

The background of the slide features a large, semi-transparent watermark of the Rutgers University seal. The seal is circular and contains the text "RUTGERS UNIVERSITY" around the perimeter and "1823" at the bottom. The seal is centered behind the text.

RUTGERS

New Jersey Agricultural
Experiment Station

Biology and Current Spread of the Brown Marmorated Stink Bug in North America

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Rutgers Cooperative Extension

Brown Marmorated Stink Bug

- Native to Asia
- Allentown, PA in 1996
- First identified in 2000
- Found in NJ blacklight trap in 1998
- Quickly moved throughout NJ and PA



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Monitoring for the Brown Marmorated Stink Bug

- [How to Identify the Brown Marmorated Stink Bug](#)

Since 2000, the Brown Marmorated Stink Bug (*Halyomorpha halys* (Stål) (Hemiptera: Pentatomidae) has been confirmed in several Mid-Atlantic States and in Oregon and California. It is believed that its distribution is much wider than currently documented.

To determine the risk to agricultural and ornamental industries, we must first determine where the Brown Marmorated Stink Bug is currently located. With the help of sightings from homeowners, Rutgers University will be able to quickly develop monitoring methods and control techniques for this invasive plant pest.

If you believe you have the Brown Marmorated Stink Bug, please see the [How to Identify the Brown Marmorated Stink Bug](#) link and then fill out the secure electronic form, which will be sent to researchers currently working on monitoring this pest. If you are able to capture a specimen, please do so in any type of container. For more information please see the [Rutgers New Jersey Agricultural Experiment Station \(NJAES\) Cooperative Extension fact sheet FS002](#) (PDF file).

For more information on this project, contact [George Hamilton](#) at the NJAES Pest Management Office.



Adult Male.

More Information

- ▶ [About the Brown Marmorated Stink Bug](#)
- ▶ [How to Control the Brown Marmorated Stink Bug](#)
- ▶ [How to Identify the Brown Marmorated Stink Bug](#)
- ▶ [Similar Species](#)
- ▶ [Frequently Asked Questions](#)
- ▶ [Report a Sighting](#)

Search

- NJAES Websites
- All of Rutgers
- eXtension FAQ

County Offices

Need more information about Monitoring for the Brown Marmorated Stink Bug? Contact your [Cooperative Extension county office](#) for answers to your questions.



