

Brown Marmorated Stink bug in Greenhouse and Herbaceous perennial crops

- Present by : Stanton Gill
- Extension Specialist, IPM For Nursery and Greenhouse, University of Maryland Extension
- And Professor – Montgomery College – Landscape Technology Program



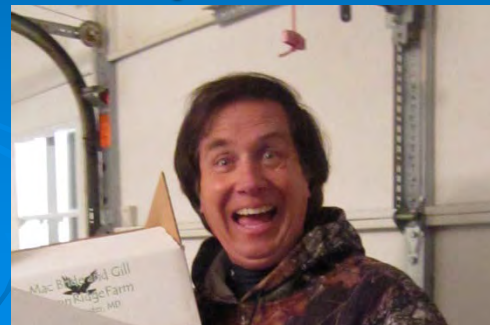

COOPERATIVE EXTENSION SERVICE
UNIVERSITY OF MARYLAND SYSTEM
HURLEY AND GREENHOUSE
CROP MANAGEMENT

UNIVERSITY OF
MARYLAND
EXTENSION
THE STATE COLLEGE OF AGRICULTURE
**Central Maryland Research
and Education Center**
11875 Research Post Road, P.O. Box 21042
Commercial and Environmental Horticulture
4-H Horse Program
Agricultural Experiment Station Headquarters


256A

The IPM Team at the University of Maryland Extension

- Karen Rane – Plant Pathologist who runs the plant diagnostic clinic
- Paula Shrewsbury – Research in IPM and Extension
- Michael Raupp – Research in IPM Landscape and Extension
- Stanton Gill – Extension Specialist in IPM For Greenhouses And Nurseries



Homeowner IPM Team

- David Clement – Pathologist , Extension Specialist, HGIC, University of Maryland
- Mary Kay Malinoski, Entomologist, Extension Specialist, HGIC, University of Maryland

