

**STATUS ASSESSMENT RESPONSE FORM**

Species (Botanical name): Xanthosoma sagittifolium

(Common name): Arrowleaf elephant ear

Where the voucher specimen is held: USF, FLAS, FSU, FTG

Assessment/  Reassessment completed by: Aimee Cooper

Date assessment started: 8/20/2009 Date assessment completed: \_\_\_\_\_

No new rec.  
for '12.  
1 new rec Central

**INSTRUCTIONS**

Either check appropriate response or enter it in the designated space.  
Attach additional sheets with evidence as necessary using appropriate labels.

**SUMMARY OF ASSESSMENT RESULTS**

**BY STATE**

If species is NOT invasive in Florida, check one of the following three conclusions:

From Section A

Automatic Exemption

Use Predictive Tool

Prohibited

Not considered a problem species at this time

**BY ZONE**

North: Central: South

North: Central: South

Index

Score I = 3 : 18.75 : 0.75

M = 35.5

Category I = L : M : L P = H : H : H M = H V = L

Conclusions North Caution; may be recommended but manage to prevent escape

Central No; invasive and not recommended by IFAS faculty

South Caution; may be recommended but manage to prevent escape

**In case of incomplete assessment:**

Where did assessment stop?

Who could provide the answer to this question?

**Automatic Exemption**

Is this species listed on any federal or state noxious or prohibited plant lists?

Yes Under "BY STATE" on page R-1 check Prohibited

No Go to Section I-a below

**Step-by-Step Assessment Responses**

**I-a Current Invasion in Florida**

1. Is there a proposed or new use for a species that would result in higher propagule pressure\* in Florida? For example, cultivation of  $\geq 2$  contiguous ac of a species for bioenergy (corresponding to DPI biofuel rule), or commercial cultivation of a species present in Florida for a new use, or increase in acreage cultivated from 1-10 ac to 10 times that acreage (10-100 ac), 10-100 ac to 5 times that acreage (50 to 500 ac), or >100 ac to 2.5 times that acreage.

Yes Use the Predictive Tool

No Go to question I-a 2

2. Does this species occur in any natural areas of Florida?

Yes Attach distribution records and Go to question I-a 3

No Go to Section A

3. Does it **ONLY** occur in natural areas of Florida because it has persisted from its previous cultivation?

Yes Attach evidence of previous cultivation for each site and Go to Section A

No Go to Section I-b

*Section A is on page R-3 and Section I-b is on page R-4*

Check box if distribution records are attached

Check box if evidence of previous cultivation is attached

**Section A**

**A1** Does this species hybridize with any Federal or Florida-listed Endangered or Threatened species, Species of Special Concern, or economically important species (e.g., exhibit pollen /genetic invasion)?

Yes Provide *information below*. Enter a conclusion on page R-17 of No **unless limited use approved**. Go to **Section D** for details on how to make a proposal for specified and limited use for the species.

No Go to question **A2**

If yes, then *provide name of listed or economically important species & information sources*:

**A2** Has this species been introduced to Florida within the last 10 years if herbaceous, or last 20 years if woody?

Yes Use **Predictive Tool** and so indicate on page R-1

No Highlight *attached distribution records that show presence in Florida before 10 or 20 years ago or attach other evidence* and **Go to question A3**

**A3** Does this species have a record of causing problems in other regions with similar habitats and climate to Florida?

Yes Provide *evidence below*, Use **Predictive Tool** and so indicate on page R-1

No Enter a conclusion of **Not considered a problem species at this time and may be recommended by IFAS faculty on page R-1** but reassess if invasion of natural areas is recorded or within 10 years, whichever is earlier.

If yes, then *give evidence of where and what problems this species has caused*:

*Section D is on page R-19*

**I-b Invasion Status in Three Zones of Florida**

Check responses to the following questions for each zone (north, central, south) separately.