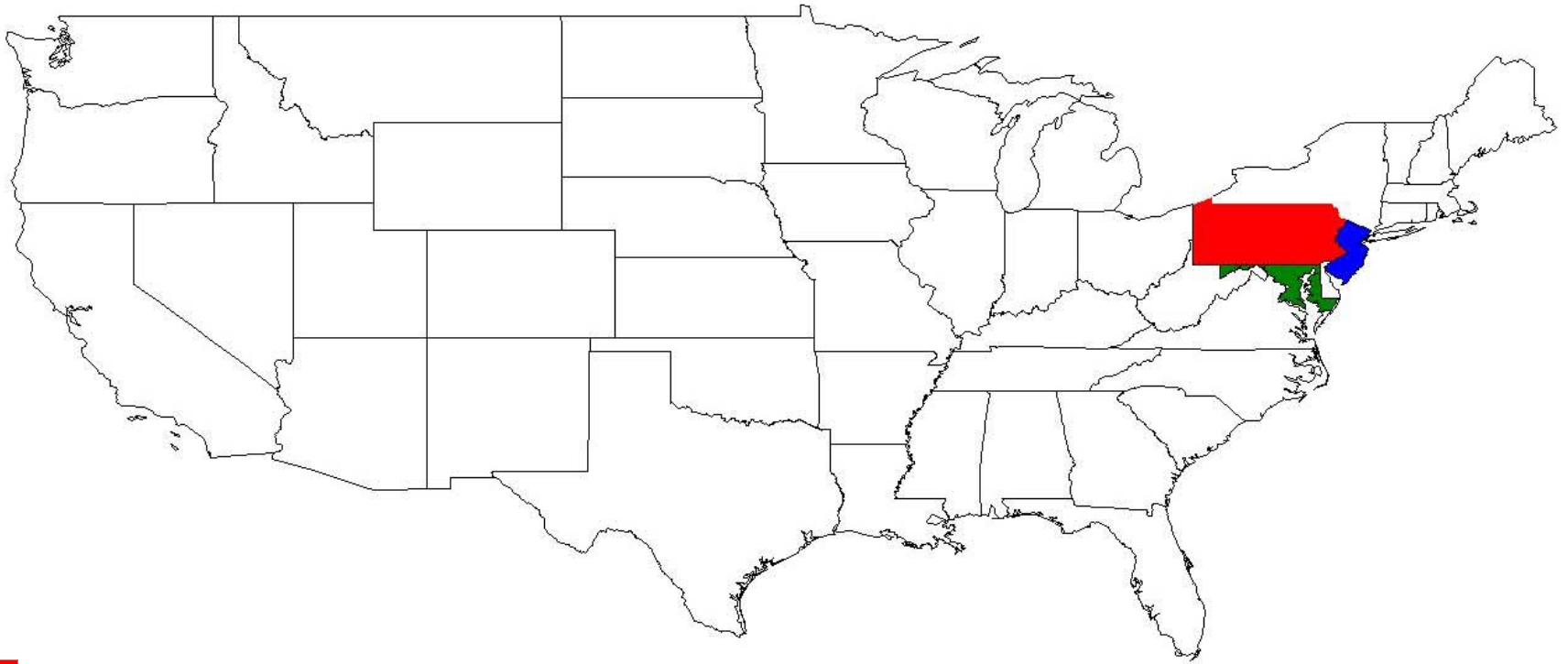
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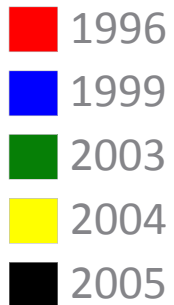
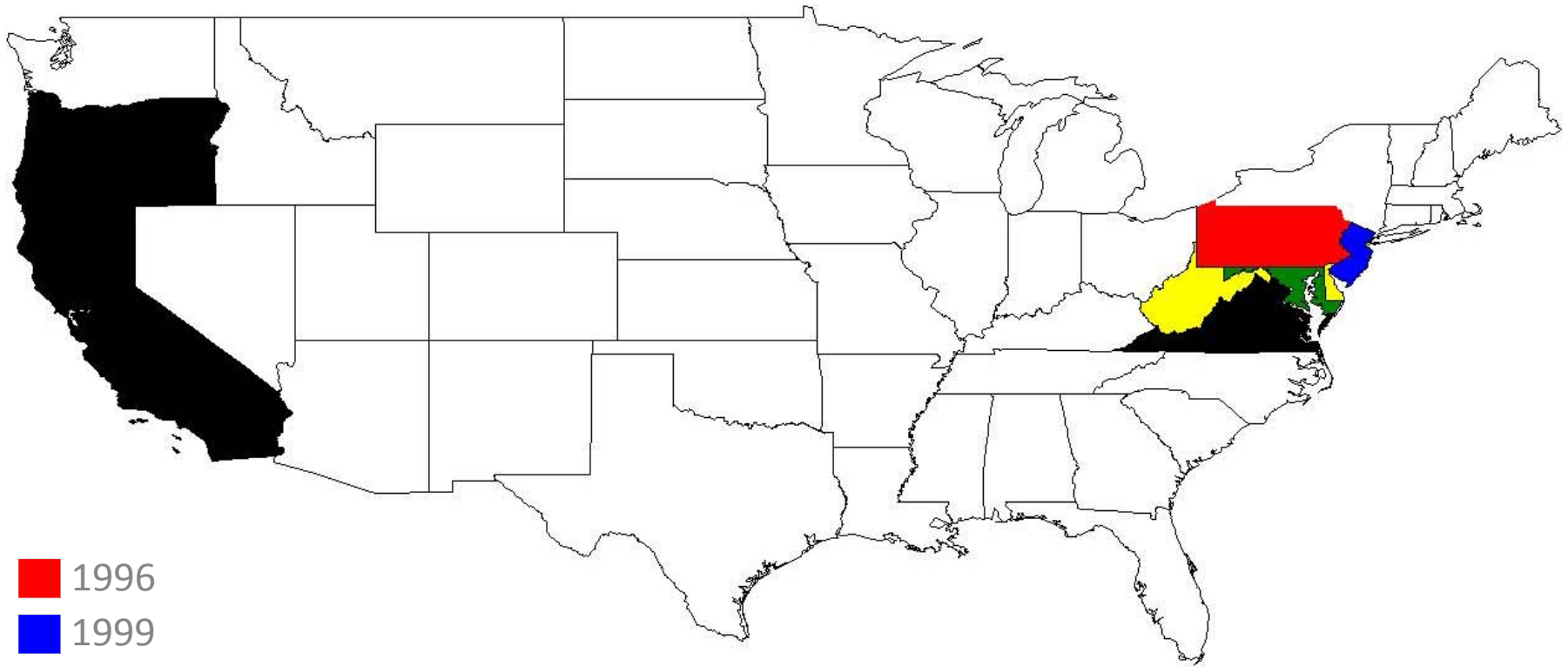
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US Distribution – 2003*



