Invasives in Maine Agriculture

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Spotted-wing Drosophila

*Drosophila suzukii*

- Pest of raspberries, blueberries, late strawberries
- Eastern region crop loss > $27 M/yr

Photo: Martin Hauser, CA Dept Food and Agric
Spotted Wing Drosophila

- Rapid population increase-multiple generations/yr
- Wide host range
- Wide distribution
- Overwinters between stones, under leaves, in buildings
- Large economic impact
Managing SWD

Exclusion Netting (Alnajjar et al. 2017)

Monitoring Trap

Natural Predation (Ballman et al.)

Harvest Early

Total SWD / trap

Date

log_{10} (insects / trap) captured
Brown Marmorated Stink Bug

*Halyomorpha halys*

- Native to Asia
- Fruit/veg pest
- Nuisance pest in buildings
Brown Marmorated Stink Bug

• Detections in trailers and homes in ME

• Invades structures in fall.
• Transported on vehicles, trailers, containers
Allium Leafminer

*Phytomyza gymnostaoma*

- Alliums: leeks, onions, chives, garlic
- Native to Germany. Economic pest in Europe.
- Found in PA (2015), NJ

Adult egg-laying and feeding punctures

Sven Spichiger

3 mm
Allium Leafminer

Larva

Curled and distorted leaves
(photo by GardenFocused.co.uk)

Pupae in garlic (photo by Syston Allotment Society Newsletter)
Swede Midge

*Contarinia nasturtii*

- Found in 7 states and 6 CA provinces (including NY, VT, MA, Quebec)
- Deformed, unmarketable crucifer crops (broccoli, cabbage, cauliflower)

S. Ellis, USDA APHIS PPQ
Daylily Leafminer

*Ophiomyia kwansonis*

- Daylilies
- Found from TX to NY. Unconfirmed report in ME
Spotted Lanternfly

*Lycorma delicatula*—native to Asia

- Found in PA 2014
- Feeds on 40 species of trees and ornamentals such as grapes, peaches, apples, dogwood, maples, walnut, oak, and pines
- PA banned transport of firewood, outdoor lawn equipment, trucks, RVs from infested locations
Dickeya spp.

- Bacterial pathogens of potato.
- ‘Blackleg’ symptoms expressed under warm (> 77°F), wet conditions.
- Spread via tubers—impact on seed potato industry
- *D. dianthicola* widespread. *D. solani* not yet found in N. A.
Boxwood Blight

*Calonectria pseudonaviculata* and *C. henricotiae*

- Fungal pathogen
- Spreads readily from nursery plants to susceptible hosts in landscape
- Regulated in PA

Microsclerotia survive years in soil and plant debris
Mile-a-Minute Vine

*Persicaria perfoliata*
- Herbaceous annual climbing vine
- Colonizes open and disturbed areas
- Seeds dispersed by wildlife, water, equipment, nursery stock
- Found VA to MA

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Thanks!

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