Northeast IPM Small Fruit Working Group Meeting
Fairlee, Vt., October 1, 2013
SWD Related Projects

- Monitoring/early detection of adult SWD
- Alternative hosts and landscape effects
- Chemical control of SWD
- Testing of alternative lures for adult traps
- Fixed sprayer system in HT’s to control SWD
- Use of exclusion netting to manage SWD in blueberries
- Interactions between SWD and other Drosophila species and sour rot in grapes
- Overwintering success of SWD
- Assessment of bacterial gut symbionts of fruit-infesting Drosophila
- Evaluation of potential chemical disrupters against SWD adults
- Preliminary field assessments of reflective plastic mulch to reduce SWD infestation in DN strawberries
ONGOING IPM PROJECTS UNRELATED TO SWD

- Relationship between plant diversity and pollination and biological control in strawberry production
- Japanese Beetle-entomopathogenic nematode project
- Grape leafroll disease and grape mealybug control
- Grape Berry Moth Biology and Management
- Breakdown of immunity to WPBR in black currant cultivars
- Powdery mildew research
- Bird damage assessment research
Additional Small Fruit Projects/Activities Include:

- High Tunnel Production of Raspberries and Blackberries incl. production practices and cultivar evaluation
- Day Neutral Strawberries and Low Tunnel Production Production
- Berry Fertility Project - Grower/Educator Guide and website will be available in 2014
- Berry Farm Business Mgmt. Summary project
- Planting date and cultivar assessment of DN strawberry varieties
- Juneberry production work
- Elderberry cultivar assessments
- Weekly Berry Call
- Sprayer calibration workshops
- Berry Pruning workshops and tours
- Cooling grant project
- Continued support with GAP’s certification
BIO-CONTROL FOR
BLACK VINE AND STRAWBERRY ROOT WEEVIL

5/7/13
Earliest damage starts in large patches, see inside yellow circle

5/7/13
3 WEEVIL GRUBS, 1 JB
GRUB
5/7/13
ALFALFA SNOUT BEETLE INFESTED AREAS IN NORTH AMERICA

Elson Shields
Prof of Entomology

Tony Testa
Research Support Specialist
2 species of nematodes collected from farms in NNY:

- *Steinernema carpocapsae* (SC)
- *S. feltiae* (SF)

Have persisted >7 years under field conditions in NNY.
Before field application, nematodes are washed from the waxworms and sawdust.
FILTERED TWICE TO AVOID CLOGGING BOOM SPRAYER.
Nozzles and screens are removed from sprayer.

First application to strawberries was made 9/5/13

Samples will be taken in mid October
An upland production system in the snow belt of Lake Ontario has BVW.

May 2012, cranberry grower reared 64 billion infective nematodes and treated 160 acres at 400 million per acre at a cost of $120 per acre for the nematodes.

August 2012, nematodes persisting at high levels and adult weevil numbers had dropped.

May 2013, 4800 core samples taken. BVW larvae found in <1% of the samples and nematodes were found persisting at moderate to high levels in all sample locations, 365 days after application.

July 2013, evening sweeping for adult BVW failed to collect a single adult across the entire farm.

In alfalfa fields across NNY, these nematodes persist for more than 7 years under field conditions. The question is whether they will persist in a cranberry field in a similar manner.
EXCLUSION NETTING IN BLUEBERRIES

[Image of two people working on a netted area in a field]
FIXED SPRAYER SYSTEM
HONEYBERRY/JUNE BERRY NURSERY
Honeyberry (Haskap) Fruit Problem?
JUNE BERRY FRUIT PROBLEM!?
ELDERBERRY LEAF SPOT?
ELDERBERRY VIRUS?
RASPBERRY LEAF SPOT OR ANTHRACNOSE?
HT
STRAWBERRY
FRUITING
STEMS BENDING
STRAWBERRY WEED PROBLEM
STRAWBERRY PHYLLODY
STRAWBERRY APHID?
STRAWBERRY LEAF PROBLEM?
MESOTRIONE INJURY?
LEAF BLOTCH?
GREEN PETAL MLO
FLOPPY BLUEBERRY FOLIAGE
BLUEBERRY CANKER?
GALLS ON LOWBUSH BLUEBERRY LEAVES
BLUEBERRY PROBLEM?
BLUEBERRIES, FROST
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- All Berry Call-In participants!