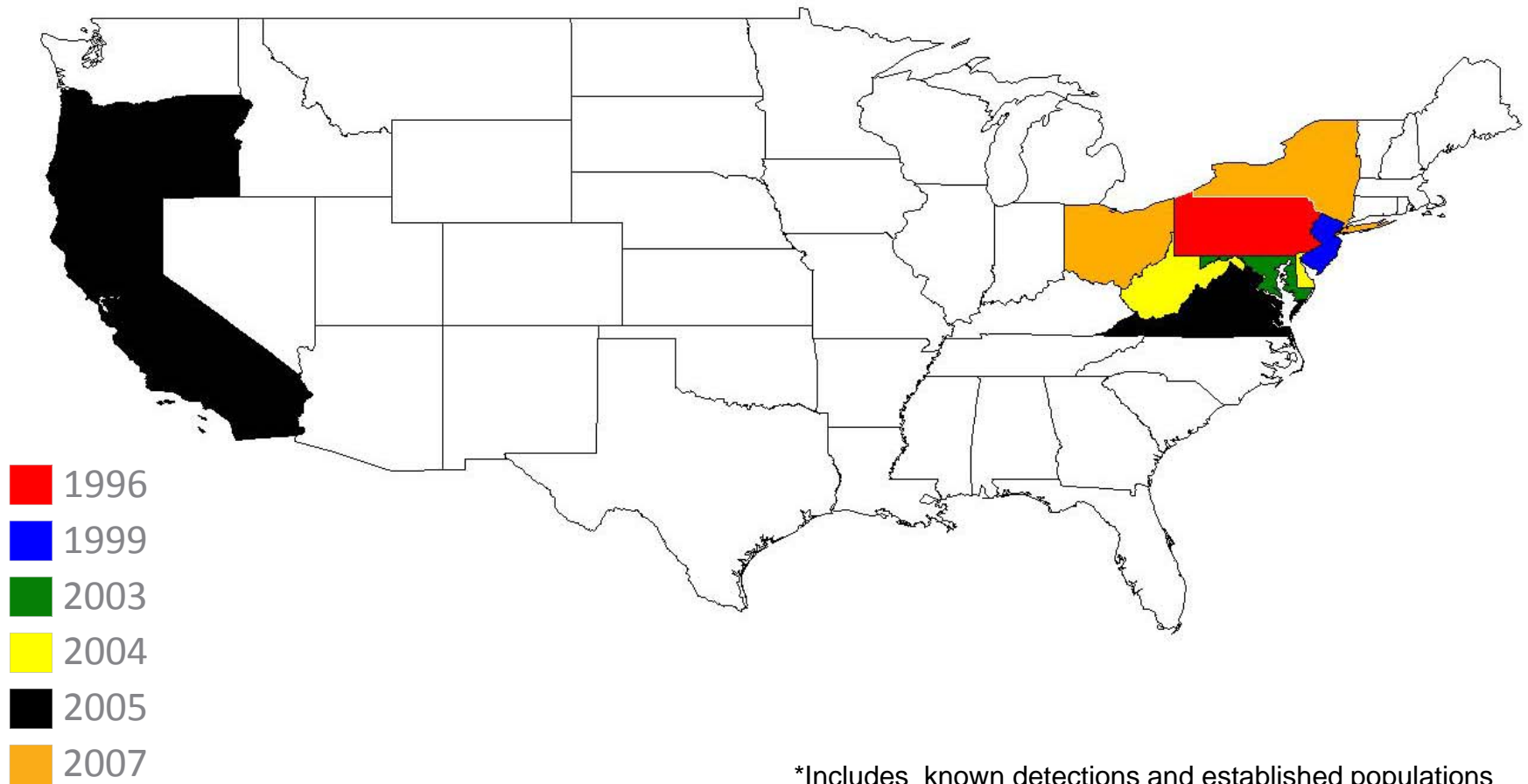
*Includes known detections and established populations

