

Non-native species in the *Atlas of Florida Vascular Plants* website database

Alan Franck (afranck@mail.usf.edu) & Richard Wunderlin

<http://florida.plantatlas.usf.edu/>

The screenshot shows the homepage of the Atlas of Florida Vascular Plants website. The header features the site title, a search bar for scientific names, and navigation links like 'Advanced Search' and 'Search Help'. The main content area is divided into several sections: 'Recent Plant Photos' with a gallery of images; 'About the Plant Atlas' providing background information on the project; 'Browse the Plant Atlas By Map' featuring a map of Florida with county-level data; 'Plant Atlas Search' with a search form; 'Specimen Search' with a search form and a specimen image; 'Institute for Systematic Botany' with a brief history; and 'Outside Links' for related resources. The footer includes logos for the Florida Fish and Wildlife Conservation Commission and the University of South Florida.



Atlas of Florida Vascular Plants

- culmination of the efforts of 1000s of botanists over 100s of years
 - and especially 4 major Florida herbaria (FLAS, FSU, FTG, USF)

The screenshot shows the website's header with the title "Atlas of Florida Vascular Plants" and "Institute for Systematic Botany". It includes a search bar with a "Scientific Name" dropdown and a "Search" button, along with links for "Advanced Search" and "Search Help". A navigation menu contains "Home", "Browse By", "Search", "Herbarium Specimen Search", "Institute for Systematic Botany", "Links", "About", "USF Herbarium", "Admin", and "Logout".

Key content areas include:

- Recent Plant Photos:** A gallery of plant images with a navigation bar (01-10).
- About the Plant Atlas:** A text block explaining the project's origin and Florida's botanical diversity, with a link to "Learn more about the Plant Atlas".
- Plant Atlas Search:** A search form with a "Search" button and a "Browse" button.
- Institute for Systematic Botany:** A text block describing the institute's role at the University of South Florida, with links to "Learn more about the ISB" and "View the Specimen Database".
- Outside Links:** A section for "View relevant external links".
- Atlas Tutorial:** A section featuring a photograph of a plant specimen and a "Search..." button.

Overlaid on the map of Florida are logos and names for four major herbaria:

- THE FLORIDA STATE UNIVERSITY**
Biology Department
Robert K. Godfrey Herbarium
- UNIVERSITY OF FLORIDA**
The Foundation for The Gator Nation.
- UNIVERSITY OF SOUTH FLORIDA**
1851
- FTBG**
FAIRCHILD TROPICAL BOTANIC GARDEN
Exploring, Explaining and Conserving the World of Tropical Plants

Atlas of Florida Vascular Plants

page for each of the 4,313 species native or naturalized in Florida

Solanum candidum [Jump to a section: Classification](#) | [Citation](#) | [Source](#) | [Synonyms](#)

Family: SOLANACEAE
Species: *Solanum candidum* Lindl.
Common Name: FUZZYFRUIT NIGHTSHADE
Plant Notes: **
Status: Not Native
Specimen: [View specimen details in the USF Herbarium Specimen Database](#)

** Not applicable or data not available.

Classification

Family [SOLANACEAE](#)
 Genus [Solanum](#)
 Species *Solanum candidum* Lindl. - FUZZYFRUIT NIGHTSHADE

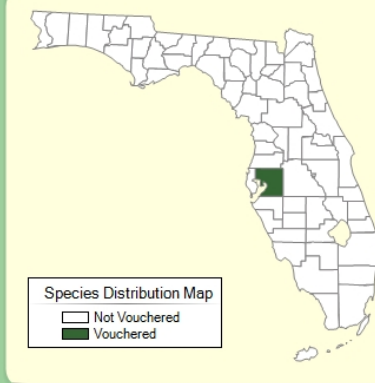
Citation

Citation SOLANUM CANDIDUM Lindley, Edwards's Bot. Reg. 25(Misc.): 73. 1839.
Basionym: **
Type: TYPE: MEXICO: Cult. in England, without data, Barker s.n. (holotype: CGE).

** Not applicable or data not available.

Map **Photo Gallery** [Broom Photos](#)

Distribution Map: Based on **vouchered** plant specimens only. View by placing the mouse cursor over a particular county.



Related Links

- [Flora of North America](#)
- [The New York Botanical Garden](#)
- [Robert K. Godfrey Herbarium at FSU](#)
- [FLAS - UF / Gainesville](#)
- [EDD MapS](#)
- [NatureServe Explorer](#)
- [USDA PLANTS](#)
- [Google Images](#)
- [Yahoo! Images \(including Flickr\)](#)

Source

County	Herbaria	Literature Citation (If Applicable)
Hillsborough	USF	

Synonyms

Synonym	Full Citation	Basionym	Type
<i>Solanum boquetense</i>	<i>Solanum boquetense</i> Standley, Publ. Field Mus. Nat. Hist., Bot. Ser. 22(2): 103. 1940.		TYPE: PANAMA: Chiriquí: Boquete, 28 Jun 1938, Davidson 817 (holotype: F).
<i>Solanum huitlanum</i>	<i>Solanum huitlanum</i> Brandegee, Univ. Calif. Publ. Bot. 6: 192. 1915.		TYPE: MEXICO: Chiapas: Near Huitla, s.d., Purpus 7813 (holotype: UC; isotypes: GH, MO, NY).



Atlas of Florida Vascular Plants

page for each of the 4,313 species native or naturalized in Florida

Solanum candidum Jump to a section: [Classification](#) | [Citation](#) | [Source](#) | [Synonyms](#)

Family: SOLANACEAE

Species: *Solanum candidum* Lindl.

Common Name: FUZZYFRUIT NIGHTSHADE

Plant Notes: **

Status: Native

Specimen: [View specimen details in the USF Herbarium Specimen Database](#)

** Not applicable or data not available.

Classification

Family: SOLANACEAE
 Genus: *Solanum*
 Species: *Solanum candidum* Lindl. - FUZZYFRUIT NIGHTSHADE

Citation

Citation: SOLANUM CANDIDUM Lindley, Edwards's Bot. Reg. 25(Misc.): 73. 1839.

Basionym: **

Type: TYPE: MEXICO: Cult. in England, without data, Barker s.n. (holotype: CGE).

