

2012 New Hampshire Small Fruit Pest Problems

Alan T. Eaton

UNH Cooperative Extension

Sept 12, 2012

Phyllophaga sp.



Asiatic garden beetle



Alan Eaton June 16, 2012 (both)



A. Eaton 6/25/12



A. Eaton 6/25/12

**SWD pupae have spines on their spiracles (breathing tubes).
Background lines are 1mm apart.**



Cheryl Smith Sept. 13, 2012

**The spicules on this species (not SWD)
don't spread 360 degrees**



Cheryl Smith Aug. 23, 2012

**In several highbush plantings,
traps failed to detect SWD's
before significant fruit
injury occurred.**

**In others, they
worked well.**



A. Eaton 8/19/2012

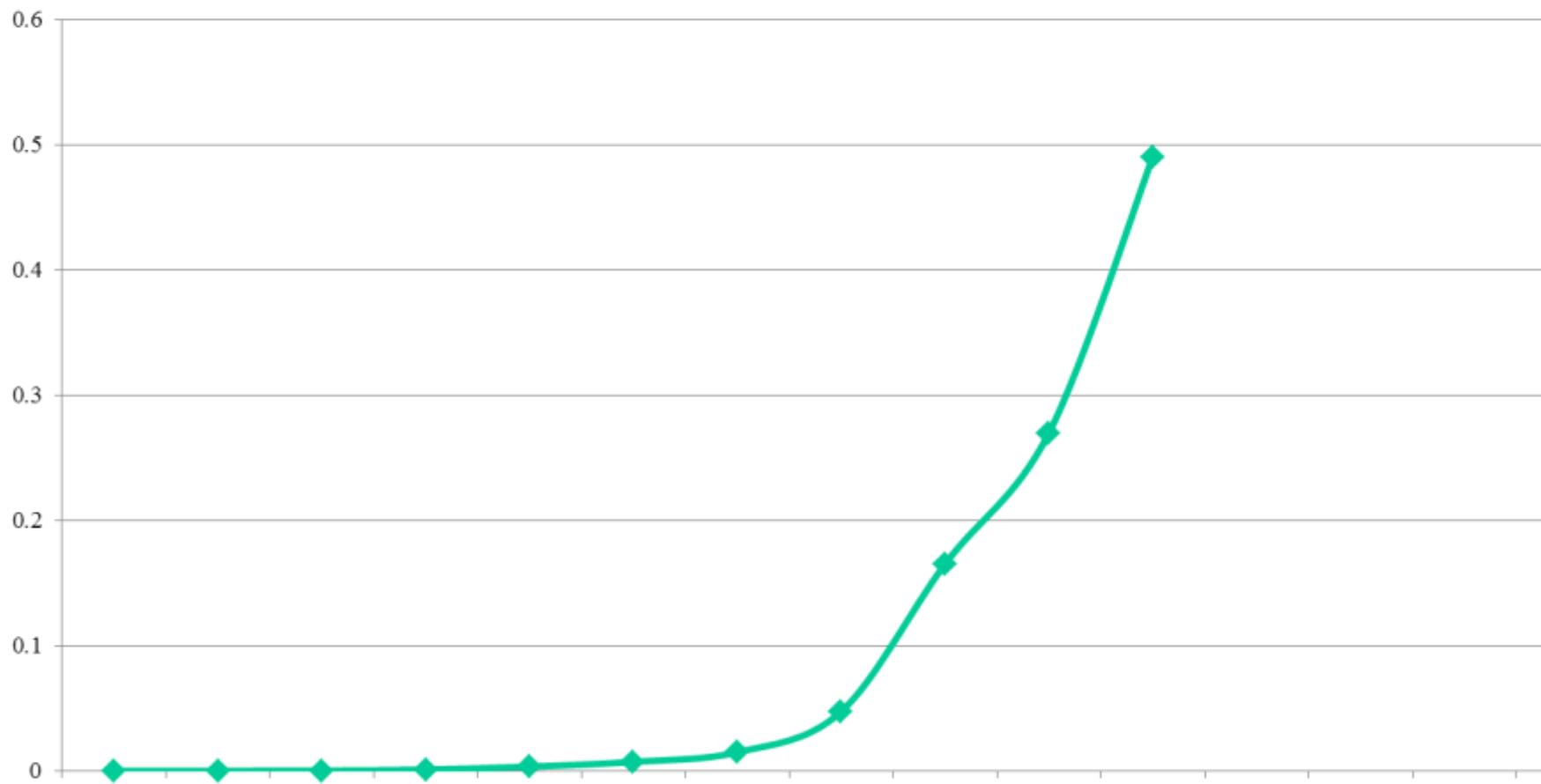


Alan Eaton Sept 7, 2012

A. Eaton Sept. 9, 2012



2012 SWD (Fruit Fly) Weekly Catch as Percentage of Season Total



The “June” crop of strawberries was not attacked by SWD in 2012.



