

# Developing New Turfgrasses at the University of Georgia

72<sup>nd</sup> Annual Southeastern Turfgrass Conference

UGA Tifton Campus  
April 26<sup>th</sup>, 2018



**Brian Schwartz**

University of Georgia

[tifturf@uga.edu](mailto:tifturf@uga.edu)



# Support



**TEAM UGA**





research impact

methods nations effectively expect opportunities evaluating societal advances time public work change scientific taken messages advice Planning ESRC legislation personal influencing content better service chance without Plan good

diverse arising issues making stages outside expert appropriate sets building find commission findings section relationships excellent exchange opportunity user makes debates R&D contributing business

policy economic part key quality

individuals generating role beneficiaries must

users able use development knowledge promote science guidance maintain benefit potential important Impact

practitioners evidence see social may bearing capacity reporting demonstration factors achieve agendas

stakeholders process ensure practical information society economy include new planning exploring

central including engagement organisations plan assessing context

across networks fund

providing relevant



# Centipedegrass Breeding



## Centipedegrass Cultivars

- Common
- ‘Oklawn’
- ‘TifBlair’
- ‘Centennial’
- ‘TennTurf’



Released from UGA-  
USDA-ARS in 1997



# Centipedegrass



## *Eremochloa ophiuroides*

- Stoloniiferous
- Coarse texture
- Medium green
- Diploid ( $2n = 18$ )



- Low maintenance requirements
- Grows well in poor soils
- Few serious pest problems





# Centipedegrass



## *Eremochloa ophiuroides*

- Stoloniiferous
- Coarse texture
- Medium green
- Diploid ( $2n = 18$ )



- Susceptible to winter kill
- Sensitive to alkaline soils
- Little genetic variation





# Centipedegrass –Center of Origin



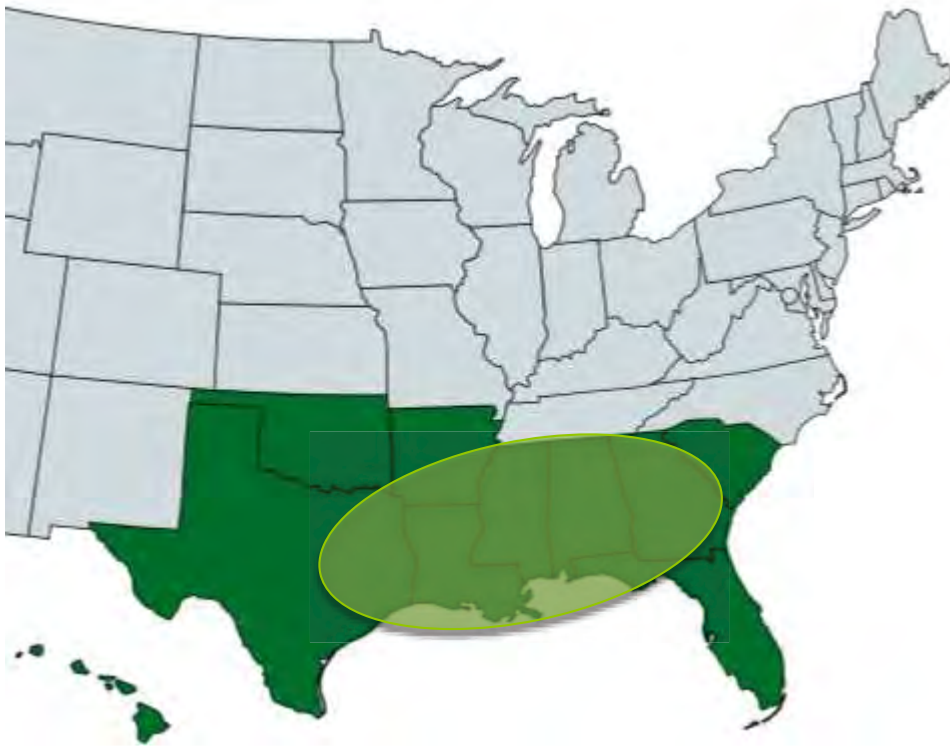
Center of Origin –Southeast China  
and Taiwan

- Frank N. Meyer – USDA  
Agricultural Explorer





# Centipedegrass in U.S.



- Grows well in sandy and acidic soils of the Southeast
- Expansion is limited due to severe iron deficiencies it develops in alkaline soils



# Centipedegrass –Research Objectives



In general, centipedegrass does not appear to have a large amount morphological variation. However, if individual plants are space-planted, one can observe some variation for internode length as well as leaf characteristics (Hanna and Liu, 2003)





# Centipedegrass – Field Plan





# Centipedegrass –Results





# Centipedegrass Hybrids









# Centipedegrass Breeding



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# Centipedegrass Breeding



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# Centipedegrass Breeding

A wide-angle photograph of a large, open field of centipedegrass. The grass is a mix of green and brown, indicating different stages of growth or maturity. In the background, a large, light-colored building with a curved roof is visible, surrounded by trees. The sky is blue with scattered white clouds. The overall scene is a natural, outdoor setting used for agricultural research.