** Not applicable or data not available.

Source

County	Herbaria	Literature Citation (If Applicable)
Hillsborough	USF	

Synonyms

Synonym	Full Citation	Basionym	Type
<i>Solanum boquetense</i>	<i>Solanum boquetense</i> Standley, Publ. Field Mus. Nat. Hist., Bot. Ser. 22(2): 103. 1940.		TYPE: PAN
<i>Solanum huitlanum</i>	<i>Solanum huitlanum</i> Brandegee, Univ. Calif. Publ. Bot. 6: 192. 1915.		TYPE: MEX

Map | [Photo Gallery](#) | [Browse Photos](#)

Distribution Map: Based on **vouchered** plant specimens only. View county names by placing the mouse cursor over a particular county.

Selected Herbarium Specimen Details (3) [Download](#) | [Toggle Thumbnails](#)

Family Name: Solanaceae
Currently Accepted Name: *Solanum candidum* Lindl. [↗](#)
Locality: USA, Florida, Hillsborough Co.: 1.5 km N of FL 674, 3 km E of US 301; Balm Scrub Addition, Wimauma. [27° 43' 32" N 82° 18' 20" W](#)
Description: Shrub to 1.5 m, two plants seen; fruits orange, each with ca. 300 seeds.
Habitat: Pastured, mesic hammock.
Reproductive State: Flower
Notes: Sheet 1 of 3.
Collector: K. Bradshaw s.n. with A.R. Franck
Date: 26 Aug 2014
Accession No: 275380
Image: [275380.jpg](#)
Plant Atlas Link: [Plant Atlas Citation](#)

Family Name: Solanaceae
Currently Accepted Name: *Solanum candidum* Lindl. [↗](#)
Locality: USA, Florida, Hillsborough Co.: 1.5 km N of FL 674, 3 km E of US 301; Balm Scrub Addition, Wimauma. [27° 43' 32" N 82° 18' 20" W](#)
Description: Shrub to 1.5 m, two plants seen; fruits orange, each with ca. 300 seeds.
Habitat: Pastured, mesic hammock.
Reproductive State: Sheet 3 of 3.
Collector: K. Bradshaw s.n. with A.R. Franck
Date: 26 Aug 2014
Accession No: 275381
Image: [275381.jpg](#)
Plant Atlas Link: [Plant Atlas Citation](#)

Family Name: Solanaceae
Currently Accepted Name: *Solanum candidum* Lindl. [↗](#)
Locality: USA, Florida, Hillsborough Co.: 1.5 km N of FL 674, 3 km E of US 301; Balm Scrub Addition, Wimauma. [27° 43' 32" N 82° 18' 20" W](#)
Description: Shrub to 1.5 m, two plants seen; fruits orange, each with ca. 300 seeds.
Habitat: Pastured, mesic hammock.
Reproductive State: Fruit
Notes: Sheet 2 of 3.
Collector: K. Bradshaw s.n. with A.R. Franck
Date: 26 Aug 2014
Accession No: 275382
Image: [275382.jpg](#)
Plant Atlas Link: [Plant Atlas Citation](#)



PLANTS OF FLORIDA

Solanum elaeagnifolium Lindl.

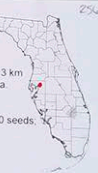
1811, ST. JOHNS BOROUGHS CO., 1.5 km N of FL 674, 3 km
E of US 301, Balm Scrub Addition, Wimauma
27° 43' 32.3" N, 82° 18' 19.9" W

Shrub to 1.5 m, fruits orange, each with ~300 seeds,
two plants seen in area

Pastured, mesic hammock.

Kenneth Bradshaw & Alan R. Franck s.n.
26 August 2014 Sheet 2 of 3
UNIVERSITY OF SOUTH FLORIDA HERBARIUM

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Atlas of Florida Vascular Plants

Solanum candidum

Jump to a section: [Classification](#) | [Citation](#) | [Source](#) | [Synonyms](#)

Print

Family:	SOLANACEAE
Species:	<i>Solanum candidum</i> Lindl.
Common Name:	FUZZYFRUIT NIGHTSHADE
Plant Notes:	**
Status:	Not Native
Specimen:	View specimen details in the USF Herbarium Specimen Database

** Not applicable or data not available.

Classification

Family	SOLANACEAE
Genus	Solanum
Species	<i>Solanum candidum</i> Lindl. - FUZZYFRUIT NIGHTSHADE

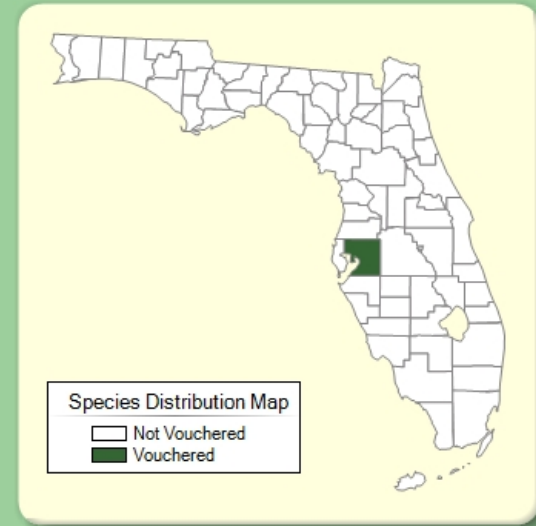
Citation

Citation	SOLANUM CANDIDUM Lindley, Edwards's Bot. Reg. 25(Misc.): 73. 1839.
Basionym:	**
Type:	TYPE: MEXICO: Cult. in England, without data, Barker s.n. (holotype: CGE).

** Not applicable or data not available.

[Map](#) | [Photo Gallery](#) | [Browse Photos](#)

Distribution Map: Based on **vouchered** plant specimens only. View county names by placing the mouse cursor over a particular county.



Related Links

- [Flora of North America](#)
- [The New York Botanical Garden](#)
- [Robert K. Godfrey Herbarium at FSU](#)
- [FLAS - UF/Gainesville](#)
- [EDD MapS](#)
- [NatureServe Explorer](#)
- [USDA PLANTS](#)
- [Google Images](#)
- [Yahoo! Images \(including Flickr\)](#)

These links conduct a search of this species at these websites:
(except EDD MapS)



Atlas of Florida Vascular Plants



Atlas of Florida Vascular Plants
Institute for Systematic Botany

 Scientific Name

[Advanced Search](#) [Search Help](#)

[Contact Us](#)

[Support the Atlas](#)

[Home](#) [Browse By](#) [Search](#) **Herbarium Specimen Search** [Institute for Systematic Botany](#) [Links](#) [About](#) [USF Herbarium](#) [Admin](#) [Logout](#)

[Atlas of Florida Vascular Plants](#) » [Herbarium Specimen Search](#)

Herbarium Specimen Search

[Print](#)

The USF Herbarium houses almost 250,000 specimens of which approximately 100,000 are of Florida vascular plants. In recent years we have made an effort to provide on-line access to these specimens by databasing the label data and photographing the specimens; about a third of the Florida specimens have been completed. By filling in the relevant boxes in the search forms below, users can retrieve the wealth of data available from this resource.

