

Cottonseed Bug

Oxycarenus hyalinipennis



Image Credit: Dani Barchana, Self employed, Bugwood.org, #54496369



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Introduction

- Pest of cotton and other plants in the Malvaceae family
- Worldwide in distribution, excluding most of North America
 - Recently declared eradicated in the Florida Keys
- Risk of being introduced in the U.S. is very high



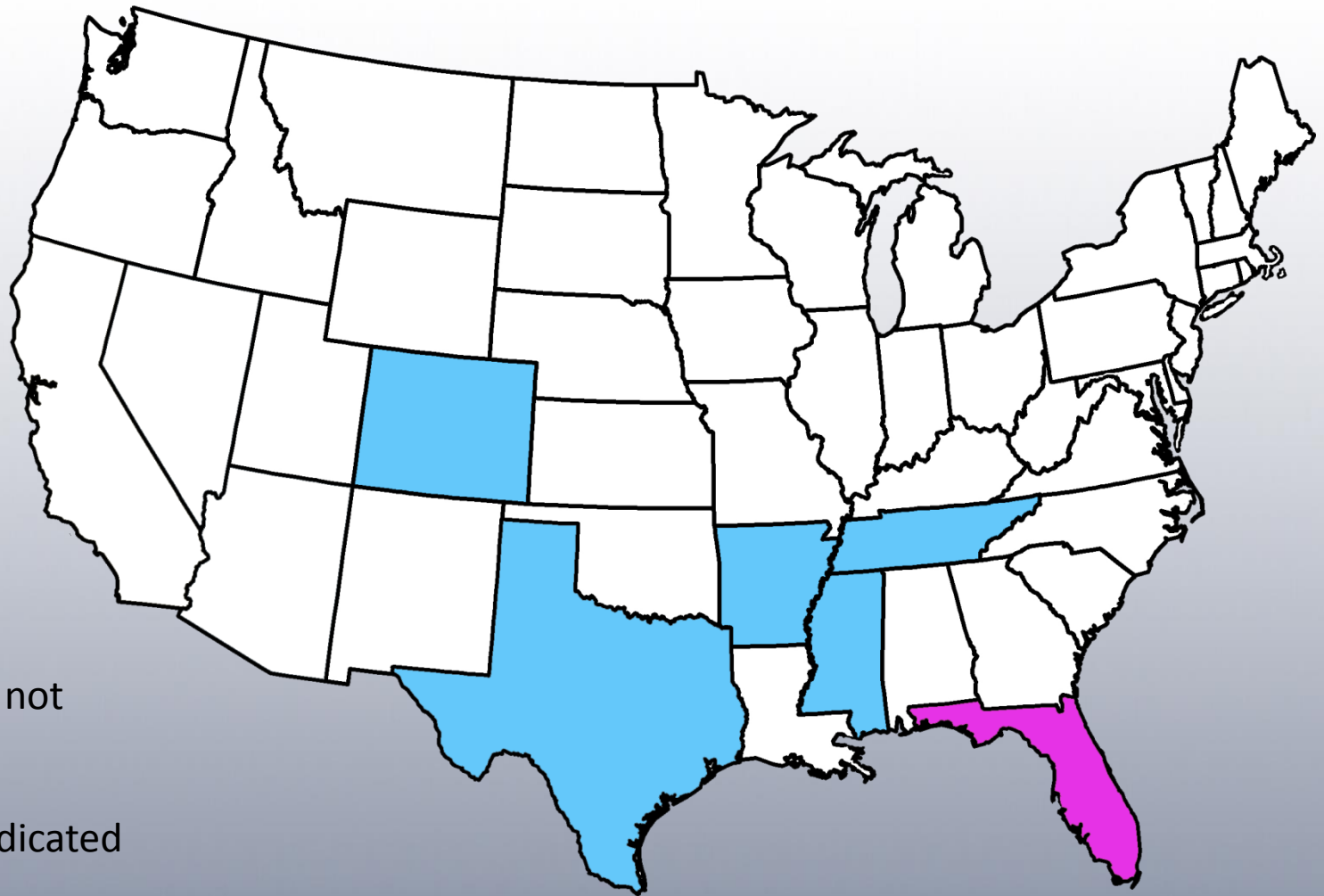
Image Credit: Julieta Brambila, USDA-APHIS