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# Centipedeegrass Breeding



**St. Peter, IL**



# Centipedegrass Breeding

A photograph of a grassy field. In the center, there is a distinct patch of brown, dead grass. This patch is surrounded by green grass, which is also interspersed with some dry, brown grass blades. The ground appears to be sandy or silty in some areas, particularly around the edges of the grass patches.

**St. Peter, IL**



# Centipedegrass Breeding

A photograph of a grassy field. In the center, there is a distinct patch of brown, dead grass, which appears to be a breeding site for centipedegrass. The surrounding grass is green and healthy. The image is used to illustrate the process of breeding centipedegrass.

**St. Peter, IL**

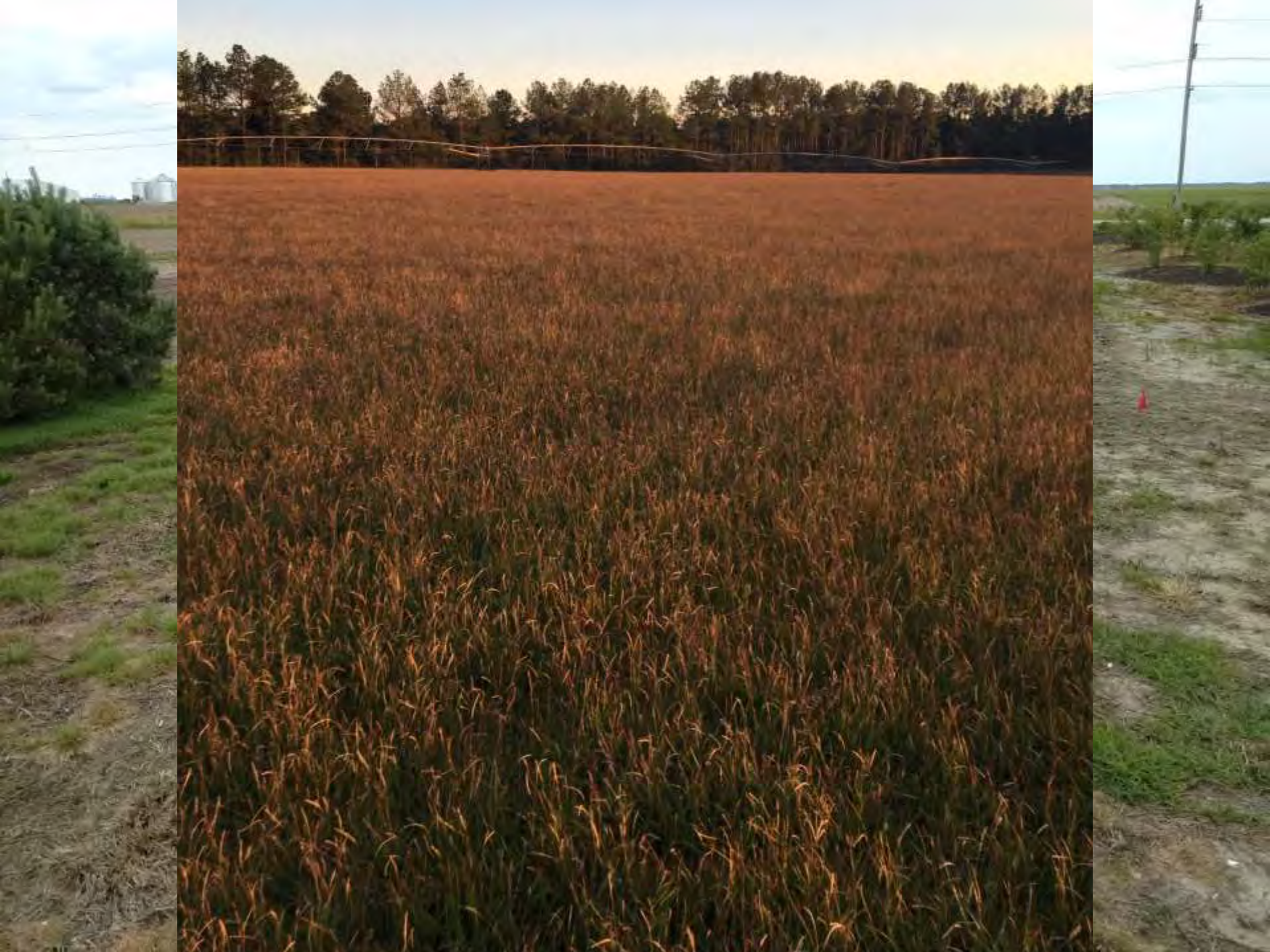


# Centipedegrass Breeding



**St. Peter, IL**







# Improving Putting Greens

## Changing Times in Ultradwarf Bermudagrass Putting Green Management

At a growing number of courses, consistent and fast putting speeds are being provided at a higher height of cut.