US Distribution – 2005*



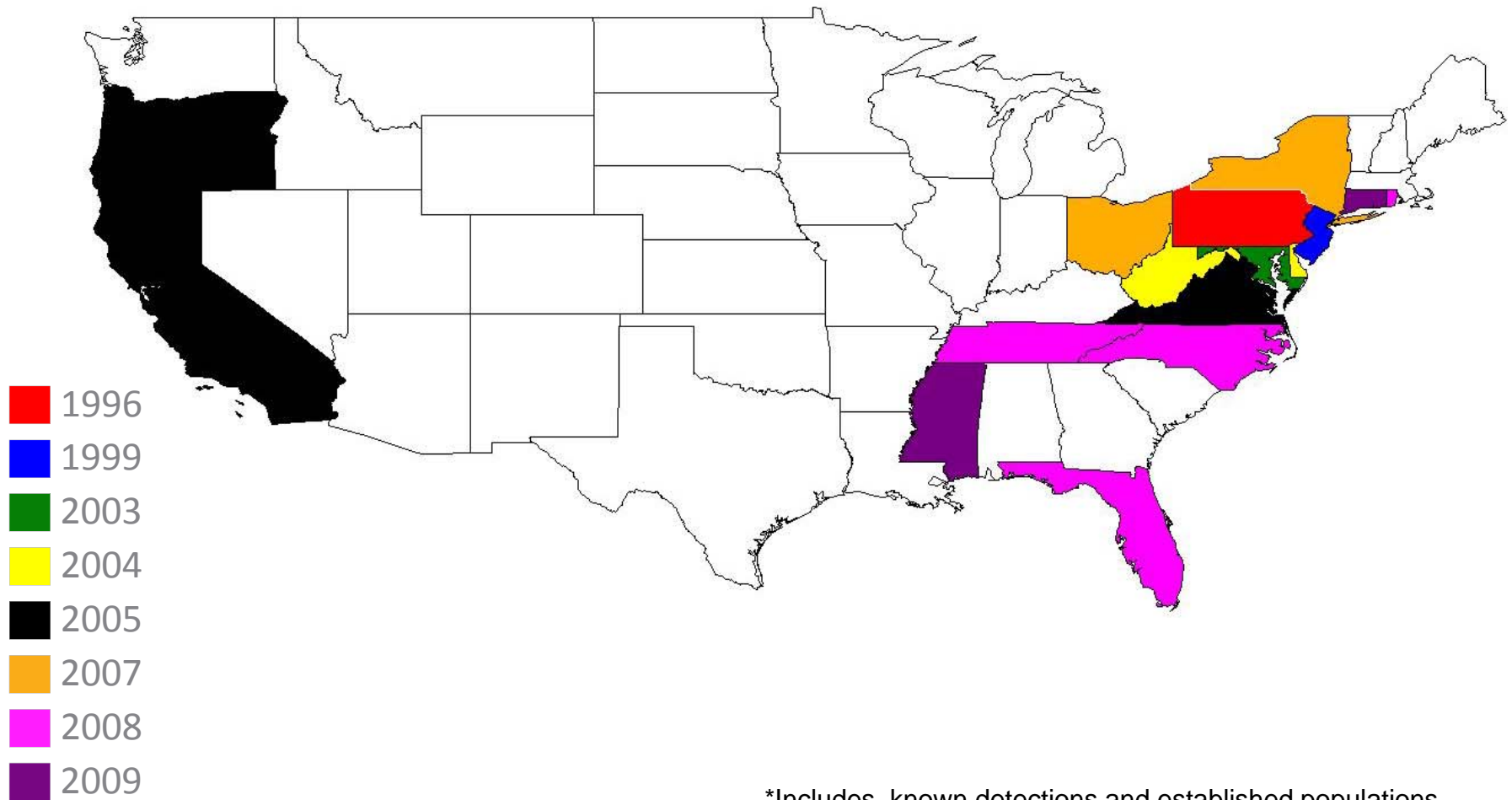
*Includes known detections and established populations

US Distribution – 2007*



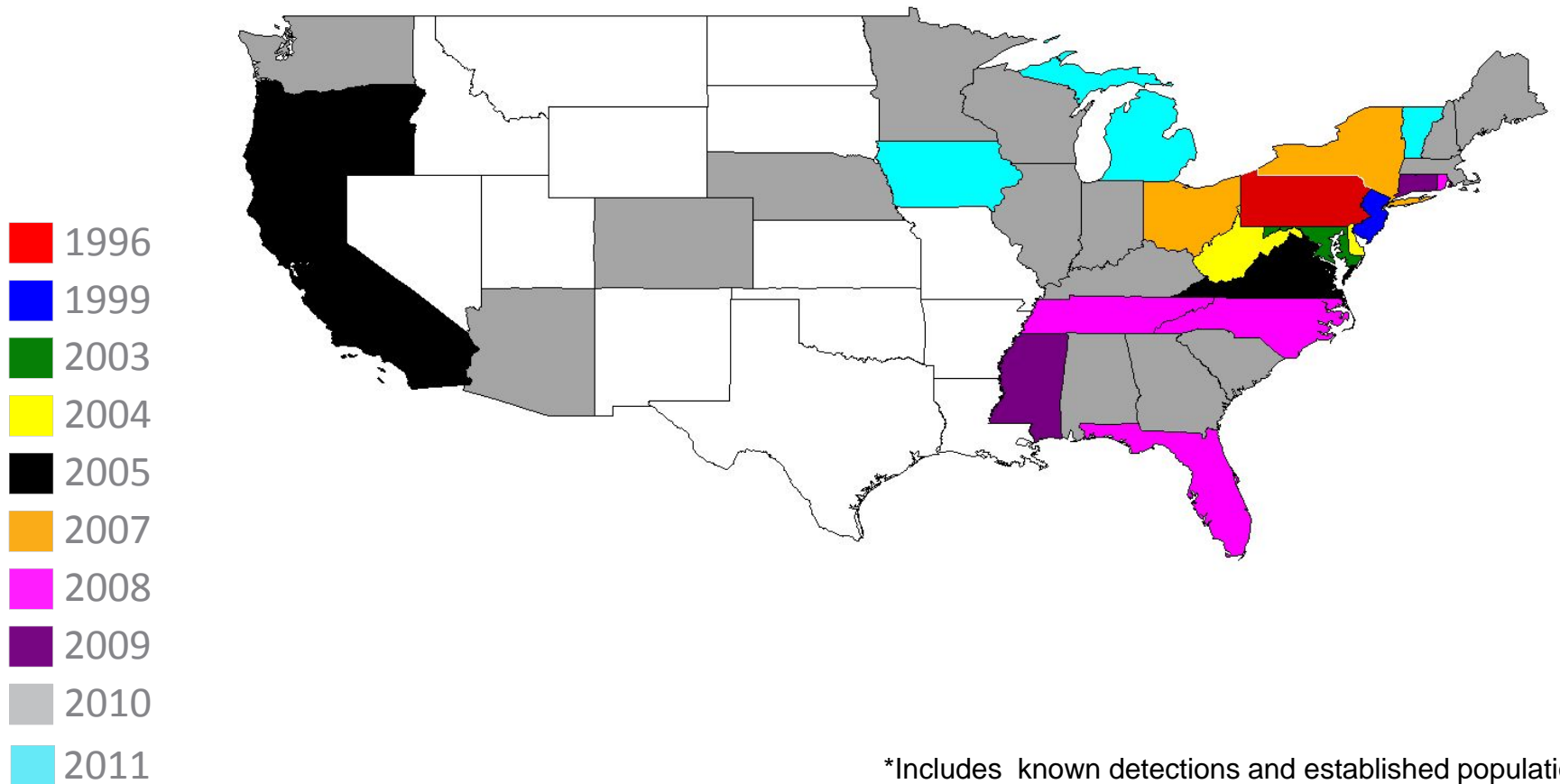
*Includes known detections and established populations

