

W504 Rapid Response Group
11 November 2010
Airport Holiday Inn Hotel
Portland, OR

Stella Coakley, Wei Yang, Amy Dreves, Flaxen Conway, Bruck, Joann from NCSU, Frank Zalom, Joe de Francesco, Bernadine Strik, Diane Kaufman, Vollmer, Jim Price, Vaughn Walton, Peter Shearer, Hannah Burrack, Tom Peerbolt, Rachael Goodhue, Derek Farnsworth, Tunyalee Martin, Linda Brewer, Steve van Timmeren, Lynell Tanigoshi, Cory Vorel, Elizabeth Beers, Doug Walsh. *This list is not entirely complete.*

Stella provides a background. Learn from states not involved, and create a national response strategy. Explanation of the NIMSS, importance of multi-state integrated projects. Generate national recognition for the project among AES Directors and the Extension system.

Presenters: (In addition to the SCRI personnel who presented earlier)

- Hannah Burrack, NCSU
- Jim Price, U of FL
- Derek Van Timmerman, MSU (for Rufus Isaacs)
- Cory Vorel USU.

Hannah: SE/Mid Atlantic SWD Group exists. (NCSU, Clemson, VPI). Monitoring network. Lure assessment; volunteer trappers. SWD detected July 2 in SC. Early August in NC. SWD presence dependent on presence of a host. Grape and cane berry plantations associated with largest groups.

Apple cider out performed yeast in traps, but the data are very limited, as are the populations. At 2 research locations with host fruit and later in the season, vinegar traps out-performed. Fall SWD detections ongoing and perhaps increasing.

Early sites focused on backyard and demo gardens. Data released through blogs. These were noncommercial locations not treated with pesticides. Data sharing and tools via GoogleDocs; all volunteer trainings were via webinar. This will change to in-person trainings with increased funding to train volunteers.

At both locations where there was fruit trap counts did not decrease.

South Carolina experienced high infestation in caneberries, about 15% in strawberries. No significant difference in black berries between out- and in-side plots (tunnel production), but significant differences were greater in raspberries between outside and inside production practices. One variety [Rediva] had very low infestation. Another to be released by NCS and Nova had very high

infestations - but this could be an artifact of the timing of the arrival of the flies, and whether the plants were fruiting.

Sprays were initiated on the trials inside the tunnels; a hard frost occurred between 14 and 28 October. No doubt this had an impact on fly numbers.

Research and Extension Needs:

South east US phenology, species and variety preference, expansion of efficacy trials, stakeholder education, improved data sharing tools.

Jim Price Florida: The constant threat of invasives has necessitated a statewide monitoring program. Dept of Ag trap monitoring teams have been oriented to SWD trapping concerns with a density of 1 trap per square mile surrounding port entry regions. Reduced trapping densities have been established at greater distances from the ports, and throughout the state. Price presented a full year of data from the strawberry producing region of FL. Strawberries are picked for sale Dec through March, and SWD numbers increased, though they had a record breaking extreme weather season. July shows yet higher numbers (only males counted), though no commercial crops are in the ground during this season. It may be that the flies are reproducing on wild species available at that time of year. MI, KY, VA, LA also have reported presence of the fly. Price suspects it is much more widespread throughout the SE than currently reported.

Steve Van Timmeren, MSU: Following the March, 2010 meeting in Portland, Michigan established a trapping network (vinegar with yellow sticky card). SWD was found on 9/23/10 in SW Michigan after finding nothing on the site for a month. Presence of SWD has been officially confirmed as present in 13 Michigan counties; he suspects it's a question of trapping density rather than distribution of the pest. Blueberries, raspberries, grapes, backyards, dumpsters are all confirmed sources. Most SWD infestation was found in blueberries. A few tree fruits have proven positive, but the sampling density is low.

Michigan researchers compared minimally managed vs. conventionally managed blue berry fields. The minimal management group included organic and research plots with spot sprays on individual bushes only. These fields showed a spike in adults in early October. Conventionally managed fields spiked in late Oct, but the data sets are very limited. The conventional fields have much fruit on the bushes, as opposed to the minimally managed with did not.

One site had significant poke weed on the field edge; the pokeweed berries were heavily infested with SWD suggesting pokeweed as a potential late season host for the upper Midwest. How will MI winters limit SWD overwintering? Live SWD males were found outside traps after a cold snap sufficient to freeze vinegar solid. This is the research question of interest in MI. Snow cover may moderate exposure to extremes of cold.