For "Yes" responses to questions 1-3, *distributional evidence of invasion* (forming self-sustaining and expanding populations within a plant community with which it has not previously been associated) *must be attached and distinguished for each zone.*

- |  |  |  |  |
|--|--|--|--|
|  | <b>North</b>   | <b>Central</b>   | <b>South</b>   |
|  | Yes No   | Yes No   | Yes No   |
| 1. Does species exist in areas outside its current, or former, cultivation in this zone? | <input checked="" type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> <input type="checkbox"/> |
| If Yes Go to question I-b 2  |  |  |  |
| If No Go to question I-b 4   |  |  |  |

- |   |  |  |  |
|---|--|--|--|
|   | <b>North</b>   | <b>Central</b>   | <b>South</b>   |
|   | Yes No   | Yes No   | Yes No   |
| 2. Is species invading in this zone ONLY when natural disturbance regime and scale have been altered? | <input type="checkbox"/> <input checked="" type="checkbox"/> | <input type="checkbox"/> <input checked="" type="checkbox"/> | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| If Yes Go to question I-b 3   |  |  |  |
| If No (or unknown) Go to Section II-a   |  |  |  |

- |  |   |   |   |
|--|---|---|---|
|  | <b>North</b>                                      | <b>Central</b>                                    | <b>South</b>                                      |
|  | Yes No  | Yes No  | Yes No  |
| 3. Has this species ever been known to persist if the natural regime is resumed and the natural flora/communities recover? | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| If Yes (or unknown) Go to Section II-a   |   |   |   |
| If No Go to question I-b 4   |   |   |   |

- |  |   |   |   |
|--|---|---|---|
|  | <b>North</b>                                      | <b>Central</b>                                    | <b>South</b>                                      |
|  | Yes No  | Yes No  | Yes No  |
| 4. Are there other zones in which this species has invaded or persisted after restoration? | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| If Yes indicate I = 0 for this zone on page R-1 then Go to Section III-b                   |   |   |   |
| If No Go to Section A  |   |   |   |

*Section II-a is on page R-5, Section III-b is on page R-10, Section A is on page R-3*

Check box if distribution records by zone are attached

**II-a Known Impacts at WORST SITE(S) (without, or before, any control effort)**

Add up points for **ALL** impact statements (i through vi) that are true at the worst affected site(s) in that zone then **Go to Section II-b.**

*If scores are assigned, attach Ecological Impacts Worksheets that include citations and/or log of expert evidence.*

Documentation of evidence of impacts for each zone (as defined in the Assessment Glossary) must be attached and include specific locations of observed impacts. If experts are providing evidence, their written and signed observations must be attached. Scientific names of impacted species (e.g., state-listed or native species with which hybridization occurs) must be included.

If there is no evidence of an impact then assign 0 points unless the impact is considered very likely (e.g., fixes N<sub>2</sub> in low nutrient soil which can change the flora) OR the impact (except vi) has been demonstrated in similar habitats in other zones or outside the state, OR if only one expert has documented the impact within the zone under consideration. In these cases assign 0.5 points.

	Points	North	Central	South
i) Long-term alterations in ecosystem processes	15	<u>0.5</u>	<u>0.5</u>	<u>0</u>
ii) Negatively impacted T & E species:				
Documented loss has occurred	12	<u>0</u>	<u>0</u>	<u>0</u>
Loss is considered very likely	4	<u>0</u>	<u>0</u>	<u>0</u>
iii) Displaces or precludes native vegetation (see criteria in assessment)	8	<u>0</u>	<u>8</u>	<u>0</u>
iv) Changes community structure	4	<u>0.5</u>	<u>4</u>	<u>0.5</u>
v) Hybridizes with native or economic plants	4	<u>0</u>	<u>0</u>	<u>0</u>
vi) Covers over 15% of invaded stratum (unless iii)	1	<u>1</u>	<u>0</u>	<u>0</u>
<b>Total</b>		<u>2</u>	<u>12.5</u>	<u>0.5</u>

*Section II-b is on page R-6*

Check box if Impacts Worksheet is attached

**II-b Range of Community Groups in Which Species is Invasive**

Is this species known to be invasive in at least four community groups OR does it occur in at least one community group of each of the terrestrial and palustrine/aquatic lists?

If <i>Yes</i> list community groups below and multiply score from II-a by 1.5	<b>North</b>		<b>Central</b>		<b>South</b>	
	Yes	No	Yes	No	Yes	No
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

If *No* multiply score from II-a by 1.0      I =      3               18.75               0.75 

Copy these Impact scores to page R-1. If  $I \geq 12$ , Go to Section II-c on page R-7; If  $I < 12$ , Go to Section III-a on page R-9.

If yes, then *list relevant community groups for each zone:*

**North:**

- Terrestrial: Rocklands
- Aquatic: Basin wetlands, Floodplain wetlands

**Central:**

- Terrestrial: Coastal uplands
- Aquatic: Basin wetlands, Floodplain wetlands, Lakes & Rivers, Wet flatlands

**South:**

- Terrestrial: Mesic flatlands
- Aquatic: Basin wetlands, Floodplain wetlands, Lakes & Rivers, Wet flatlands

**II-c Proportion of Invaded Natural Areas/Sites with Significant Impacts**

Of the invaded sites, might any of the worst (statements i to v in Section II-a) impacts *only* occur under a few, identifiable, environmental conditions (i.e., conditions that occur in only 1 to 10% of the sites)?