US Distribution – 2009*



*Includes known detections and established populations

US Distribution – 2011*



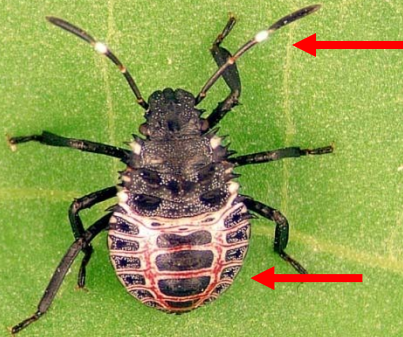
*Includes known detections and established populations

Life Cycle



Life Cycle

2nd Instar



~3.7 mm

3rd Instar



~5.5 mm

4th Instar



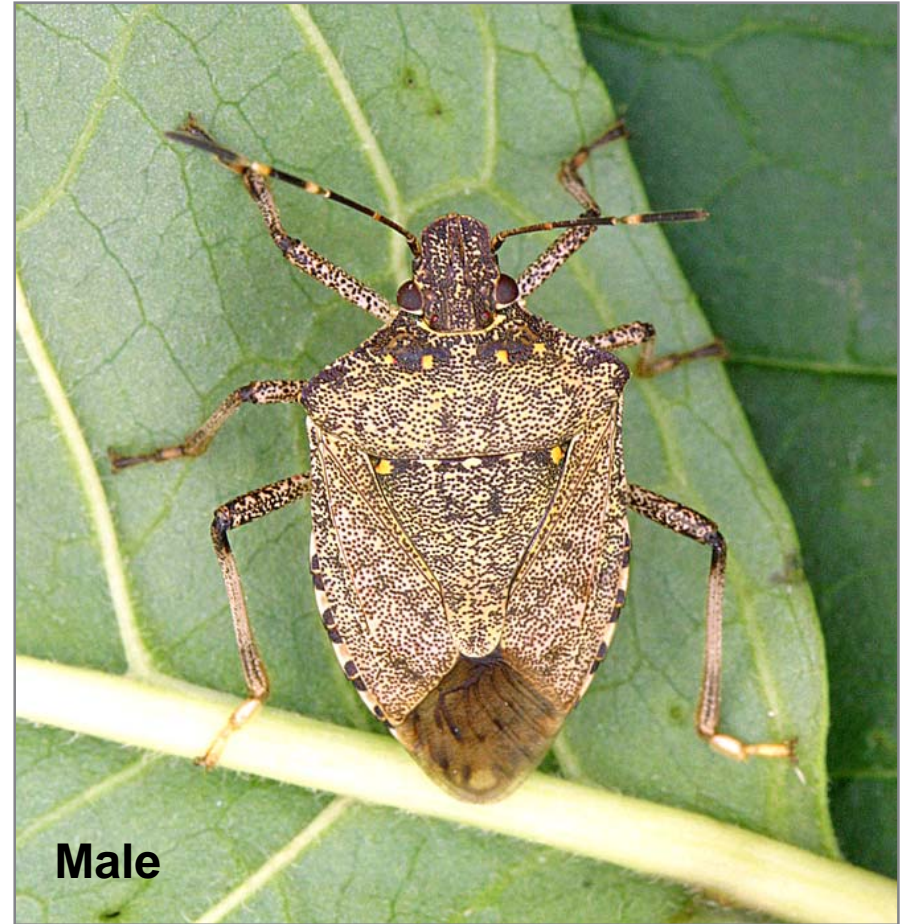
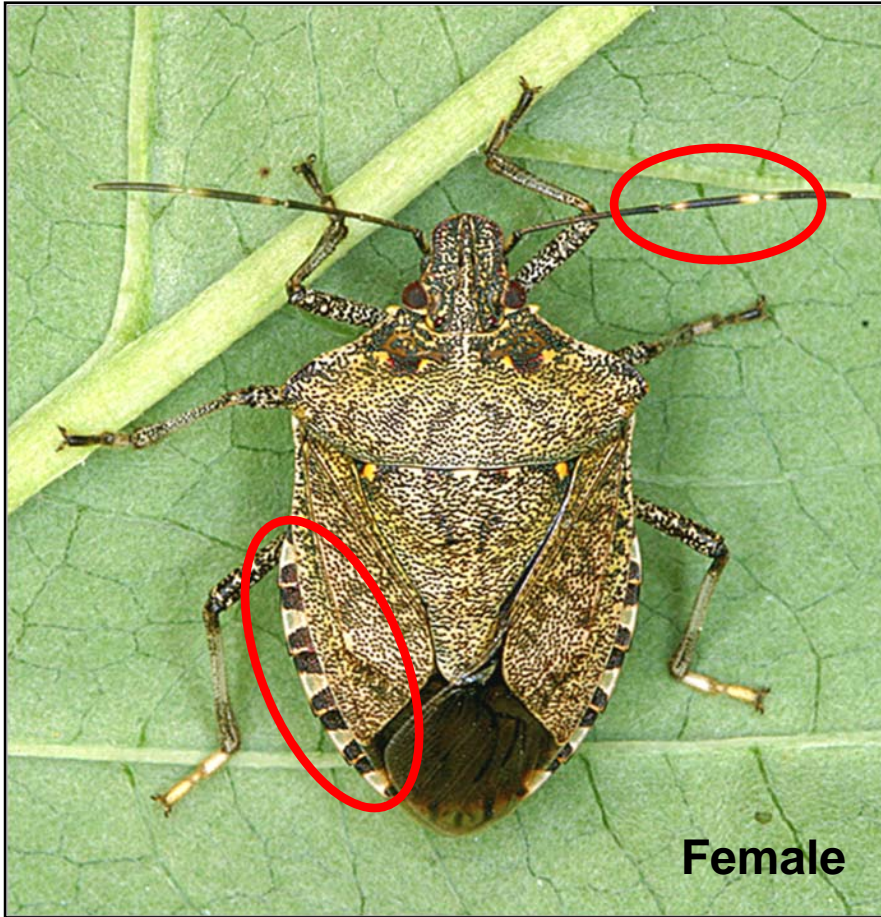
~8.5 mm