The Michigan SWD Response Team was organized after the March 10 meeting in Portland. The response team includes University, Extension, Dept of Ag, Commodity leaders. They have organized themselves to respond to the threat and establish monitoring strategies. Michigan is seeking increased funding to continue their monitoring and research efforts.

Cory Vorel: USU. In Utah, the approach has been less of a coordinated effort vs. the efforts of 2 academics who gained support to begin trapping in the N area of the state in stone and pome fruits, and one site at a research farm. Traps split between yeast plus sugar and vinegar. On Aug 18, they found the first male on the only trap in caneberries. No other sites have turned up the SWD. The site showed a spike in Sept in fall bearing raspberries. Vorel cites that the trapping efforts are limited. Because the fly has been found at the research center, there is a density of diverse crops, providing alternate hosts. Increased density of traps after discovery has shown the movement of flies among these diverse crops, and they remain to be trapped after the fruit is gone. Utah found vinegar to be of minimal use. They continue to find flies despite the lateness of the season and freezing nights.

Coakley comments on mildness of the Willamette Valley autumn. She queries the group about their interest in the future of a multistate program? Do all agree on the need for a national project. Show of hands: participation in a new multi state project? (About ½) The current W504 has a 2 year life [12/1/09-12/1/11].

There are 3 types of Multi State projects: :

1. Research committee organized to do and get funding for research (sounds appropriate). Don't duplicate the work being done by 2 groups.
2. Coordinating committee – research side.
3. Education/research/extension program to integrate among the foci.

For the long term and beyond the life of a grant, there is an advantage to increasing organization. What participants get from their participation depends on how the AES and Extension Directors in each state set up and authorize resources. Participation provides a travel funding advantage for national meetings for those not participating in SCRI.

Committee composition

- NIFA representative (Rick Myer)
- Administrative coordinator
- There is the potential for a governance committee

Jan 15 and May 15 are reporting dates for the W504, which suggests January reporting based on the March and November 2010 meetings.

Coakley asks whether there is there interest in keeping the W504 going for the western region. She calls for the audience to speak to the pros and cons of doing so.

Vaughn speaks in favor of continuing W504 through life of SCRI at the very least. Stella points out that if we do nothing by May 15, this W504 will have a 2 year life. She further asks what type of governance would the group like. Bernadine speaks out on behalf of WERA project. **Who is willing to help bring this into a 5 year project?** Vaughn requests representatives from other areas of the US as the project moves into an ordination phase.

Hannah is interested, Steve Van Timmeren, Cory Vorel.

Message to stakeholder group is that we plan to continue to bring W504 forward. Walsh Dough strongly encourages that these 2 meetings (SCRI and W504) be held jointly into the future.

Stella would be willing to assist if the plan is to meet in person annually, though teleconferencing can work well too. Frank Zalom says it will vary by state, but he sees internal (state) meetings will continue, and that regional and national coordination will be required. Frank says we learn from the extremes (of observation, weather, etc.).

Stella refers to tools developed by or used by Paul Jepson and IPPC. A Risk Management Agency grant was secured to develop a Western IPM platform for an IPM information 'pipe.' The national IPM Pipe is writing to develop national research to support this project, and would fund data management for it. Stella and Linda will endeavor to avoid duplicate requests for more information and will ensure that the 2 projects are close enough to enhance national participants and not increase the work burden of the Western region participants.

What about Hawaii? (Price asks) Stella suggests we should invite them. Frank Zalom recounts that in Hawaii, the concern is all about export. They've been under the radar screen for a long time. Why doesn't it reach large populations in Hawaii? Under what conditions should we expect real problems? Maybe Hawaii has unique situations. Stella remarks that Jeff Miller is looking at parasitoids from Hawaii. Have SWD and natural enemies reached an equilibrium in HI? Hannah comments that Hawaii is one of the natural centers for diversity of SWD, remarks on the diversity of vertical distribution of trees, non-commercial fruit production and the widespread use of chemicals. Frank comments that SWD occur higher in the hillsides in Hawaii, while commercial farming is lower in the watersheds, thus it is more limited to home production.

How do you disseminate the information to growers without damaging export? Challenge in managing export pests.