SWD Regional Report, NY State

Spotted Wing Drosophila

Northeast IPM Working Group Meeting

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## Collaborators, Counties and Crops - 2013

<table>
<thead>
<tr>
<th>Name</th>
<th>Counties</th>
<th>Crops(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agnello</td>
<td>Ontario, Wayne</td>
<td>Cherry</td>
</tr>
<tr>
<td>Armata</td>
<td>Herkimer</td>
<td>Caneberry</td>
</tr>
<tr>
<td>Bachman</td>
<td>Erie</td>
<td>Caneberry, blueberry</td>
</tr>
<tr>
<td>Breth</td>
<td>Monroe, Niagara, Orleans</td>
<td>Caneberry, blueberry</td>
</tr>
<tr>
<td>Carlberg</td>
<td>Chautauqua</td>
<td>Caneberry</td>
</tr>
<tr>
<td>Carroll</td>
<td>Cayuga, Niagara, Onondaga, Orleans, Schuyler, Wayne</td>
<td>Cherry, strawberry, caneberry, blueberry</td>
</tr>
<tr>
<td>Cook</td>
<td>Dutchess, Ulster</td>
<td>Caneberry, blueberry, DN strawberry, wild edge</td>
</tr>
<tr>
<td>Fargione</td>
<td>Columbia, Ulster</td>
<td>Cherry, wild edge</td>
</tr>
<tr>
<td>Hetzler</td>
<td>St. Lawrence</td>
<td>Caneberry, blueberry, currant</td>
</tr>
<tr>
<td>Ivy</td>
<td>Clinton</td>
<td>Blueberry, wild edge</td>
</tr>
<tr>
<td>Jentsch</td>
<td>Orange</td>
<td>Cherry, caneberry, blueberry</td>
</tr>
<tr>
<td>Loeb</td>
<td>Monroe, Ontario, Schuyler, Seneca, Tompkins, Yates</td>
<td>Strawberry, caneberry, blueberry, wild edge</td>
</tr>
<tr>
<td>Loeck</td>
<td>Tioga</td>
<td>Blueberry</td>
</tr>
<tr>
<td>McDermott</td>
<td>Albany, Columbia, Rensselaer, Saratoga, Washington</td>
<td>Caneberry, blueberry, DN strawberry, wild edge</td>
</tr>
<tr>
<td>Mehlenbacher</td>
<td>Steuben</td>
<td>Blueberry</td>
</tr>
<tr>
<td>Miller</td>
<td>Oneida</td>
<td>June strawberry</td>
</tr>
<tr>
<td>O'Connell</td>
<td>Ulster</td>
<td>Blackberry</td>
</tr>
<tr>
<td>Thorp</td>
<td>Livingston</td>
<td>Caneberry</td>
</tr>
<tr>
<td>Zaman</td>
<td>Suffolk</td>
<td>Caneberry, peach, apple, blueberry, grape, wild edge</td>
</tr>
</tbody>
</table>

\(^a\) ‘Wild edge’ indicates a hedgerow or a forested edge of the crop.

- Traps – red/black or clear cups, apple cider vinegar drowning solution, and yeast, whole wheat flour and sucrose bait.
- Set in late May to early June at ~140 locations; within the crop, on crop edge, or in wild edge.
- Checked weekly until sustained trap capture or until the crop was harvested.
- First reports posted on the SWD blog [blogs.cornell.edu/swd1/](http://blogs.cornell.edu/swd1/) with GDD\(_{50}\) & day length.
NY SWD Trap Network - 2013

1\textsuperscript{st} detection June 11, latest first detection August 26. Earliest wild host, \textit{Prunus serotina}, black cherry.

4 Counties reported first trap catch in June (dark blue).

19 Counties reported first trap catch in July (dark purple).

3 Counties reported first trap catch in August (light purple).

Two Counties did not find SWD in traps (gray).

The Eastern SWD Volunteer Monitoring Network generated a NY distribution map.

www.eddmaps.org/project/project.cfm?proj=9
The most common landscape for 1st catch was the crop edge or the wild edge.

1st catch in NY in the Finger Lakes region on June 11. Within a week found on Long Island and in the Hudson Valley.

Traps in June strawberries, monitored until harvest, typically did not catch SWD.

Some traps set in blueberries failed to catch SWD, but larvae found in fruit.
Growing degree days (GDD) and day length (hh:mm) for the first trap catch dates in NY. Earliest catch was June 11 (GDD=554, day length=15:14).

Median date was July 22; with July 24 and 25, these dates accounted for 30% of the first trap catch dates, while the eight day period from July 22 to July 30 accounted for 48%. The GDD and day length for these dates ranged from 1252 to 1483 and 14:29 to 14:52, respectively (circles).
SWD Trap Network Conclusions

Met goal of monitoring for 1st trap catch and disseminating information to growers.

- June strawberries escaped SWD.
- Grapes had little damage, though SWD oviposition.
- Cherries in the lower Hudson Valley infested, though not in other areas.
- Plums were infested, though damage light and variety-dependent.
- Blueberry damage influenced by maturation date.
- Day-neutral strawberries were infested.
- Blackberries & fall raspberries were heavily damaged.

- Research needed on
  - Optimal insecticide timing,
  - Crop diversity effects,
  - Landscape ecology,
  - Cultural management.
  - Insecticides suitable for U-pick.

- Extension needed on
  - SWD website improvements.
  - Insecticide quick reference tables.

- SWD blog successful
  - Picked up in newsletters.
  - Info ran in newspapers.

- Education needed on
  - SWD identification.
  - How to sort through trap contents.