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Distribution



- ☐ No sampling
- ☒ Sampled but not found
- ☒ Declared eradicated

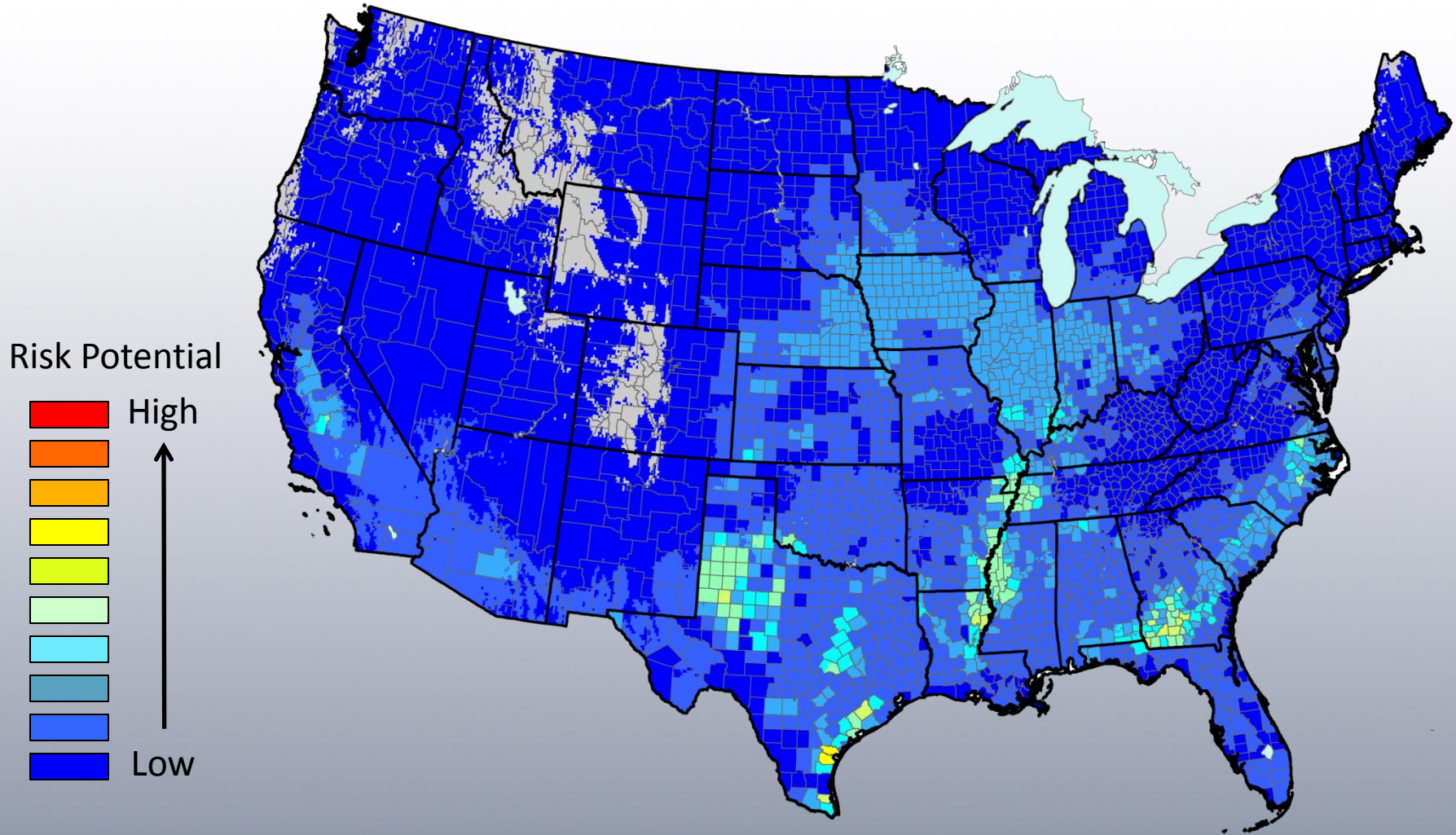
Map based on NAPIS Pest Tracker, accessed April 2014.



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Potential Distribution in the U.S.



Map based on CAPS Risk map for cotton seed bug, accessed April 2014. -

http://www.nappfast.org/caps_pests/maps/2012%20Matrix%20Risk%20Map%20PDFs/Oxycarenus%20hyalinipennis%20Risk%20Map%20AM.pdf



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Hosts



Okra



Cotton



Hibiscus

Image credit – Wikimedia Commons



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Eggs

- Eggs are oval shaped
- Pale yellow to pink
- Laid in the lint close to the seed
- Females lay about 15 to 26 eggs singly or in groups of 2 to 4.



Image Credit: Julieta Brambila, USDA-APHIS



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Nymphs

- Brownish head and thorax
- Abdomen is pinkish or orange
- Five nymphal stages
- Fifth instar darker brown
- Must feed on the seeds in Malvales in order to complete their development



Image Credit: Natasha Wright, FDACS-DPI



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Adult

- Adults are 3.8 to 4.3 mm in length
- Brownish black in color
- Wings are translucent white
- Male abdomen is rounded
- Female abdomen in truncate