To answer this question, for each statement in Section II-a, i – v that gets a score (> 0.5), determine the percentage from this table. Calculate the percentage separately for each zone.

	A) Number of Natural Areas/Sites with a Yes Answer*			B) Total Number of Natural Areas/Sites		
	North	Central	South	North	Central	South
i)	_____	_____	_____	_____	_____	_____
ii)	_____	_____	_____	_____	_____	_____
iii)	_____	_____	_____	_____	_____	_____
iv)	_____	_____	_____	_____	_____	_____
v)	_____	_____	_____	_____	_____	_____
<b>TOTAL</b>	_____	_____	_____	_____	_____	_____
<b>Total A/Total B x 100 = %</b>	_____	_____	_____	_____	_____	_____

If the percentage is between 1-10% from the table above, check *Yes*:

North		Central		South	
Yes	No	Yes	No	Yes	No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If *Yes*                      *Documentation of evidence must be included in Ecological Impacts Worksheets and Go to Section B*

If *No* or *No score*                      **Go to Section III-a**

\**Yes* responses must receive a score. If only 1 individual reports any impacts, the result of which would be a 1-10% score, seek a second opinion on that impact/site.

*Section B is on page R-8 and Section III-a is on page R-9*

**Section B**

**B1** Can the specific habitats and communities in which significant impacts occur be clearly defined as different from invaded sites where there are no such impacts?

North		Central		South	
Yes	No	Yes	No	Yes	No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If *Yes* Attach such a site definition including documentation of evidence and Go to **Question B2**

If *No* Go to **Section III-a**

**B2** Can maximum distance of propagule/pollen dispersal be estimated?

North		Central		South	
Yes	No	Yes	No	Yes	No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If *Yes* Attach a definition of that distance of dispersal including Documentation of evidence, complete Sections III, IV, and V to derive information on Potential for Expansion, Management Difficulty and Commercial Value. Enter a conclusion of No unless limited use approved on page R-17. Go to Section D for details on how to make a proposal for specified and limited use for the species.

If *No* Go to Section III-a

*Section III-a is on page R-9 and Section D is on page R-19*

Check box if site definition is attached

Check box if definition of distance of dispersal is attached



**ONLY For Zones Where Plant Has Invaded** (Strike out un-invaded zones)

III-a Known Rate of Invasion.

1. Was this species reported in more than two new discrete populations in any 12 month period within the last 10 years?
- |  | North                               |                          | Central                             |                          | South                               |                          |
|--|-------------------------------------|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
|  | Yes                                 | No                       | Yes                                 | No                       | Yes                                 | No                       |
|  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

If Yes Indicate **P = High**, highlight relevant reports on the distribution records and list these sites below and Go to Section IV

If No or Unknown Indicate **P = Low** and Go to Section IV

	North	Central	South
P =	<u>  H  </u>	<u>  H  </u>	<u>  H  </u>

Copy these Potential values to page R-14; Section IV is on page R-12

If yes, then list relevant new sites invaded for each zone:

**North:**

See attached records.

**Central:**

See attached records.

**South:**

See attached records.

Reassessment: 8/20/09-3/13/10

**III-a Data – North Zone**

<b>DATE</b>	<b>SOURCE</b>	<b>NATURAL AREA</b>
11/13/2009	FSU Herbarium	Panacea Unit, St. Mark's National Wildlife Refuge
9/20/2010	FLAS Herbarium	President's Park Conservation Area

**III-a Data – Central Zone**

<b>DATE</b>	<b>SOURCE</b>	<b>NATURAL AREA</b>
5/1/1999	FLEPPC Database	Homosassa Springs State Park
5/1/1999	FLEPPC Database	Wekiva River Aquatic Preserve
5/1/1999	FLEPPC Database	Ravine State Gardens

**III-a Data – South Zone**

<b>DATE</b>	<b>SOURCE</b>	<b>NATURAL AREA</b>
5/1/1999	FLEPPC Database	Jonathan Dickinson State Park
4/13/2000	FLEPPC Database	Doris Davis Forman Wilderness Preserve
4/13/2000	FLEPPC Database	Tradewinds Regional Park
4/13/2000	FLEPPC Database	Turtle Run
4/13/2000	FLEPPC Database	Woodmont Natural Area
7/18/2003	FLEPPC Database	Fern Forest Nature Center
7/18/2003	FLEPPC Database	Tall Cypress Natural Area