2011 – MNLA Funded Research on Herbaceous Plants

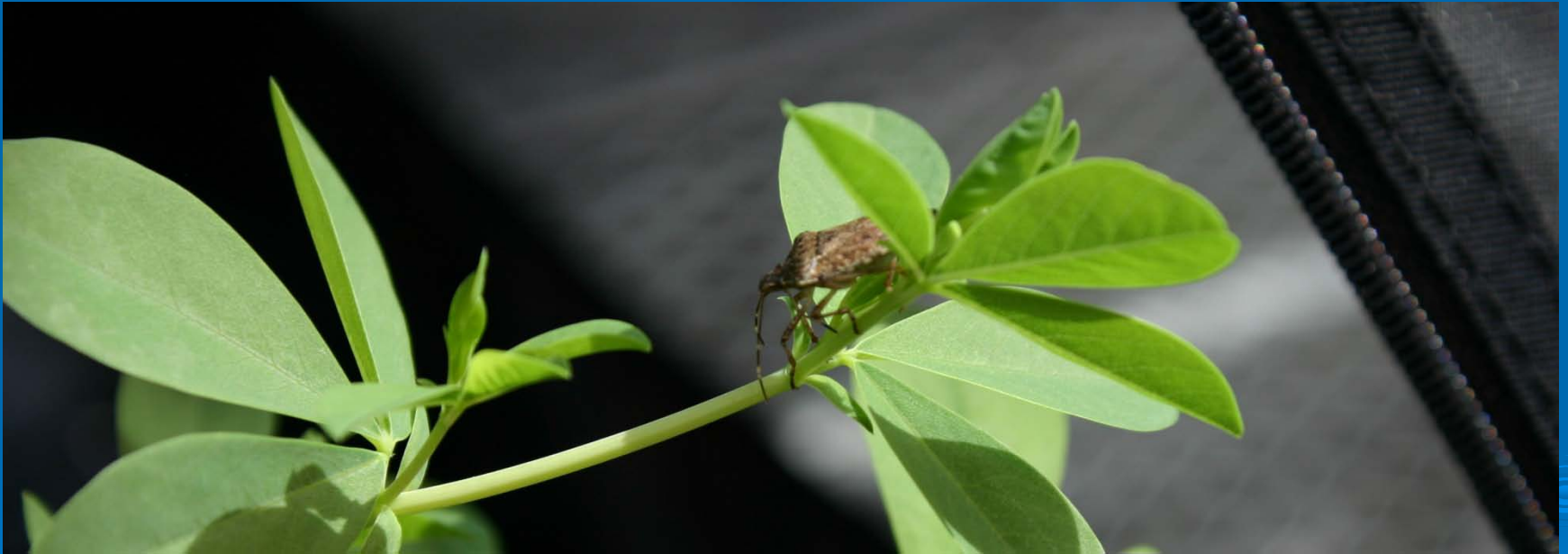


- Petunia
- Garden impatiens
- Snapdragon
- Celosia
- Tomato
- Pepper
- Baptisia
- Heuchera
- Dahlia
- New Guinea impatiens





