

BMSB Expansion in Georgia

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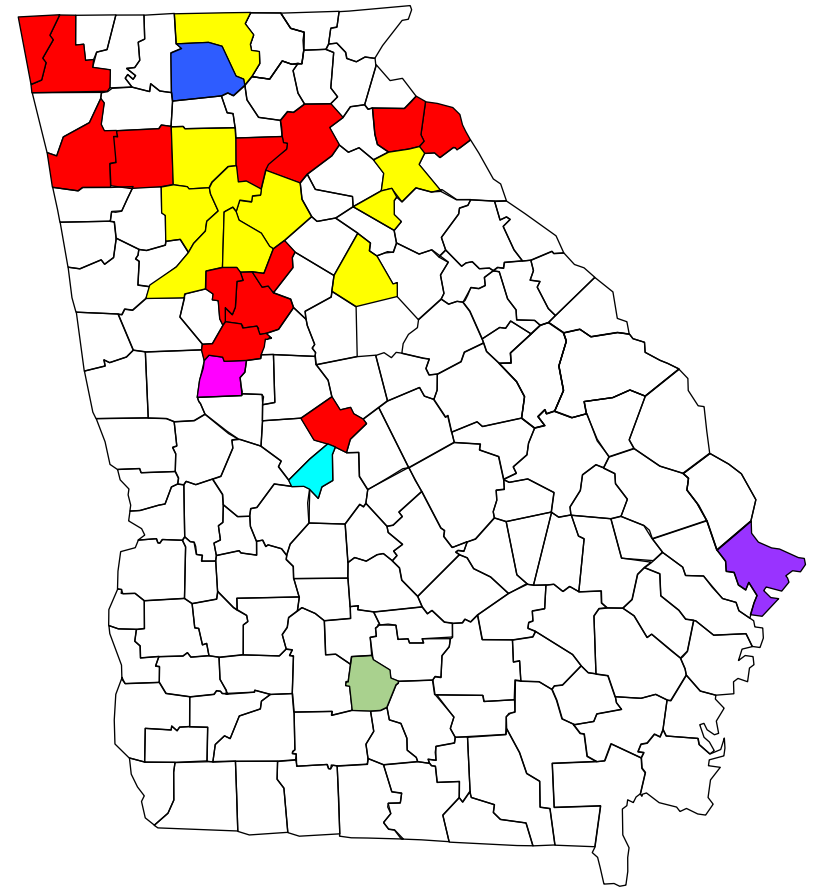


Current Distribution of BMSB in Georgia by County

Detected in 25 counties

2011: Urban pest management professionals began reporting overwintering aggregations in the Atlanta Metro area

- 2014: reproducing BMSB populations in Atlanta Metro area and in cotton, pecan, catulpa, and ornamental hibiscus in other northern counties
- Jan. 2015: authorities at the Port of Savannah disclosed detection of BMSB in international cargo shipped out of Georgia
- 2015: BMSB populations damaging apples in Gilmer County in the Blue Ridge Mountain region
- 2015: reproducing BMSB populations in soybean in Pike County in the Piedmont region
- 2015: reproducing BMSB populations in peach in Peach County in the Coastal Plain region (bordering Piedmont Region)
- Adults detected
- I-75 Hitchhiker



Status: limited establishment, major nuisance pest, reproductive populations in some agricultural crops

BMSB Trap Capture in Orchards Late-season in Peach County in 2015

Orchard	Mean no. of adults per trap	Dates captured	Notes
Peach	2.8	9/25 to 10/29	Adults & nymphs on peach trees in mid-Aug.
Asian pear	0.9	9/25 to 10/29	Trees not sampled
Pecan	5.5	9/25	Trees not sampled; BMSB found on crape myrtle

MDT pheromone first 2 weeks

MDT + BMSB aggregation pheromone remaining weeks

In 2016, we will use pheromone-baited traps to monitor BMSBs and will sample plants to determine BMSB density and percent damage in various orchard and row crops in Georgia.

Occurrence of stink bug egg parasitoid species attacking *E. servus* in woodland habitats, an early-season (ES) crop, and late-season (LS) crops.

Parasitoid	Parasitoid species frequency (%)		
	Woodland (44/827)	ES Crop (210/4583)	LS Crops (62/1237)
<i>T. podisi</i>	53.1	92.3	80.2
<i>Anastatus</i> males	15.0	0.7	.
<i>A. redivii</i> females	12.1	.	.
<i>T. brochymenae</i>	8.6	4.1	6.6
<i>Ooencyrtus</i> sp.	4.2	1.1	1.1
<i>T. euschisti</i>	2.8	0.1	0.7
<i>T. edessae</i>	2.1	.	1.0
<i>T. thyantae</i>	1.3	0.6	4.0
<i>A. mirabilis</i> females	0.8	.	.
<i>T. basalis</i>	.	0.8	4.1
<i>G. obesum</i>	.	0.3	2.3

Occurrence of stink bug egg parasitoid species attacking *C. hilaris* in woodland habitats and late-season (LS) crops.

Parasitoid	Parasitoid species frequency (%)	
	Woodland (49/1298)	LS Crops (12/391)
<i>T. edessae</i>	53.3	100
<i>Anastatus</i> males	25.4	.
<i>A. redivii</i> females	13.9	.
<i>Ooencyrtus</i> sp.	6.0	.
<i>A. mirabilis</i> females	1.4	.

Known crop (corn, soybean, cotton, apples, peaches) and non-crop hosts (black cherry, mimosa) of BMSB are common in Georgia. Parasitoids that parasitize native stink bug eggs in these crop and non-crop hosts are known to parasitize BMSB eggs; the two *Anastatus* species attacking eggs of native stink bugs are found only in woodland habitats. In 2016, we will continue to determine host and food plants of BMSB and also to assess parasitism of natural and sentinel BMSB eggs in a variety of plant species/habitats.