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Smutgrass Down Under: Our Recent Exposure to Smutgrass Management in Australia


Brent Sellers and José Dias
UF-IFAS Range Cattle REC and Agronomy Department,
Ona, FL

UF IFAS Extension
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Introduction


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- Conversations with colleagues concerning identification of smutgrass species
- IFAS Travel Grant



In the News

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World leaders in this pest about to descend on Gympie

By [Name] [Date]

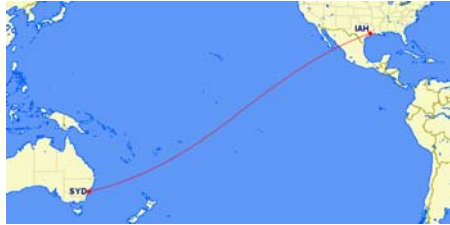
GYMPIE Regional Council's Great Kato Tail Green Event, to be held from 22-23pm on Tuesday, February 27, will bring some of the world's industry leaders to pasture needs to the Civic Center to give guidance on managing the weed.

The event will feature Professor Brent Sellers from the University of Florida and Wayne Vajpey of Research Queensland.

Registration for the event is free, but tickets are strictly limited. Registration closes Thursday, February 22.

To book, visit gympie.qld.gov.au or call 0755 3071 800.

World's Longest Flight







Smutgrass in Australia



- 12-13 *Sporobolus* species
- 4-5 considered "weedy"
 - Giant rat's tail
 - American rat's tail
 - Parramatta grass
 - Giant Parramatta grass



Gympie



Gladstone/Miriam Vale



Research Plots



Precision Ag



Extension Presentations



Brisbane Herbarium



EcoSciences Precinct – Joe Vitelli



Smutgrass Management



Smutgrass Management



Australia

- Flupropanate
 - Root absorbed
 - 4 to 12 months for kill
 - 4 month grazing restriction
- Mandates by local governments to “make reasonable efforts to limit spread”

Florida

- Hexazinone
 - Root absorbed
 - 30 days to kill
 - No grazing restriction
- No mandates

Time to inflorescence emergence and total inflorescence number over 11 months following sowing of 50 GRT seed in canopy gaps in February 1998 in native pasture at Gayndah (adapted from Bray 2004)



Gap Size (cm)	Time till inflorescence emergence (days)	Inflorescence number per plot
No Gap	No plants	No plants
15 x 15	No flower	0
30 x 30	No flower	0
60 x 60	342	4
120 x 120	243	33

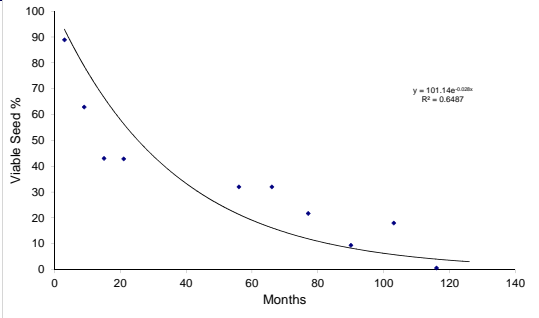
* Slide from Dr. Wayne Vogler

Seed viability and glyphosate

Days after anther appearance	Description of embryo/seed	Viability not treated (%)	Viability glyphosate (%)
0	Unfertilised embryo	0	0
4	Small, early milk stage.	5	0
8	Small, green/white, seeds; late milk/early dough stage.	55	23
12	Full, green/white seeds; late dough stage.	60	40
16	Full, detached, mature hard seed.	95	86

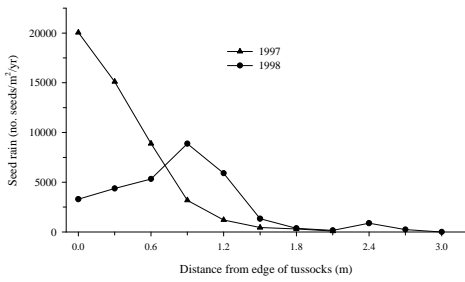
* Slide from Dr. Wayne Vogler

GRT Seed longevity



* Slide from Dr. Wayne Vogler

Distance of GRT seed fall from reproductive tussocks



* Slide from Dr. Wayne Vogler

Buffer Strips

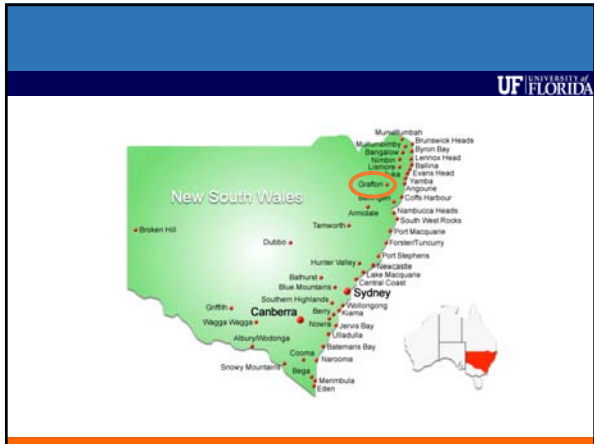


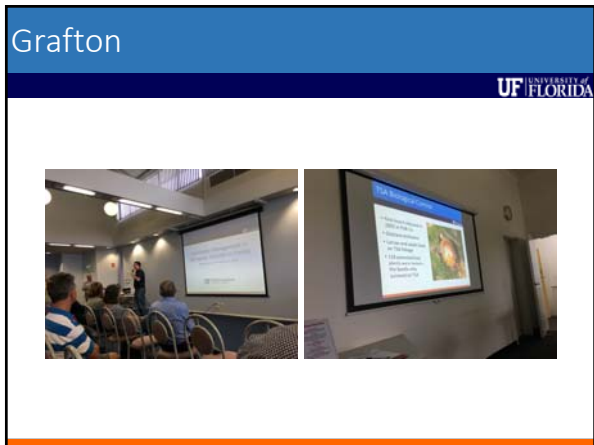
Weed Wipers









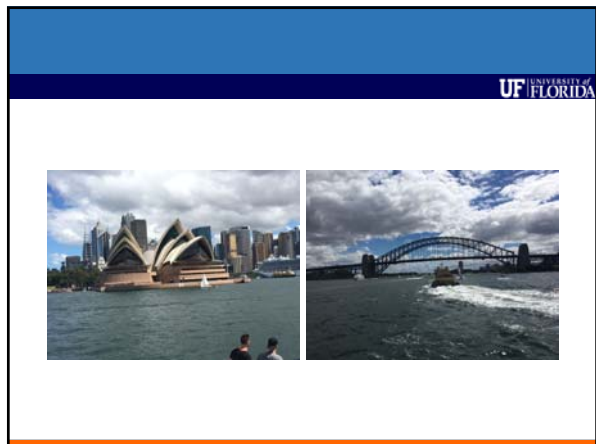




Some Fun Too!







Take Home



- Disturbingly similar
- They're committed to finding biocontrol agents, BUT.....
- Good grass competition may be our best bet



"A recurring theme is the importance of a competitive, well managed pasture sward to minimise gaps within the pasture throughout the year thus preventing giant rats tail grass seedling establishment from the long-lived soil seed bank. Without a vigorous, competitive pasture being present, any attempts to control giant rats tail grass will be futile."

* Slide from Dr. Wayne Vogler

Upcoming Events



- Smutgrass field day: May 24
 - Registration is limited
- Next webinar: June 12, 11:00 – 11:45
 - Dr. Mario Binelli: The UF Brahman Project
 - <https://register.gotowebrinar.com/register/8568349369777324291>