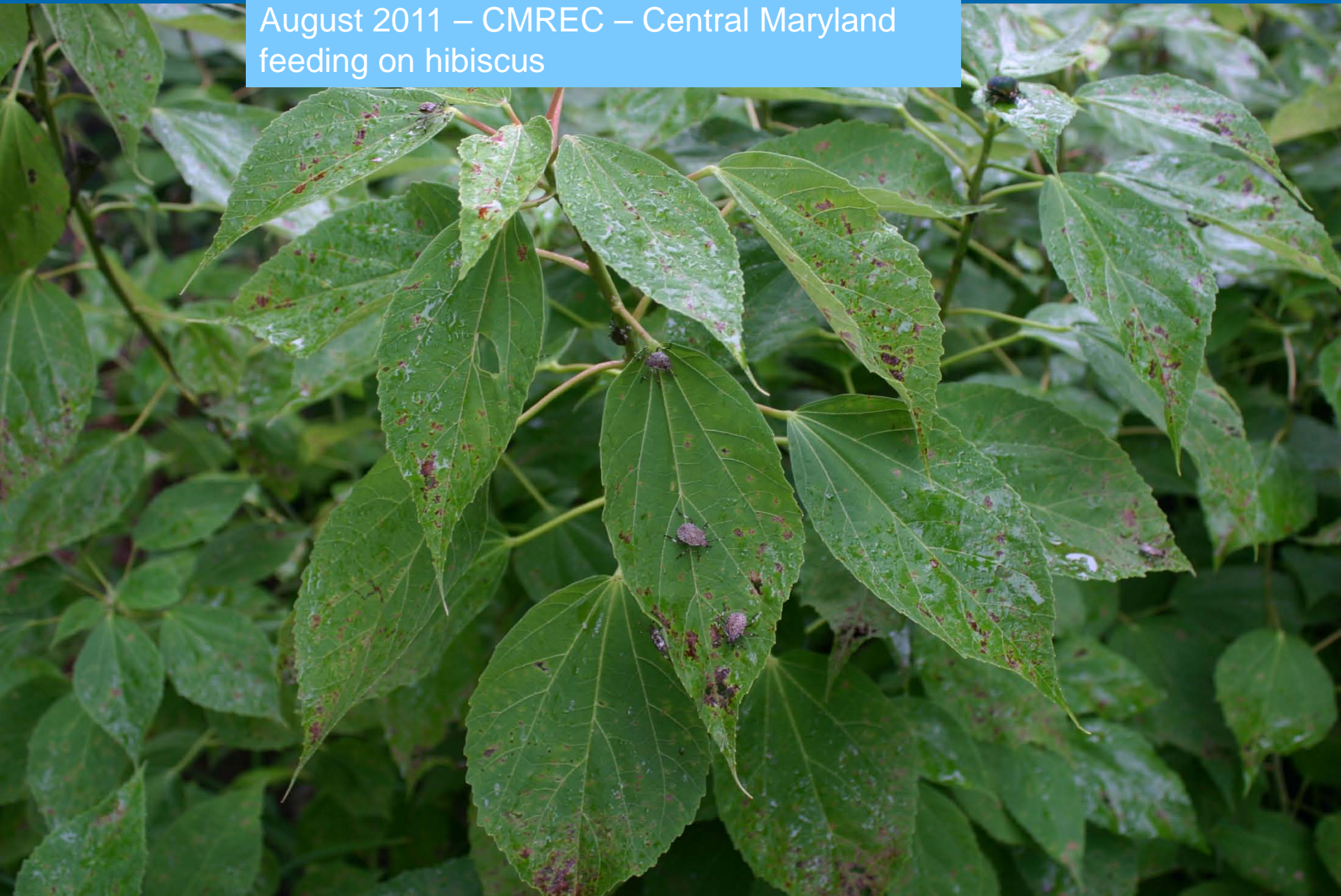
BMSB feeding on Baptista April 25 2011



BMSB feeding on Petunia



August 2011 – CMREC – Central Maryland
feeding on hibiscus





June 2011 - Survey of 125 greenhouse growers in Maryland

- Survey conducted via electronic, and telephone- Sarah Kenny
- BMSB reported in head houses and – adjacent building
- No stink bugs reported in glass, double poly and polycarb greenhouses in the state

BMSB Greenhouse and Herbaceous Perennial Nursery Survey

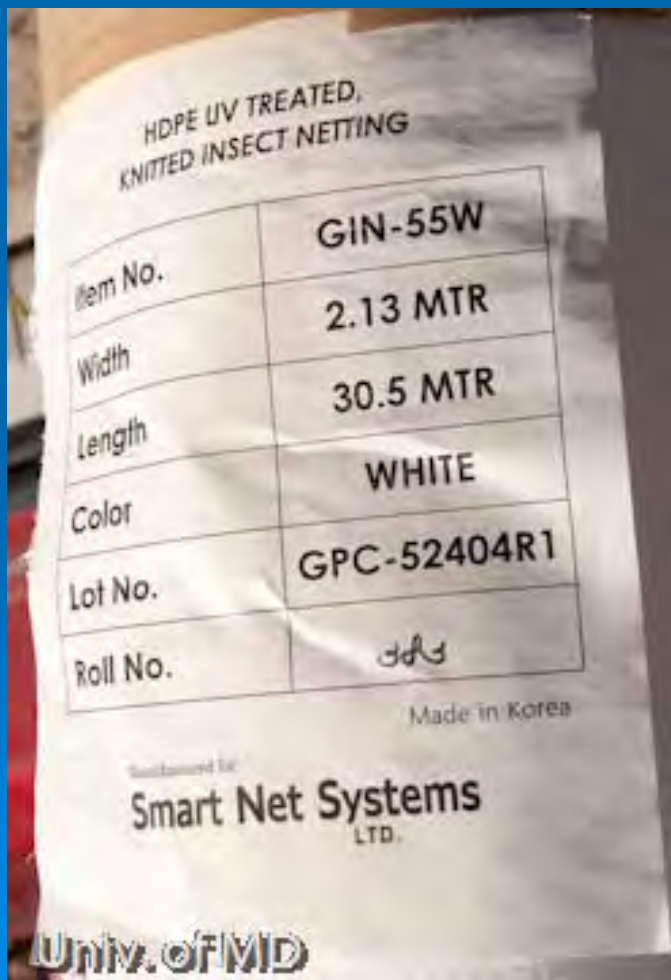
Compiled by :

