Evaluating the invasion risk of non-native plants in Florida

Deah Lieurance & S. Luke Flory
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Biological Traits of Invasive Plants

- Higher relative growth rates
- Longer flowering & fruiting periods
- Greater seed production/Efficient dispersal
- Fast germination/short minimum generation times
- Tolerant to a wide range of habitats/conditions
- Efficient resource utilization

Presence of these traits allows us to identify potential & actual invasive species
What is The Assessment?

- Status Assessment evaluates the status of species currently present in the state
- Predictive Tool & ITP predicts the potential invasiveness of species proposed for release
Bamboo

- Family Poaceae
- Multiple uses
- More than 1400 species
  - Low groundcover <30cm
  - Giant bamboos >30m
- Long internast periods
- Fast growing
- Clumping or running rhizomes

http://manipuronline.com
Clumping & running

http://www.bamboobotanicals.ca
Bamboo invasion

• Spreads rapidly
• Forms dense thickets
• Reduces native diversity
• Impacts not always clear
• Difficult to control

https://utextension.tennessee.edu
Methods

• Compiled a list of 40 bamboo species
  – 8 requested by agency/industry
  – 17 previously assessed
  – 22 Clumping/ 18 running

• Conducted WRAs

• Standardized WRAs from other sources
- 72% running bamboo high risk, 17% low risk
- 5% clumping bamboo high risk, 82% low risk
Conclusions

• Running habit trait of high risk species
• Variable results in clumping bamboo

• History of naturalization & invasiveness elsewhere influential in scoring

• Anecdotal evidence that all bamboos are difficult to eradicate once established
http://assessment.ifas.ufl.edu
How and why are species assessed?

The UF/IFAS Assessment of Non-native Plants in Florida's Natural Areas uses literature-based assessment tools to evaluate the invasion risk of non-native species that occur in the state, new species proposed for introduction, and novel agricultural and horticultural selections, hybrids, and cultivars. Our overarching goal is to reduce non-native plant invasions in Florida and throughout the Southeast US for protection of natural and agricultural areas.

Learn More
Currently displaying all 808 assessments. No filters have been defined.

- **Abelia x grandiflora**
  Glossy abelia, Largeflower abelia

- **Abrus precatorius**
  Rosary pea

- **Abutilon hirtum**
  Indian mallow

- **Abutilon megapotamicum**
  Trailing abutilon

- **Acacia auriculiformis**
  Earleaf acacia

- **Acalypha amentacea subsp wilkesiana**
  Copperleaf, Jacob's coat, Wilkes' copperleaf
Filter Results

Search by species name

Apply Filters

- ALL ASSESSMENTS
- ZONES
- CONCLUSION TYPE
- ORIGIN

- GROWTH HABIT
  - Aquatic
  - Forb/Herb
  - Graminoid
  - Shrub
  - Subshrub
  - Tree
  - Unknown
  - Vine

- TOOL USED

Aquatic

- CLEAR ALL

Alternanthera philoxeroides
- Alligatorweed

Crassula heimii
- Swamp stone crop, swamp crassula

Egeria densa
- Brazilian waterweed

Eichhornia crassipes
- Water-hyacinth
**Phyllostachys aureosulcata**

<table>
<thead>
<tr>
<th>COMMON NAMES</th>
<th>Yellow groove bamboo</th>
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</thead>
<tbody>
<tr>
<td>SYNONYMS</td>
<td>No known synonyms</td>
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</table>

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<thead>
<tr>
<th>CONCLUSIONS BY ZONE</th>
<th>CENTRAL, NORTH, SOUTH</th>
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</thead>
<tbody>
<tr>
<td><strong>Invasive (No Uses)</strong></td>
<td></td>
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</table>

For Status Assessments:
Invasive and not recommended by IFAS. Will be reassessed every 10 years. Specialist and limited uses may be considered by the IFAS Invasive Plants Working Group.

For the Predictive Tool:
Predicted to be invasive. In particular cases, the species may be considered for use under specific management practices that have been approved by the IFAS Invasive Plant Working Group.

Assessment Status: Complete

<table>
<thead>
<tr>
<th>GROWTH HABIT</th>
<th>Graminoid</th>
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<tbody>
<tr>
<td>ORIGIN</td>
<td>Asia Temperate</td>
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<tr>
<td>TOOL USED</td>
<td>Predictive Tool</td>
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<table>
<thead>
<tr>
<th>PREDICTIVE TOOL SCORE</th>
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<tr>
<td>ASSESSMENT DATES</td>
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**Detailed Data**
[phylllostachys_aureosulcata_wra.pdf](phylllostachys_aureosulcata_wra.pdf)
**Rotala rotundifolia**

**Common Names**: Dwarf rota, roundleaf toothcup

**Synonyms**: No known synonyms

**Conclusions by Zone**

<table>
<thead>
<tr>
<th>Zone</th>
<th>Status</th>
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<tr>
<td>North, Central, South</td>
<td>Caution</td>
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**Growth Habit**: Aquatic

**Origin**: Asia Temperate, Asia Tropical

**Tool Used**: Status Assessment

**Assessment Dates**: 2007, 2011

**Detailed Data**: N/A

**Links**
- USDA Plants Database
- EDOMapS
- Atlas of Florida's Vascular Plants
- UF/IFAS Center for Aquatic and Invasive Plants