BY TODD LOWE

Golf course superintendents are tasked with providing good playing conditions. For putting greens, "good" playing conditions generally correlates to desired putting speed, smoothness, and firmness, with speed being especially important for some golfers. Putting speed has increased significantly over the years and is continually trending upward.

There are a variety of techniques and tools for increasing putting speed, but the most common has been to simply decrease mowing height. Over the past several decades, equipment manufacturers have improved technology to produce sophisticated mowers that can cut at less than 0.1 inch. Likewise, turf breeders have developed varieties that can tolerate lower heights



*Low mowing can create fast putting speeds but can be detrimental to turf health.*



# Putting Green Trial – September 2017



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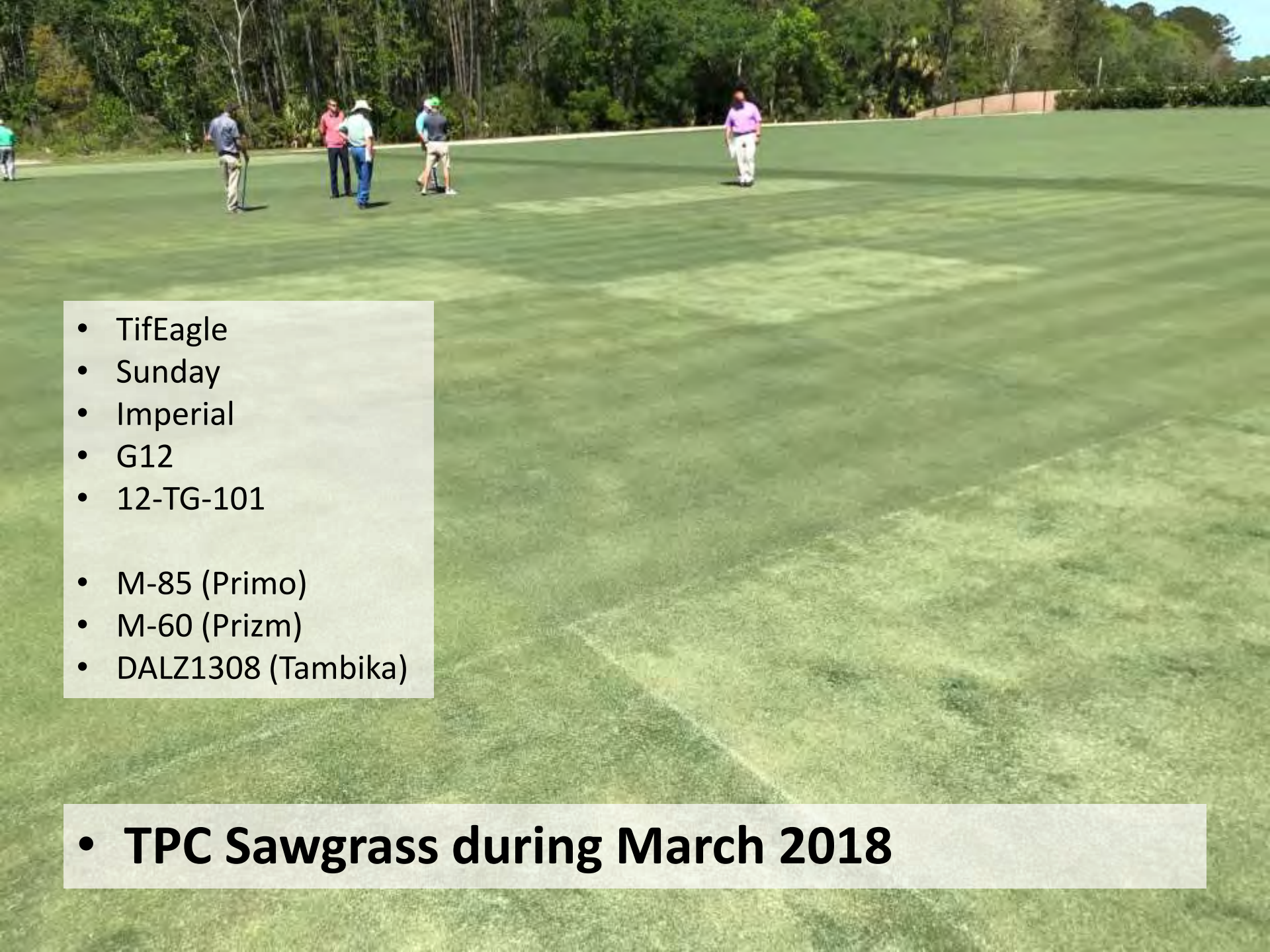


# Putting Green Trial – December 2017



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- 
- TifEagle
  - Sunday
  - Imperial
  - G12
  - 12-TG-101
  - M-85 (Primo)
  - M-60 (Prizm)
  - DALZ1308 (Tambika)

- **TPC Sawgrass during March 2018**