**ONLY For Zones Where Plant Has NOT Invaded.** (*Strike out invaded zones*)

III-b Potential for Invading Non-invaded Zones

- |    |  |                          |                          |                          |                          |                          |                          |
|----|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. | Would this species be able to survive, reproduce, and disperse in the <u>climate</u> of this zone? | <b>North</b>             |                          | <b>Central</b>           |                          | <b>South</b>             |                          |
|    |  | Yes                      | No                       | Yes                      | No                       | Yes                      | No                       |
|    |  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

If Yes            *Provide documented evidence below and Go to question III-b 2*  
 If No             *Indicate P = Low below and Go to Section IV*

- |    |  |                          |                          |                          |                          |                          |                          |
|----|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 2. | Do habitat-types suitable for the growth of this species occur in this zone? | <b>North</b>             |                          | <b>Central</b>           |                          | <b>South</b>             |                          |
|    |  | Yes                      | No                       | Yes                      | No                       | Yes                      | No                       |
|    |  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

If Yes            *Provide documented evidence below and indicate that P for this non-invaded zone is equal to the P assigned to the nearest invaded zone (from Section III-a - if there is an option between two zones with P = High or Low, use High).*

*If an adjacent zone is invaded Go to Section III-c  
 If the only adjacent zone is non-invaded Go to Section IV*

If No             *Indicate P = Low below and Go to Section IV*

	<b>North</b>	<b>Central</b>	<b>South</b>
P =	<u>  X  </u>	<u>  X  </u>	<u>  X  </u>

*Copy these Potential categories to page R-14*

If yes, then *provide evidence that suitable climate and habitat-types for survival and impacts exist in zone(s):* Zone = \_\_\_\_\_:

*Section III-c is on Page R-11 and Section IV is on page R-12*

**ONLY For Zones Where Plant Has NOT Invaded But Has The Potential To Invade.**

III-c Potential for Causing Ecological Impacts in Non-invaded Zones

1. For zones invaded by this species, identify all communities in which any ecological impacts identified in Section II-a occur. Do these communities occur in the un-invaded zone under consideration (e.g., do the negatively impacted Federal- or Florida-listed Endangered or Threatened species or Species of Special Concern occur in this zone)? If no impacts were documented in any zones for this species, the response here is **NO**.

North		Central		South	
Yes	No	Yes	No	Yes	No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If Yes *Provide documented evidence below* and revise the **Ecological Impact Score** for this zone from zero to match the **Ecological Impact Score** for the adjacent invaded zone (use highest value if there is an option; mark this revised score with brackets{ } to show this score was derived from Section III-c) then **Go to Section IV**

If No **Go to Section IV**

If yes, *provide evidence that communities where ecological impacts occur exist in non-invaded zone(s):* Zone = \_\_\_\_\_:

*Section IV is on page R-12*

**IV Factors That Increase the Difficulty of Management**

*If scores are assigned, attach Management Worksheets that include citations and/or log of expert evidence.*

Add up all points from statements that are true for this species and documentation of evidence must be provided. Assign 0.5 point for each statement for which a true/false response is not known.

	<b>Points</b>	<b>All Zones</b>
i) No known permitted control techniques.	<b>15</b>	<u>  0  </u>
ii) Difficult to control without damage to native species in:		
≥ 50% of discrete sites;	<b>10</b>	<u>  0  </u>
25% to 50% of discrete sites.	<b>7</b>	<u>  7  </u>
iii) Total costs of control per acre in <b>first year</b> are > \$1,500/acre	<b>5</b>	<u>  5  </u>
iv) Further site restoration is necessary following plant death.	<b>5</b>	<u>  5  </u>
v) Total area to be managed: ≥ 500 acres;	<b>5</b>	<u>  5  </u>
< 500 but > 50 acres.	<b>2</b>	<u>  -  </u>
vi) Re-treatments following the first year of control expected:		
at least once a year for the next 5 years;	<b>5</b>	<u>  5  </u>
1 to 4 times over the next 5 years OR regrowth not known.	<b>2</b>	<u>  -  </u>
vii) Access to most areas is difficult.	<b>3</b>	<u>  3  </u>
viii) Occurs in more than 20 discrete populations.	<b>3</b>	<u>  3  </u>
ix) Many persistent or dispersed propagules per plant	<b>3</b>	<u>  0.5  </u>
x) Early reproduction.	<b>2</b>	<u>  2  </u>
	<b>Total for M =</b>	<u>  35.5  </u>

*Copy these Management scores to page R-1 then Go to Section V on page R-13*

*Check box if Management Worksheet is attached*

V Economic Value

1. Does this species have any economic value in Florida?
  - Yes Go to question V - 2
  - No Indicate V = No on page R-1, but treat as Low in the Conclusions table on page R-16. Go to Conversion of Index Scores to Index Categories.
  