Quick Search

Search Keyword(s):

Advanced Search

Fields within the Advanced Search section are searched upon using an **AND** relationship but will not be combined with "Quick Search" searches.

Family:

Taxon:

Collector:

Collection Number:

Country:

State/Province:

County:

Locality:

Accession Number:

Habitat:

Plant Description:

Collection Month:

Collection Year (Range): -

Search Options:

Search Type Specimens ONLY

Determination Options:

Search only accepted names

Search entire determination history

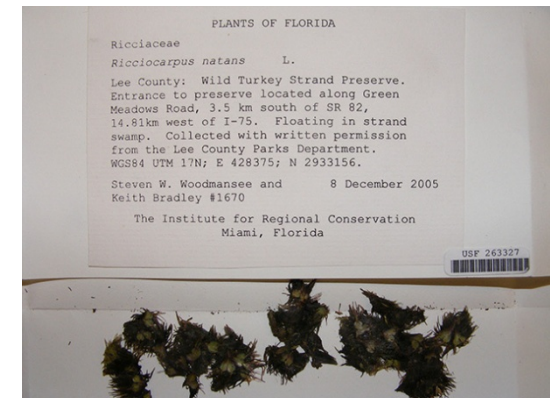
Results per Page:



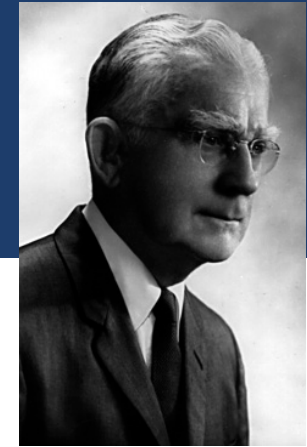
USF Herbarium



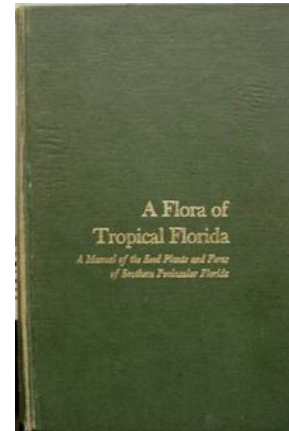
- ~280,000 specimens
 - 260,000 vascular plants (110,000 Florida)
 - 15,000 algae; 2,500 bryophytes; 1,000 lichens; 300 macrofungi
 - ~103,000 Florida vascular plant specimens databased & imaged
 - >95% of Florida specimens digitized
 - ~20,000 non-native Florida specimens



Botany at USF

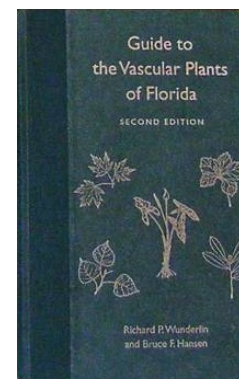


- USF Herbarium (b. 1956)
 - George Cooley – honorary curator & benefactor



- Robert Long – director (1964–1976)
- Olga Lakela – curator (1960–1974)

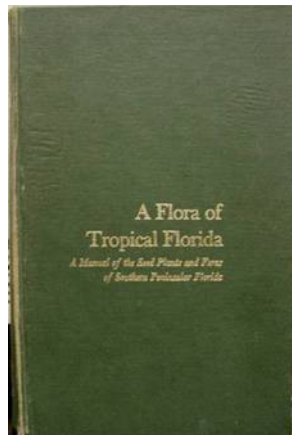
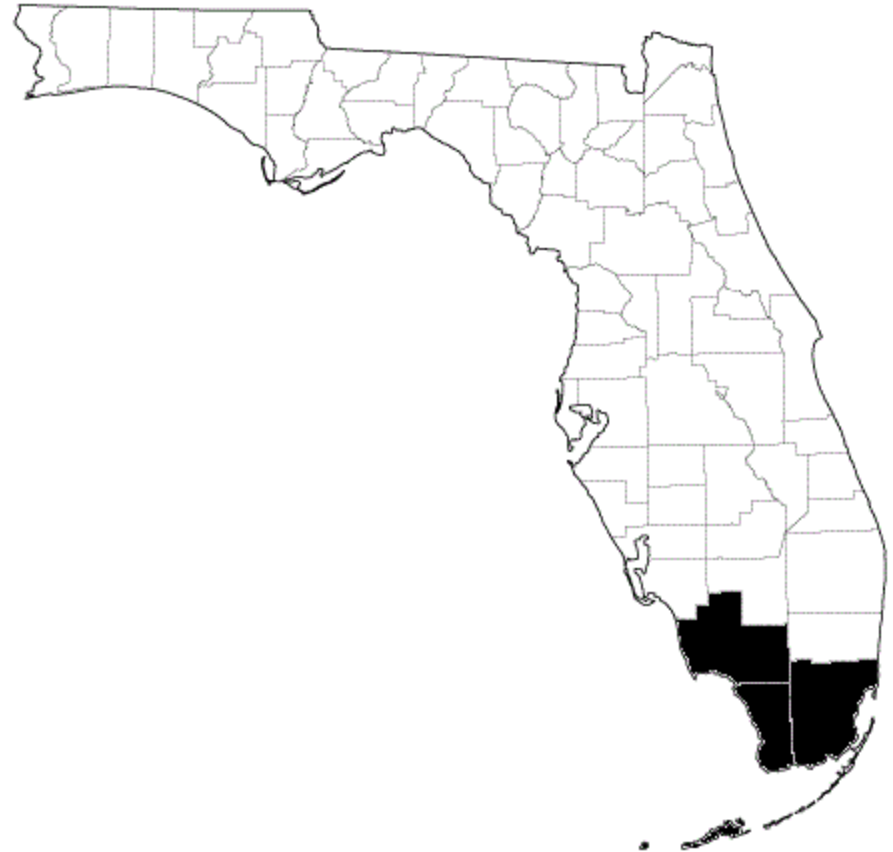
- Richard Wunderlin – director (1976–2009)
- Bruce Hansen – curator (1979–2014)



Long & Lakela (1971)