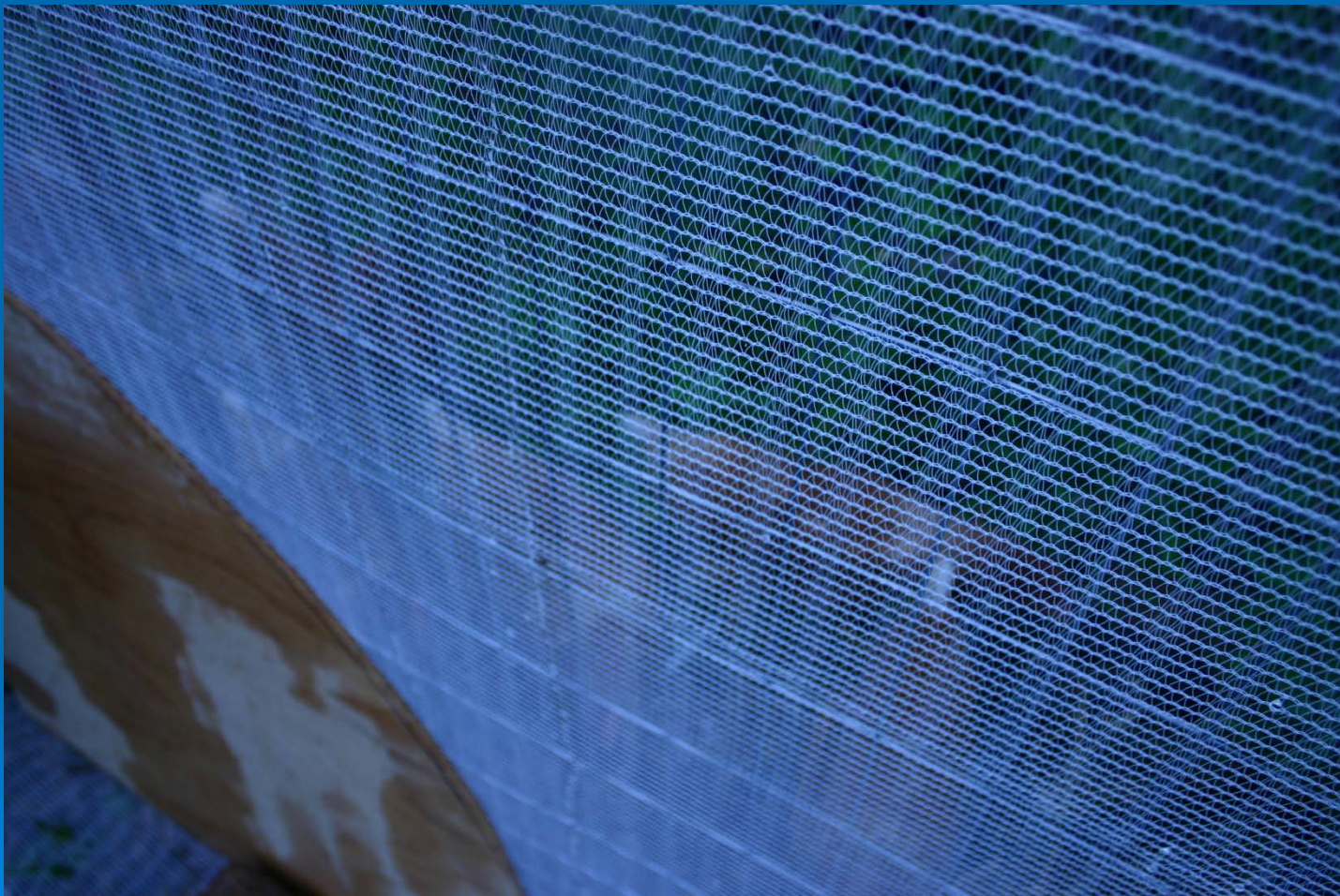
Stanton Gill, Extension Specialist, Central Maryland Research and Education Center,
University of Maryland Extension, June 2012 – Sgill@umd.edu

And Suzanne Klick, Lead Technician, CMREC, University of Maryland Extension
June 12 2012

GREENHOUSE	SIZE	CROPS	COVERING	BMSB INSIDE	BMSB INSIDE on Plants	BMSB OUTSIDE	BMSB OUTSIDE on Plants	COMMENTS
Catoctin Mountain Growers (5/17/12)	14 acres	Bedding plants and hanging baskets	Glass	No	No	No	No	
Catoctin Mountain Growers (5/22/12)				Yes	One on gerbera flower - not feeding	No	No	As of 5/31/12 no others seen
Bell Nursery – Burtonsville 5/17/12	11 acres	Bedding plants and perennials	Glass	No	No	No	No	
Bell Nursery – Richmond VA 5/17/12	10 acres	Bedding plants and perennials	Glass	No	No	No	No	
Pogo Organics	¼ acre	Tomatoes and peppers		No	No	Yes	On peppers/tomatoes	
Fehrs Greenhouse	1 acre	Annuals and perennials	Poly	No	No	No	No	
Terra	2 acres	Annuals		No	No	No	No	5/31/12
Cavano's 5/30/12	5 acres	Perennials annuals		No	No	No	No	
Farmhouse Flowers and Plants	1 acre	Cut flowers						5/21/12 - I've only seen a few, and not enough to even notice if they are causing any problems. The numbers seem to be way down from last year.
Greenway Greenhouses	3 acres	Annual flowers and vegetable transplants and herbaceous perennials	poly	No	No	No	No	BMSB found in residential house and head house – none in greenhouse

