

Empire State Fruit and Vegetable Expo - 2012
Syracuse, NY

Title of session: Plasticulture strawberries

Speaker: Dr. Greg Loeb, Department of Entomology, Cornell University

Title of talk: Arthropod pest management in day neutral strawberries: focus on tarnished plant bug and spotted wing drosophila

Summary: The critical arthropod pest management issues for day neutral strawberries can be different from those issues for June-bearing varieties. In many cases, pest pressure is reduced due to the short duration of the planting (one or maybe two seasons) and the use of plastic (e.g. root weevils, strawberry rootworm, white grubs, spittlebug). However, several arthropod pests may be more of a problem with day neutral production. In particular, I want to focus on tarnished plant bug, a familiar pest to strawberry growers, and spotted wing drosophila, a new invasive fruit fly pest that may prove particularly problematic for the late summer harvest of day-neutral strawberries.

For both tarnished plant bug and spotted wing drosophila, I will present information on basic biology and identification, type of damage they cause, monitoring and management options including cultural, biological and chemical approaches. Here are some of the take-home messages for tarnished plant bug:

1. Feeding by tarnished plant bug causes deformed fruit.
2. Tarnished plant bug populations typically increase over the season so late summer and fall-produced fruit are the most vulnerable.
3. Tapping flower/fruit clusters for plant bug nymphs a useful monitoring tool.
4. Treatment threshold at or below 0.25 nymphs per flower cluster.
5. Good weed management helps reduce tarnished plant bug populations.

And below are some take-home messages for spotted wing drosophila (SWD).

1. SWD was first discovered in NY and throughout the Northeast in 2011.
2. SWD become more abundant as the season progresses, peaking in the fall.
3. Late summer and fall day neutral fruit the most vulnerable to SWD.
4. Fruit contaminated with larvae a major concern.
5. Monitor for adult SWD as a warning that fruit might be infested.
6. Currently, chemical control options for SWD in NY are limited to pyrethrins.
7. Research is being initiated to better understand phenology of SWD and associated risk factors and develop improved monitoring and management options.