A Flora of Tropical Florida

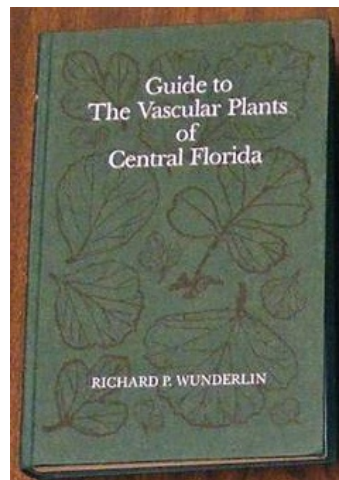
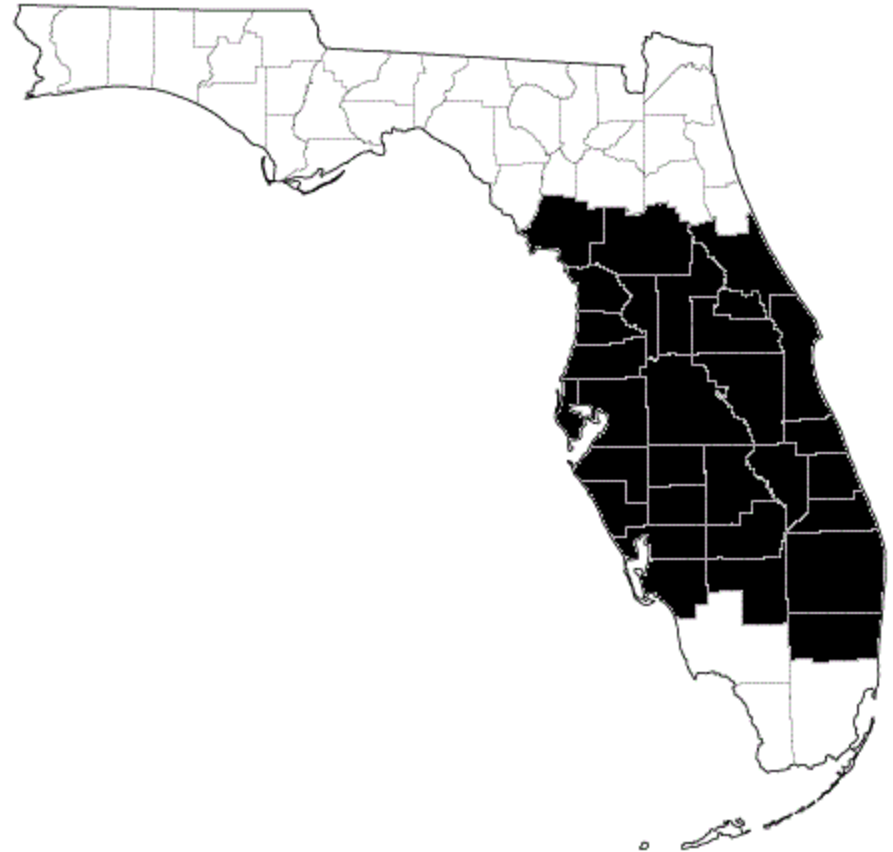
- 3 counties
- 1,647 species
 - ~83.6% (1377) native
 - ~16.4% (270) non-native



Wunderlin (1982)

Guide to the Vascular Plants of Central Florida

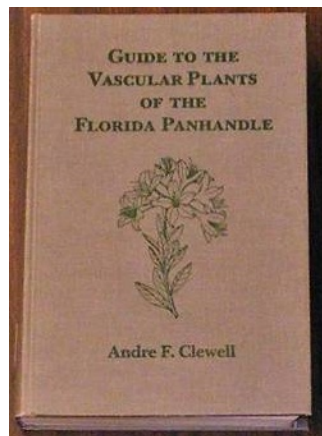
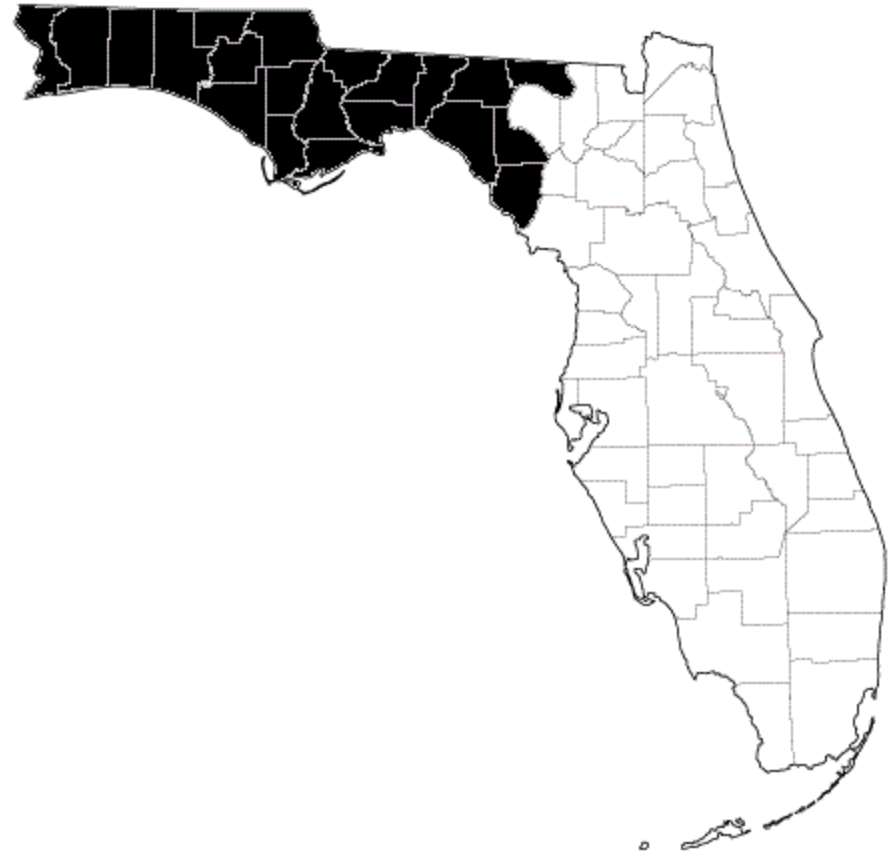
- 30 counties
- 2,197 species
 - ~79.3% (1742) native
 - ~20.7% (455) non-native



Clewell (1985)