2. Is this species sold in national or regional retail stores? (E.g., WalMart, Home Depot, Publix supermarkets.)
  - Yes Go to Conversion of Index Scores to Index Categories on page R-14 and indicate V = High
  - No Go to question V - 3.
  
3. State-wide are there more than 10 commercial growers of this species?
  - Yes Go to Conversion of Index Scores to Index Categories on page R-14 and indicate V = High
  - No Go to question V - 4.
  
4. Does this species have economic value for forage, biomass, or remediation purposes?
  - Yes If net value  $\geq$  \$50,000 / yr, Go to Conversion of Index Scores to Index Categories (page R-14) and indicate V = High
  - No If net value  $<$  \$50,000 / yr, Go to Conversion of Index Scores to Index Categories (page R-14) and indicate V = Low

*Conversion of Index Scores to Index Categories is on page R-14*

**Conversion of Index Scores to Index Categories**

Using the following table, determine the appropriate category (Low to High or Very High) for each index. (Categories for Potential for Expansion Index and Commercial Value were copied from Pages R-9, R-10, and R-13)

<u>Category</u>		<u>Impacts</u>		<u>Management Difficulty</u>		
Low	(L)	< 12		< 15		
Medium	(M)	12 - 26.4				
High	(H)	26.5 - 41		≥ 15		
Very High	(VH)	> 41				

  

	<u>Impact</u>			<u>Potential</u>			<u>Management</u>	<u>Value</u>
	North	Central	South	North	Central	South	All zones	All zones
Category	<u>L</u>	<u>M</u>	<u>L</u>	<u>H</u>	<u>H</u>	<u>H</u>	<u>H</u>	<u>L</u>

*Copy these Index categories to page R-1 then Go to Conclusions on pages R-15 & 16*

## Conclusion

## **For Zones where conclusions were NOT developed in Section D**

Conclusions are derived separately for each zone from the combined index categories using the table on page R-14. Whenever new information becomes available about the invasive status of a species (e.g., new populations, new data on ecological impacts) that species should be reviewed and if necessary reassessed. The following text corresponds to the abbreviations in the table on page R-14 (text in bold is approved language for IFAS documents, text in parentheses provides additional instructions to IFAS faculty and for reassessment):

*OK =*

**Not considered a problem species at this time** (may be recommended by IFAS faculty and reassess in 10 years).

*Caution =*

**Caution - manage to prevent escape** (may be recommended by IFAS faculty and reassess in 2 years).

*No - unless limited use approved =*

**Go to Section D** for details on how to make a proposal for specified and limited use for the species.

If a proposal for specified and limited use has not been approved by the IFAS Invasive Plant Working Group (IPWG) the conclusion is:

**Invasive and not recommended by IFAS faculty** (reassess in 10 years - a proposal for specified and limited use may be submitted to the IPWG at any time). In IFAS publications, reference can be made to the Web site for the Center for Aquatic and Invasive Plants (<http://plants.ifas.ufl.edu/assessment>) to determine if any specified and limited uses have been approved since the time of publication.

If a proposal for specified and limited use has been approved by the IPWG the conclusion is:

**Invasive and not recommended by IFAS faculty except for “the specified and limited” use that has been approved by the IFAS Invasive Plants Working Group** (reassess in 2 years).

**OR**

**Predicted to be invasive\*:** Recommended only under specific management practices agreed upon by the IFAS Invasive Plant Working Group (reassess in 2 years).

In IFAS publications the term “specified and limited” would be replaced by a summary of the specific use that has been approved (e.g., indoor foliage). Details of approved specified and limited uses are to be kept with other assessment documentation.

*No =*

**Invasive and not recommended by IFAS faculty** (reassess in 10 years).

\*Reported invasiveness in environments similar to but outside of Florida is one basis for this conclusion



Determine Index Categories for ALL zones before starting this Section.