Smart Net – British Columbia distributed by Oesco - Insect/Netting Mess to protect

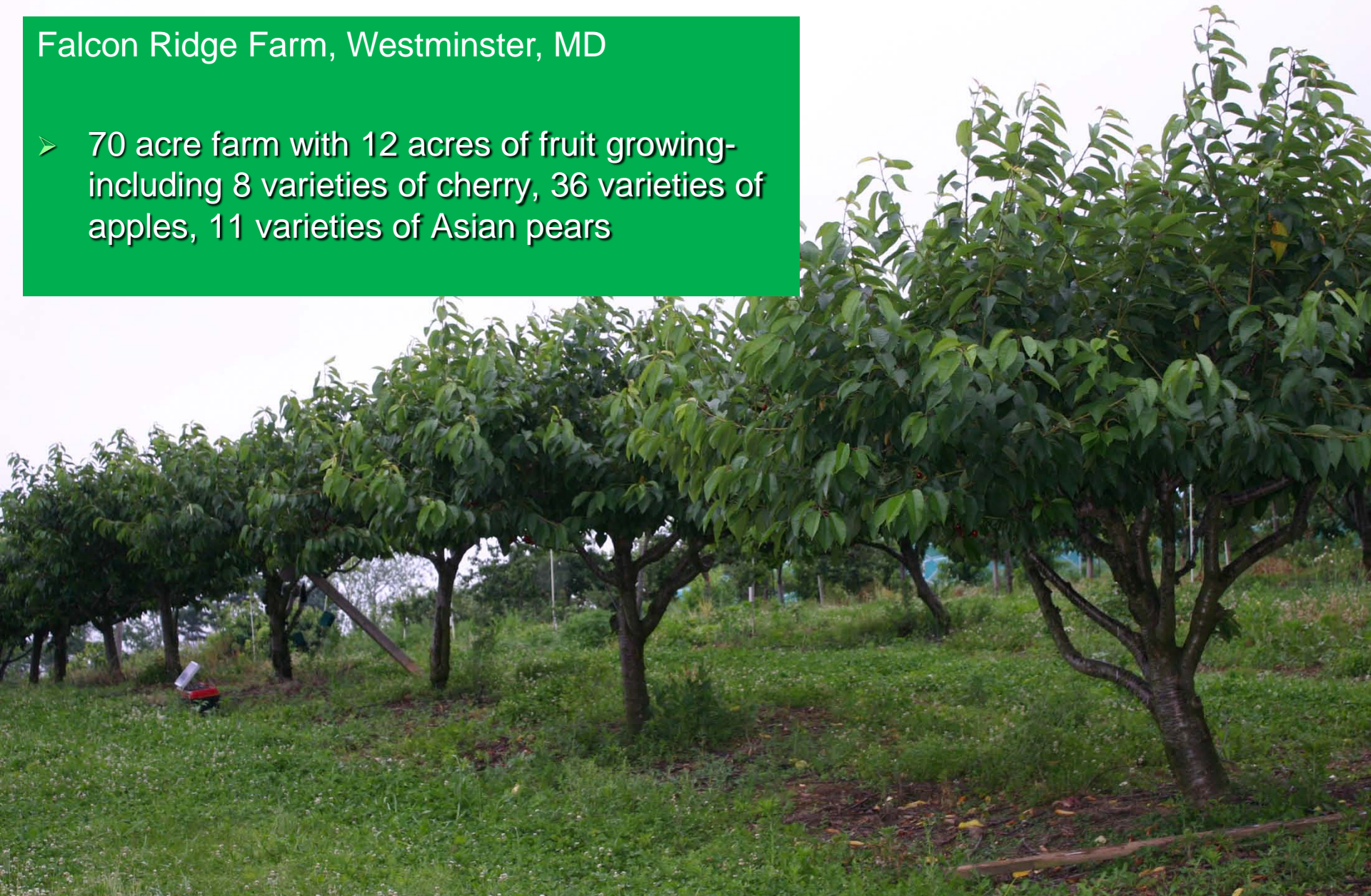




Farm involved in Project

Falcon Ridge Farm, Westminster, MD

- 70 acre farm with 12 acres of fruit growing- including 8 varieties of cherry, 36 varieties of apples, 11 varieties of Asian pears







Black lights placed inside high tunnels and outside

- Monitored from early May through 1st week of June

date	outside	Inside
5-May	3	0
12-May	18	0
19-May	6	0
26-May	91	0
3-Jun	3	0



May 25, 26 and 27

- Temperature started in the mid 80 and then went to 90 F with rain. The BMSB adults counts in black light traps skyrocketed.
- The number of adult bugs on the windows on the barn of the orchard rocketed















Lapin Cherries

6/12/2012

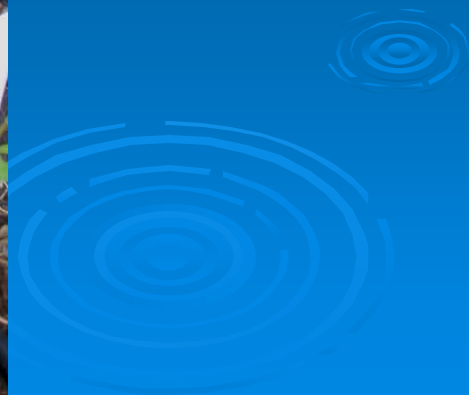


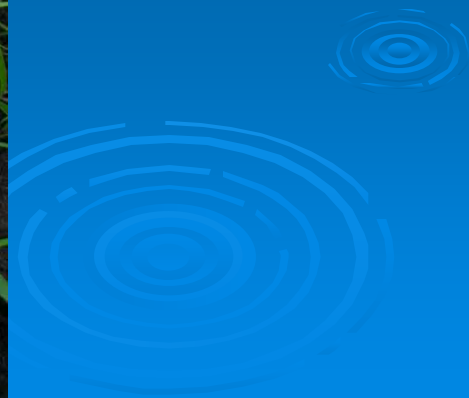




Harbinger
apricot in high
tunnel























Cost

- OESCO – Smart Net
– 15 ft by 300 ft -
\$290
- OESCO 100 ft by 7 ft
rolls - \$47.80
- 12 ft by 300 ft - \$239

- Cable wire \$68.00 –
600 linear feet

High Value crops

- Sweet cherries - \$5.00/pt, Rainer \$6 /pt.
- Average 30 – 50 pints per tree – 3 - 6 year old trees.
- 100 ft high tunnel – 63 trees
- Tomatoes and Peppers
- \$3.00/lb June through October
- Apricots – 30 – 40 lb per tree- \$3.50/lb
- Takes two year to three years to cover cost of high tunnel and netting

What have we seen so far?


In 2011 – lots of BMSB.

In 2011 Extremely low populations of BMSB in cherries, apples, Asian pears.

No significant damage on unprotected fruit (Cherries, Asian Pears, Apples, Apricots) in Orchard compared to high tunnels

No damage to black raspberries
in 2012 so far. Tough year for
BMSB



A photograph of three orangutans sitting on the ground in a lush, green forest. They have reddish-brown fur and are looking towards the camera. The background is filled with dense foliage and ferns. Two text boxes are overlaid on the image: a yellow one on the left and a blue one on the right.

Can we conquer Brown
Marmorated stink bugs
in this century?

I think we have tools
developing that can
be used to reduce
their damage