Guide to the Vascular Plants of the Florida Panhandle

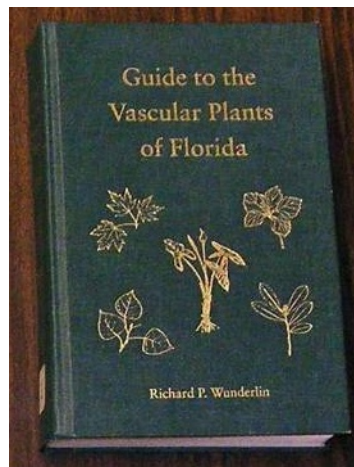
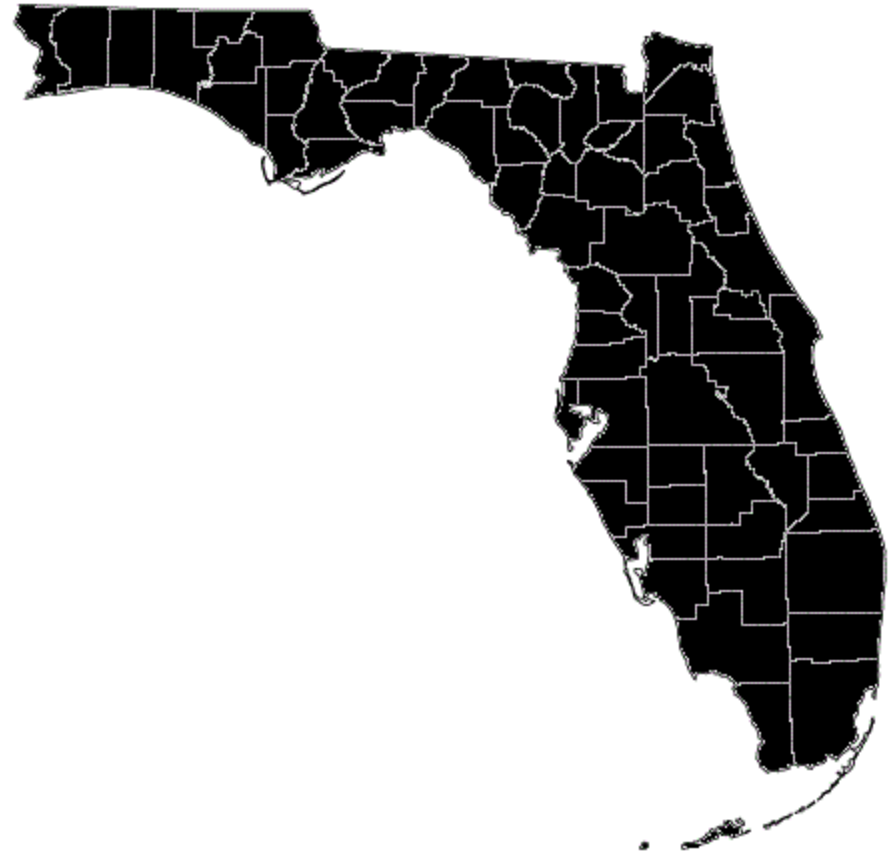
- 21 counties
- 2,359 species
 - 84.3% (1989) native
 - 15.7% (370) non-native



Wunderlin (1998)

Guide to the Vascular Plants of Florida

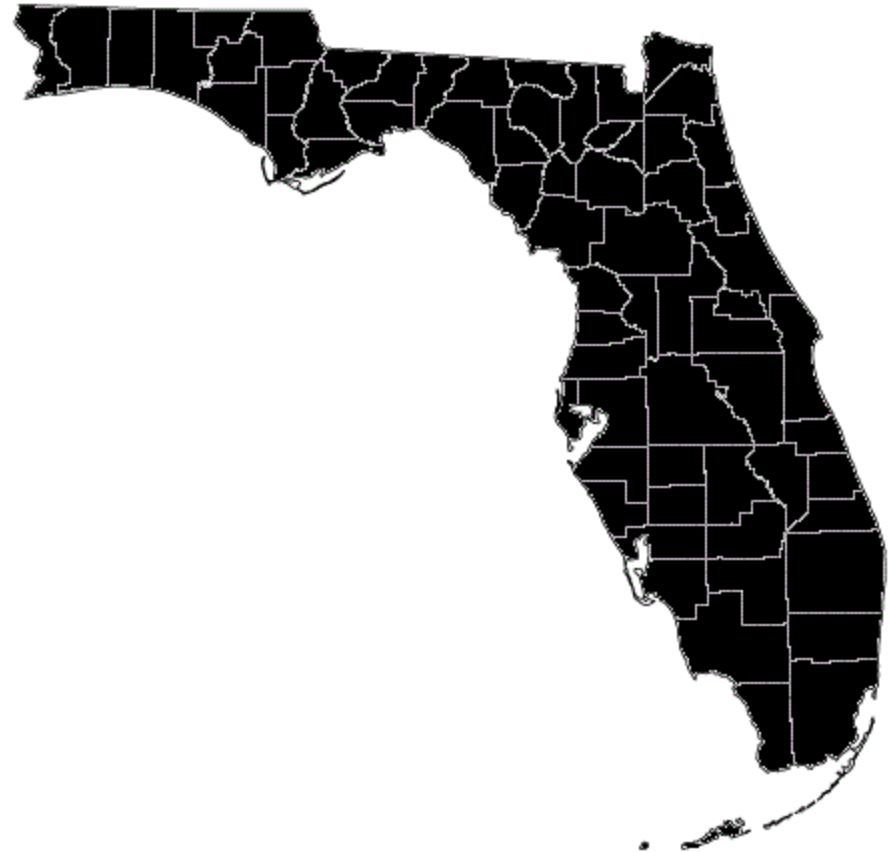
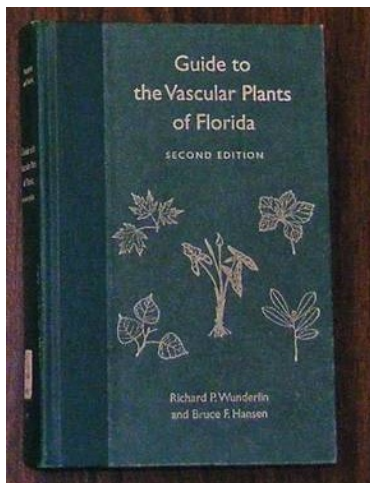
- 67 counties
- 3,834 species
 - 69.2% (2654) native
 - 30.8% (1180) non-native



Wunderlin & Hansen (2003)