5th Instar



~12.0 mm

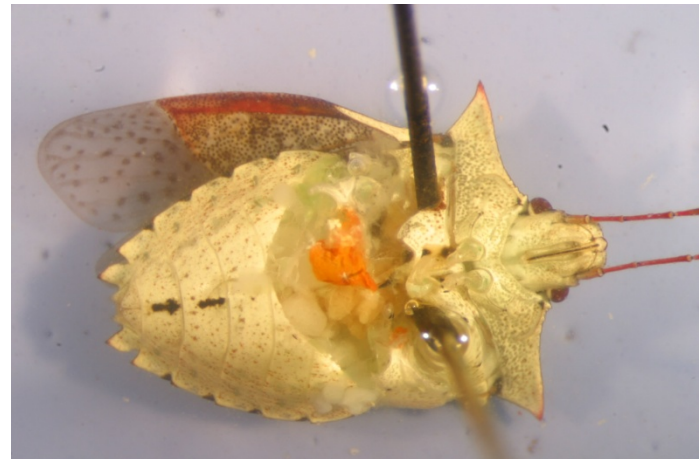
Adults

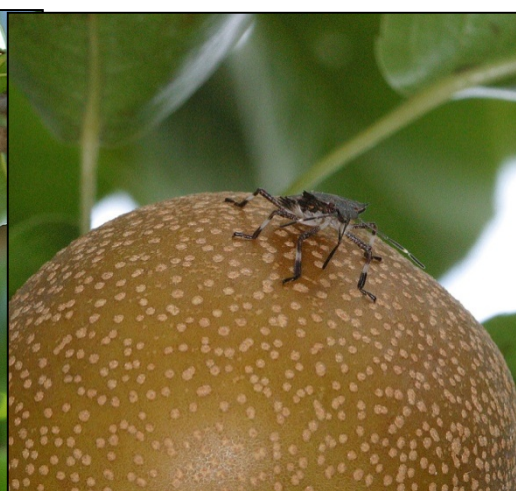
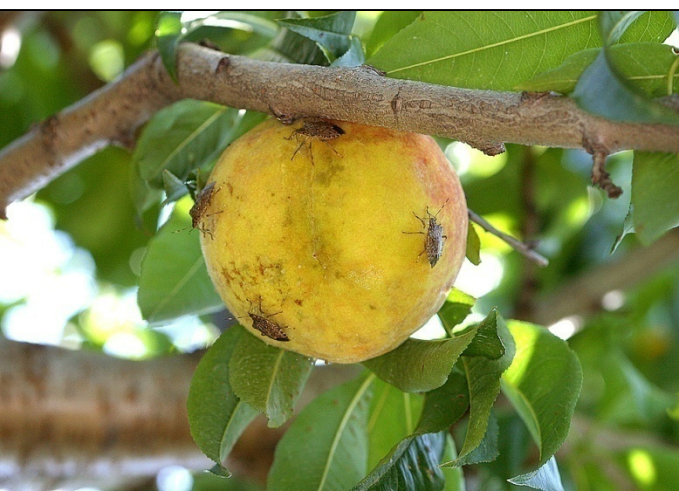


