance)
 - Chemical applications
2. Burn or mow before herbicide application
 - Remove excess thatch and older leaves
 - Initiates regrowth



Useful Links

- Floridata Homepage:
http://www.floridata.com/main_fr.cfm?state=Welcome&viewsrc=welcome.htm
- University of Florida Center for Aquatic and Invasive Plants:
<http://aquat1.ifas.ufl.edu/welcome.html>
- University of Florida's Cooperative Extension Electronic Data Information Source: <http://edis.ifas.ufl.edu/index.html>

Useful Links

- Pacific Island Ecosystems at Risk (PIER).
Plant Threats to Pacific Ecosystems:
<http://www.hear.org/pier/threats.htm>

Literature Cited

Langeland, K.A. and K. Craddock Burks. 1998. Identification and Biology of Non-Native Plants in Florida's Natural Areas. IFAS Publication SP 257. University of Florida, Gainesville. 165 pp