Guide to the Vascular Plants of Florida

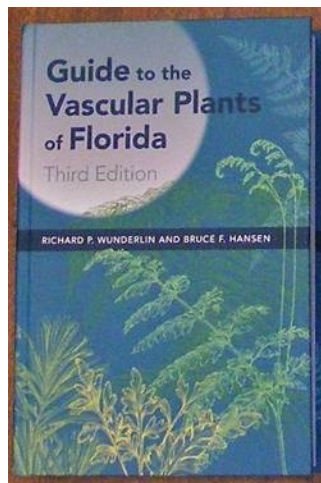
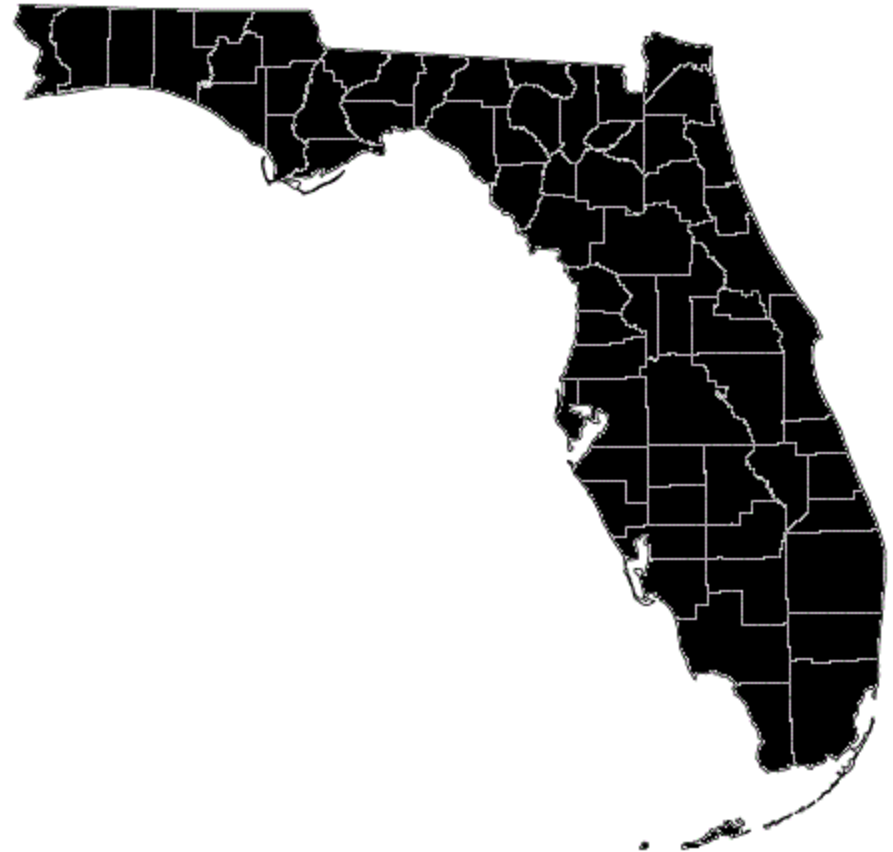
- 67 counties
- 4,145 species
 - 68.2% (2827) native
 - 31.8% (1318) non-native



Wunderlin & Hansen (2011)

Guide to the Vascular Plants of Florida

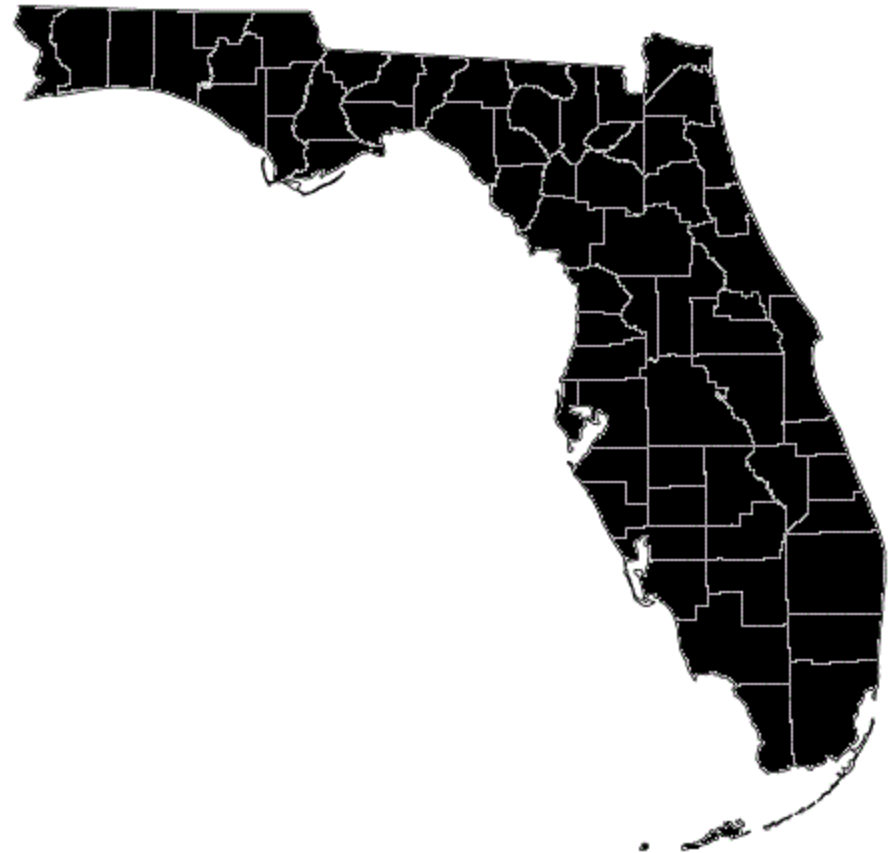
- 67 counties
- 4,255 species
 - 67.1% (2857) native
 - 32.8% (1398) non-native



Wunderlin & Hansen (2015)