12-17 mm in length, 7-10 mm in width

Development

- Lower dt – 13.94 °C
- Egg – 53.3 DD
- Total – 537.6 DD
- Preoviposition – 147.7 DD







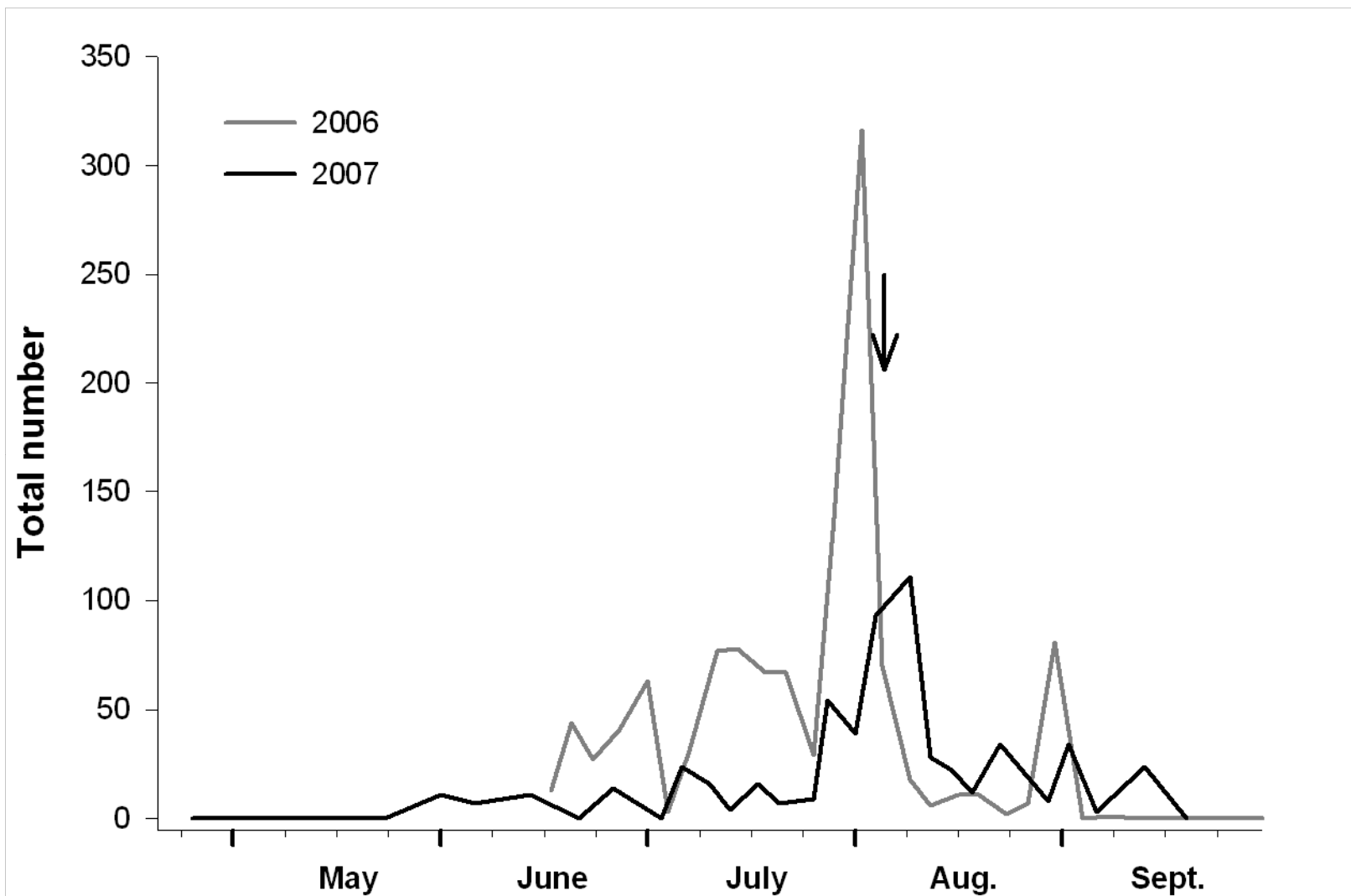


Photo's courtesy of Gary Bernon, 2004



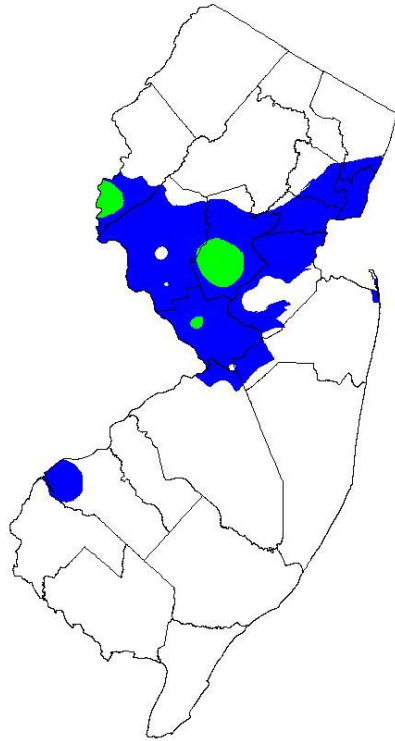
Photo's courtesy of Tracy Leskey 2010

Seasonal Flight Activity

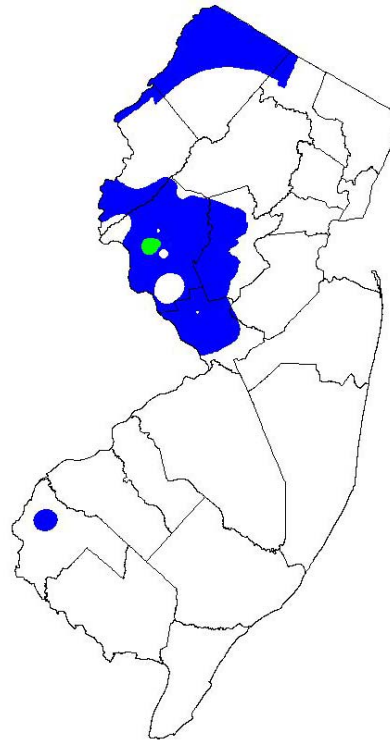


Average Weekly Distribution of BMSB in New Jersey

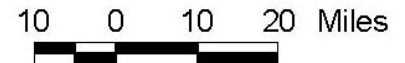
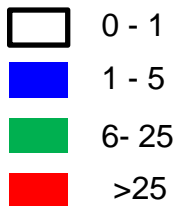
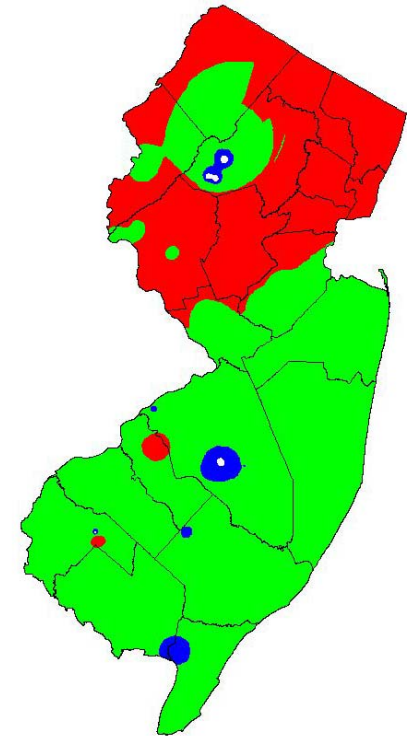
2008



2009



2010



Aggregation Behavior



Aggregation Pheromone

- *H. halys* pheromone unavailable
- Attracted to an isomer of the brown-winged stink bug pheromone (Khrimian, 2005)
- Good for monitoring (Khrimian et al. 2008)



Plautia stali



What Trap Style to Use?



Football Trap



**Pyramid Trap
(large/small)**

Research Plans for 2011

- Insecticide Trials
 - Laboratory
 - Apple
 - Peach
 - IR-4 Biopesticide trial
- Work in Peppers
 - Varietal screening
 - Monitoring tools
 - Damage assessments
- Homeowner Work
 - Mass Trapping Study



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NJAES Hatch & Multistate funds

Cooperators

Rodale Institute
Lichtenwalner Farms
Peaceful Valley Farms

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Move Over Bed Bugs; Stink Bugs Are the New Bug in Town

Smelly Stink Bugs Impervious to Pesticides, Spreading Rapidly

By CHRISTINA CAPATIDES and TAHMAN BRADLEY

Sept. 26, 2010



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Meet Stink. He's got glands that release a foul, musty odor when he's mishandled or feels threatened.



He's just in from Asia and he's disguised as a small brown shield. But don't let that fool you. He's not the one who'll need to be intercepting attacks this Fall.

Rather, while the people of the Northeast have been distracted over the past several months -- with their eyes fixed on their beds -- Stink and his friends have been letting themselves in through the back door -- your vents.

And once the stink bugs are in your home, it's unfortunately very difficult to get them out.