A. Eaton June 1989

Alan Eaton 6/27/2011





A. Eaton 8/14/2012

A. Eaton Aug. 14, 2012



A. Eaton 7/14/2012

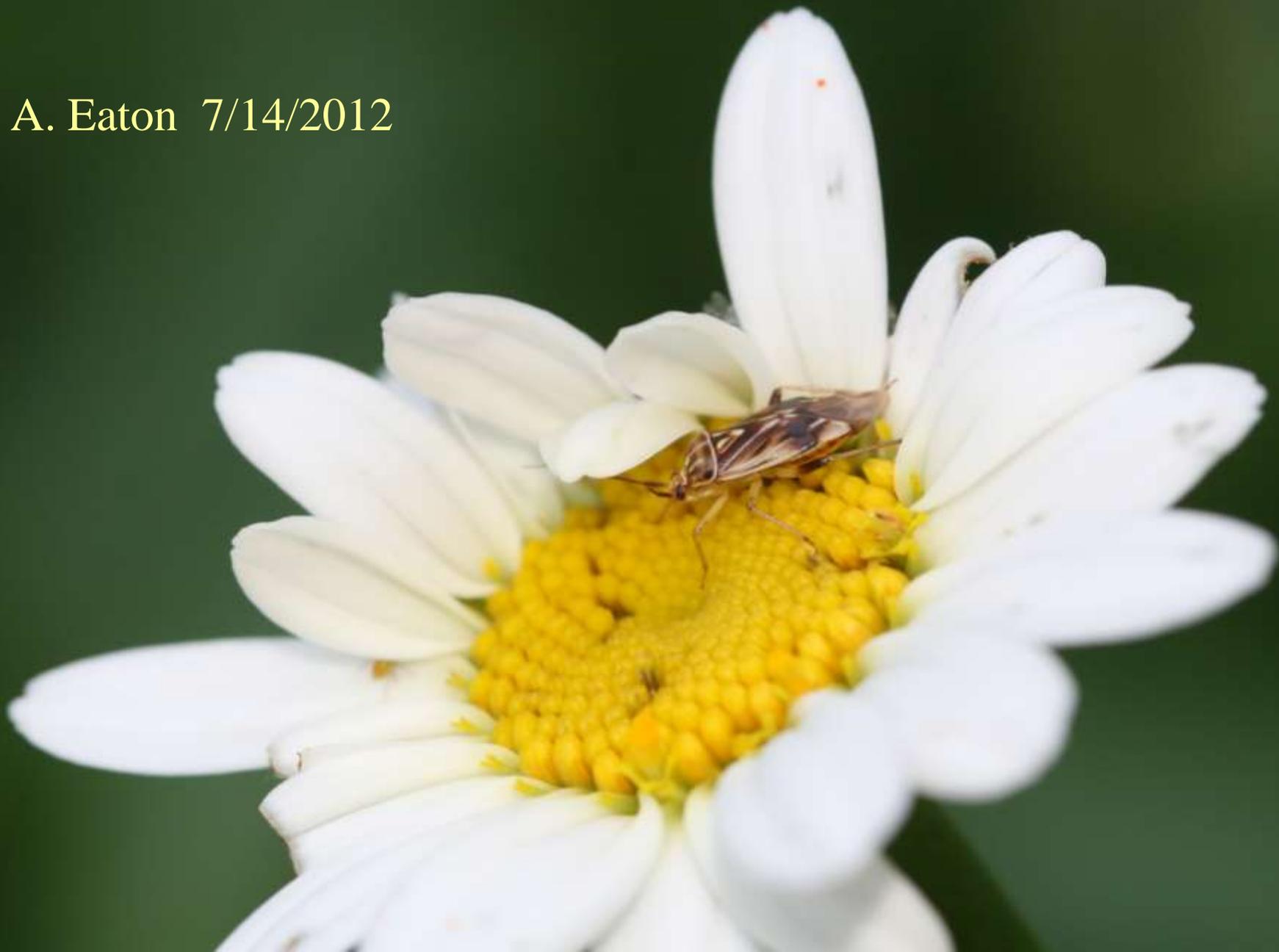


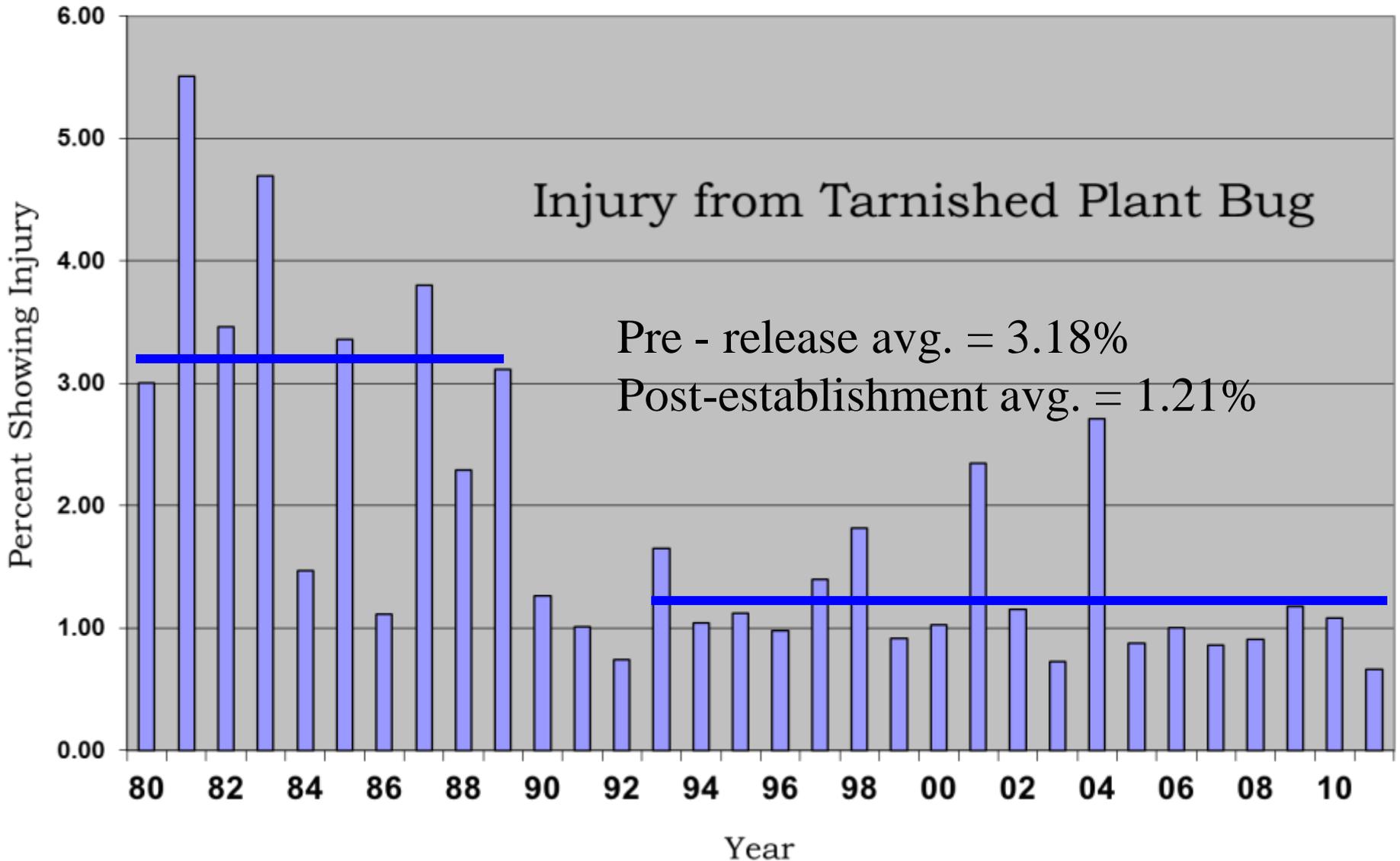
Photo: Scott Bauer USDA



New Hampshire Apple Harvest Evaluations

1980 - 2011

Alan Eaton UNH Coop Extension



Blueberry Stem Borer

Oberea myops Haldeman

Blueberry stem borer is a beetle also known as the rhododendron stem borer and the azalea stem borer. It is in the family Cerambycidae [long-horned borers]