Atlas of Florida Vascular Plants

- 67 counties
- 4,313 species
 - 66.4% (2864) native
 - 33.6% (1449) non-native

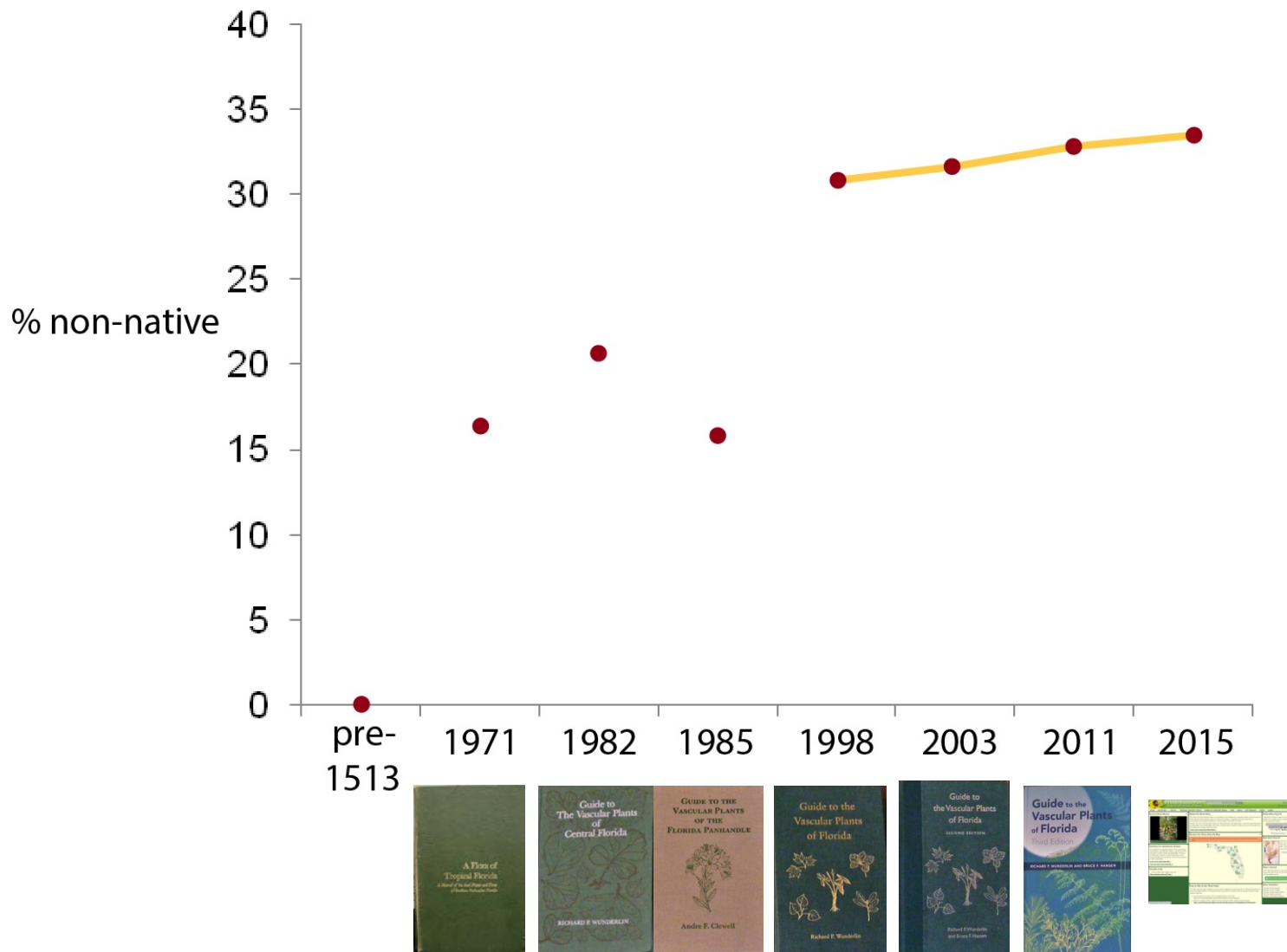


The screenshot shows the website's layout with several sections:

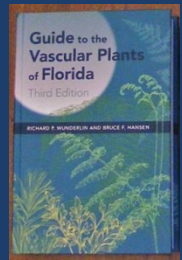
- Header:** "Atlas of Florida Vascular Plants Institute for Systematic Botany" with search and navigation options.
- Recent Plant Photos:** A gallery of plant images.
- About the Plant Atlas:** A text block explaining the atlas's purpose and scope.
- Plant Atlas Search:** A search form with "Scientific Name" and "Search" buttons.
- Specimen Search:** A search form for specimens.
- Atlas Tutorial:** A link to a tutorial document.
- Atlas Statistics:** A table showing the following data:

Number of Plant Species	4,313
Number of Plant Images	15,111
Number of Specimens Digitized	150,953
Number of Native Species	2,864
Number of Non-Native Species	1,449
- How to link to the Plant Atlas:** Instructions on how to link to individual species and families.

% Non-native species in Florida flora over time



74 species new to flora since 2011 edition of *Guide*

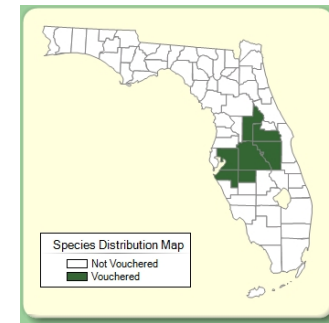


- **Abutilon grandifolium*
- **Acacia saligna*
- **Acisanthera erecta*
- **Aeschynomene fluitans*
- **Aloe* × *schoenlandii*
- **Anthurium hookeri*
- **Arachniodes simplicior*
- **Aristida purpurea*
- **Aspidistra elatior*
- **Basella alba*
- **Boerhavia coccinea*
- **Bruguiera gymnorhiza*
- **Caesalpinia vesicaria*
- **Callerya reticulata*
- **Calotropis procera*
- Carex austrodeflexa*
- **Carlowrightia texana*
- **Cinnamomum burmannii*
- **Citrus japonica*
- **Clerodendrum quadriloculare*
- **Clinopodium vulgare*
- **Condea floribunda*
- Coreopsis palustris*
- **Crotalaria alata*
- **Croton discolor*
- **Cuphea hyssopifolia*
- Cuscuta boldhingii*
- **Cymbopogon nardus*
- **Davallia trichomanoides*
- Dicerandra fumella*
- **Erythroxylum confusum*
- Eupatorium hyssopifolium*
var. *laciniatum*
- **Fuirena umbellata*
- **Gladiolus dolanii*
- **Gmelina arborea*
- **Hedera canariensis*
- **Heteropterys brachiata*
- **Jacquemontia verticillata*
- **Liriope muscari*
- **Lithachne humilis*
- **Medicago littoralis*
- **Microgramma nitida*
- **Mikania micrantha*
- **Narcissus pseudonarcissus*
- **Narcissus* × *incomparabilis*
- **Nelsonia canescens*
- **Nephrolepis hirsutula*
- **Nymphoides peltata*
- **Ochna mossambicensis*
- **Opuntia ficus-indica*
- **Pandanus odorifer*
- **Phanera yunnanensis*
- **Phyllanthus fluitans*
- **Polygonum arifolium*
- **Polygonum cuspidatum*
- **Psophocarpus tetragonolobus*
- Quercus* × *beadlei*
- **Rhipsalis cereuscula*
- **Rhynchosia precataria*
- **Rhynchosia reticulata*
- Rhynchospora marliniana*
- **Sansevieria trifasciata*
- Schoenoplectus subterminalis*
- **Scleria melaleuca*
- **Senna angustisiliqua*
- **Silene latifolia*
- **Solanum candidum*
- **Stellaria graminea*
- **Tagetes lucida*
- **Ternstroemia gymnanthera*
- **Turnera subulata*
- **Urochloa humidicola*
- **Vicia lutea*
- **Vitex rotundifolia*