Image Credit: Julieta Brambila, USDA-APHIS, bugwood.org, #5426962



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Life Cycle

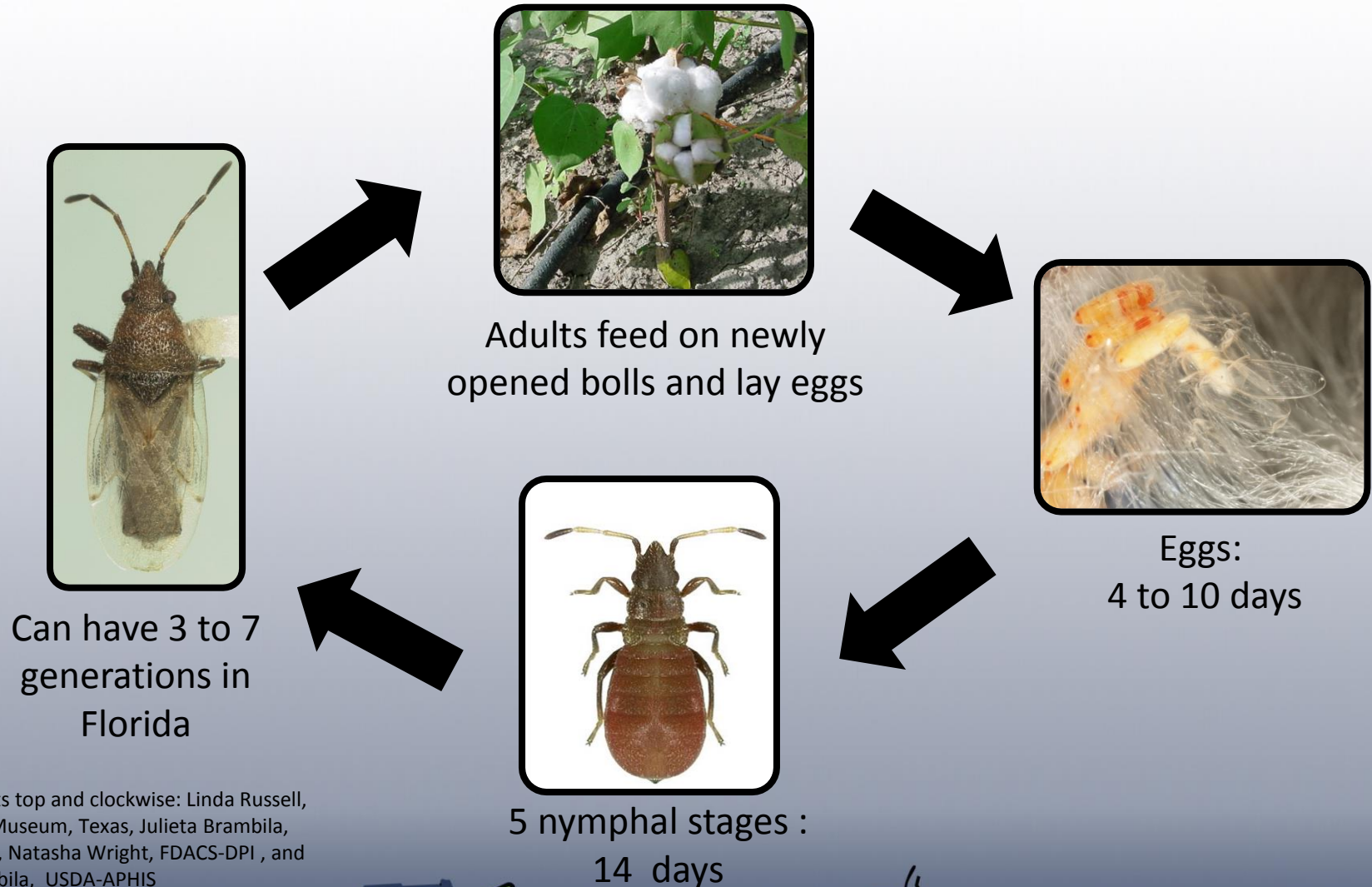


Image Credits top and clockwise: Linda Russell, Cotton Gin Museum, Texas, Julieta Brambila, USDA-APHIS, Natasha Wright, FDACS-DPI, and Julieta Brambila, USDA-APHIS



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Damage

- No external signs of damage in cotton
 - Damage is seen in the processing
- When feeding on the fleshy fruit of other hosts, look for a pungent smell and greasy secretions



Image Credit: Doug Restom Gaskill, USDA APHIS



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Monitoring

- Surveys must be conducted in high risk areas
- Carried out when the host is seeding
- Visual inspection is the best method
- Cotton bolls look like they have tiny black or brown bugs running through it



Image Credit: left - Doug Restom Gaskill, USDA APHIS and right - Karolynne Griffiths, FDACS-DPI



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Collaborating Agencies

- U.S. Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS)
- Cooperative Agricultural Pest Survey Program (CAPS)
- Florida Department of Agriculture and Consumer Services (FDACS)
- National Plant Diagnostic Network (NPDN)
- Sentinel Plant Network (SPN)
- Protect U.S.
- University of Florida Institute of Food and Agricultural Sciences (UF-IFAS)



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