For each zone identify the combination of Index categories from page R-14 in the table below. The asterisk indicates the appropriate Conclusion. Footnotes and space for recording the Conclusions are provided on page R-17.

**Index Categories**

L/H = either Low or High

**Conclusions**

See page R-15 for full text for conclusions

Impact	Potential	Manage.	Value	No	No unless limited use approved	Caution	OK
VH	L/H	L/H	L/H	*			
H	H	H	L	*			
H	H	H	H	*			
H	H	L	L	*			
H	H	L	H	*	*1		
H	L	H	L	*			
H	L	H	H	*	*1		
H	L	L	L	*			
H	L	L	H	*	*1		
M	H	H	L	*			
M	H	H	H	*	*1		
M	H	L	L	*			
M	H	L	H	*	*1		
M	L	H	L	*			
M	L	H	H	*	*1		
M	L	L	L	*	*1		
M	L	L	H	*	*1		
L	H	H	L			*2	
L	H	H	H			*2	
L	H	L	L			*2	
L	H	L	H			*2	
L	L	L/H	L/H				*2, 3

Footnotes for table of Conclusions

<sup>1</sup> Enter a conclusion of **No unless limited use approved** in the spaces below. Go to **Section D** on page R-19 for details on how to make a proposal for specified and limited use for the species.

<sup>2</sup> If a zone is invaded and has Impact = Low or Medium but the adjacent zone has Impact = High or Very High or has received a **No** or **No unless limited use approved** conclusion via Section C, then for the invaded zone under consideration **Go To Section C**.

<sup>3</sup> For zones where a species has not invaded, if Potential = Low but Impacts in an adjacent invaded zone are Medium, High, or Very High, then use **Caution** for the un-invaded zone. If Impact = Low in the adjacent zone or it is not yet invaded, then retain **OK**.

*Because the Conclusion for one zone can be modified by the Index Categories or Conclusions for an adjacent zone, be sure to check Conclusions for each zone twice.*

Conclusions North Caution; may be recommended but manage to prevent escape

Central No; invasive and not recommended by IFAS faculty

South Caution; may be recommended but manage to prevent escape

*Copy these Conclusions to page R-1; Section C is on page R-18; Section D is on page R-19.*

**Section C**

**C1** Was the first record of this species in natural areas of this zone less than 10 years ago if herbaceous or less than 20 years ago if woody?

Yes *Highlight distribution records that show first documentation in Florida is less than 10 or 20 years ago then Go to question C2*

No **Conclusion for this zone remains as Caution - manage to prevent escape OR Not considered a problem species at this time.**

**C2** Can this species reproduce and disperse in this zone?

Yes **The conclusion for this zone is Invasive and not recommended by IFAS faculty OR Invasive and not recommended by IFAS faculty except for the specified and limited use that has been approved by the IFAS Invasive Plants Working Group to match the adjacent, highly impacted zone. However, do not alter the Ecological Impact category for this zone from Low or Medium. (Thus, if there is an adjacent non-invaded zone, the Ecological Impact category for that zone will remain Low or Medium.) The assessment for this zone can be considered complete now, even if the “documentation of evidence” requirement for Ecological Impacts is not fulfilled (i.e., there are only one or two expert opinions on this species in this zone).**

No **Conclusion for this zone remains as Caution - manage to prevent escape OR Not considered a problem species at this time**

*Select appropriate Conclusion and enter it on Page R-1 and R-16*

If yes, then provide evidence of reproduction and dispersal in this zone: Zone = \_\_\_\_\_

## **Section D**

If there are specific circumstances in which this species could be used that would not be expected to result in escape and invasion (e.g., foliage plants that are only used indoors and which can be reasonably prevented, by conspicuous labeling, from use or disposal in the landscape) **OR** if it is possible to define how to avoid dispersal of this species to habitats where its impacts are high (i.e., from Section B), then based on a proposal that is approved by the IPWG the conclusion becomes **Invasive and not recommended by IFAS faculty except for “the specified and limited” use that has been approved by the IFAS Invasive Plants Working Group.** The proposal for specified and limited use should document how invasion would be prevented, and should stipulate that disposal of any propagules must ensure their destruction. Reassess this species in 2 years (or in the case of referrals from Section B, immediately if the incidence of worst-case impacts increases above 10%.)

In IFAS publications the term “the specified and limited” would be replaced by a summary of the specific use that has been approved (e.g., indoor foliage).

### **Conditions of Acceptable Specified and Limited Use:**

**Further information needed:**