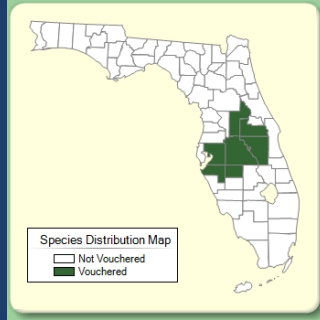
* = non-native species

Documenting plants on the *Atlas*

1. discover, collect specimen
2. deposit at herbarium
3. confirm ID
4. mount specimen
5. freeze specimen (de-bug)
6. map & database specimen
7. photograph
8. file specimen



Praxelis clematidea

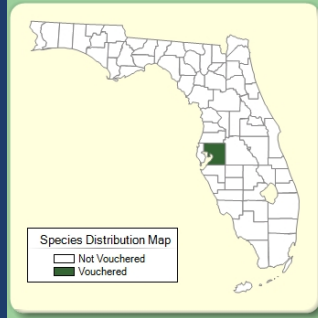


- 13 May 2014
 - Debi Stone (TNC)
 - Disney Wilderness Preserve
- 6 July 2014
 - on the *Atlas*
- 19 May 2014
 - Steve Dickman (Hillsb. Co.)
 - Wimauma Airport
- 17 June 2014
 - on the *Atlas*



Solanum candidum

fuzzyfruit nightshade

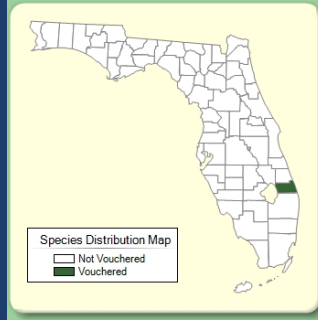


- 22 Aug 2014
 - Kenneth Bradshaw (Hillsb. Co.)
 - Balm Scrub
- 26 Aug 2014
 - site visitation
 - specimen collection
- 17 Sep 2014
 - on the *Atlas*



Gmelina arborea

gumhar



- 16 Sept 2014
 - Mike Bodle (SFWMD)
 - DuPuis MA
- 17 Oct 2014
 - on the *Atlas*

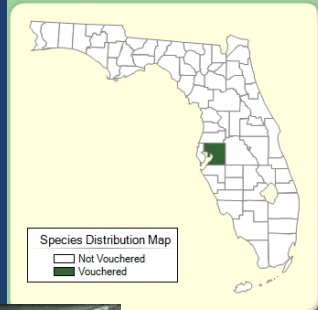


Urochloa humidicola

- 30 Sep 2014
 - William Overholt
 - UF India River center
- 23 Oct 2014
 - on the *Atlas*



Caribbean/Miami soil pile



30 Dec 2010



24 April 2012



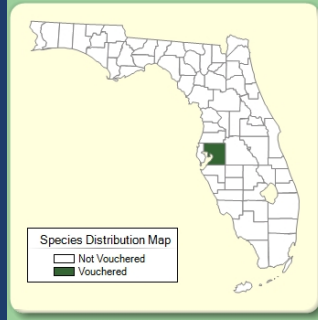
25 Jan 2013



17 Jan 2014



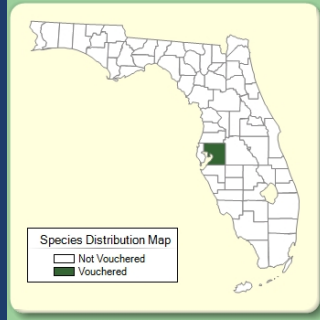
Caribbean/Miami soil pile



- 2012
 - Steve Dickman (Hillsb. Co.)
 - Tampa Bay port
- Jun 2014
 - on the *Atlas*
 - **Calotropis procera*
 - **Croton discolor*
 - **Jacquemontia verticillata*
 - **Rhynchosia reticulata*
 - **Senna angustisiliqua*



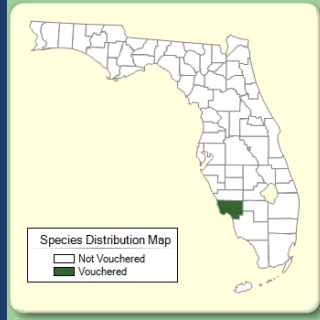
Bacopa rotundifolia



- 11 Sep 2014
 - aquatic consulting firm
 - Tampa
 - gated community wetland
- not on *Atlas*
- no herbarium specimen



Cissus repens



- ~6 Oct 2014
 - environmental consulting firm
 - limestone mine
- not on the *Atlas*
- no herbarium specimen



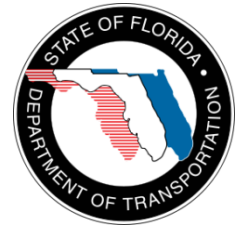
Acknowledgements



- USF Herbarium Staff
 - Peter J. Simoes
 - Rose Odonovan
 - Arian Farid
- USF Water Institute
 - Shawn Landry
 - Jason Scolaro
 - Keith Bornhorst

- Recent Collectors
 - Steve Dickman, Patricia Howell, Travis MacClendon, Randy Mejeur, Steve Myers, Rosalind Rowe, Cecil Slaughter, Walter Taylor, David Williams
- USF 2014–2015 volunteers
 - Aarzo Bukhari, Ryan Coddington, Chuck Courtney, Ambang Ebie, Alexandra Ferrero, Sarah Funaro, Michael Inman, Thomas Richards, Austin Ritenour, Janice Rivera, Aline Cristina Sousa, Sean Suba, Brittany Wert, and Gang Xian

Acknowledgements



and countless others . . .