http://extension.unh.edu/resources/files/Resource002142_Rep3156.pdf



only about 3mm (1/8 inch) wide. It pupates in the tunnel in spring, and the adult beetle usually appears in New Hampshire about the third week of June. Host plants include blueberry, rhododendron, azalea, and mountain laurel. The

Using Traps to Monitor Blueberry Fruit Fly in New Hampshire



Blueberry fruit fly, *Rhagoletis mendax* Curran is a native insect that looks almost identical to apple maggot, except that it attacks blueberries, not apples. It is usually slightly smaller than apple maggot, with the adults typically

http://extension.unh.edu/resources/files/Resource002077_Rep3071.pdf



New Hampshire farms, zero blueberry fruit flies were trapped at eight sites. Four had 100 or more flies trapped over the season, and one had over 1000.

Identifying Moths in Traps for Sweet Corn Pests

We recommend control sprays and treatment intervals based on the number of pest moths collected in pheromone traps. Because large changes in pest density may occur, literally overnight, we suggest checking traps twice a week (more frequently if you prefer). By learning to identify your own trap catch, you can immediately respond to sudden changes in pest populations. Corn earworm and Fall armyworm are the best ones to monitor.

It is easy to identify the corn earworm and fall armyworm moths using this guide. With a little practice.

[http://extension.unh.edu/resources/files/
Resource002122_Rep3133.pdf](http://extension.unh.edu/resources/files/Resource002122_Rep3133.pdf)

Moths have two pairs of wings. The photos below show moths with wings unspread, as you will find them in your traps. In some cases, seeing the hind wing is helpful, so you'll move the front wings aside. Once you are familiar with identification, this should not be necessary.

Identifying Common Sweet Corn Caterpillars



Left - Corn earworm caterpillar
Right - Fall armyworm caterpillar

Corn earworm, Fall armyworm, and European corn borer caterpillars can all infest the ears of sweet corn. **The most reliable way to identify them is to examine the heads** of the caterpillars. Corn earworm caterpillars have a uniform light yellow-brown head. Fall armyworm caterpillars have distinctively marked heads—when viewed from the front, there is an upside down white Y which divides the head into three regions. The low (middle) region is light; and the left and right regions are dark. This is visible even on very small caterpillars. European corn borer caterpillars have dark brown

http://extension.unh.edu/resources/files/Resource002121_Rep3132.pdf

with a pattern of small darker spots on each segment.

SWD Trapping in New Hampshire Highbush Blueberries

Alan T. Eaton

UNH Cooperative Extension

Sept 12, 2012



0.4 acre highbush blueberry patch
UNH Woodman Farm

A. T. Eaton Sept 7, 2012



A. T. Eaton 9/7/2012

- **Picking began about July 14**
- **Set 2 SWD traps (New Engl. project) July 18**
- **Counted trap catch weekly**
- **Changed bait weekly**
- **Picked 50 ripe fruit wkly (5/bush x 10 bushes)**
- **Pick dates: 7/18, 7/26, 7/31, 8/8, 8/14, 8/22**
- **All remaining fruit were spoiled by 8/26**
- **Held fruit 14 days for emergence in cages**

Picking Date	<u>Emergued Drosophilids</u>		# SWD's in 2 Traps
	SWD	Other	
July 18	0	0	0, 0
July 26	0	0	0, 0
July 31	1	0	0, 0
Aug 8	52	1	0, 0
Aug 14	131	26	0, 0
Aug 22	67	11	30, 81

Typical fruit appearance on Aug 19th



A. Eaton Aug 19, 2012

**These bushes had LOTS of fruit.
They were very open... not dense.**

**We had more success in plantings
with more dense foliage.**