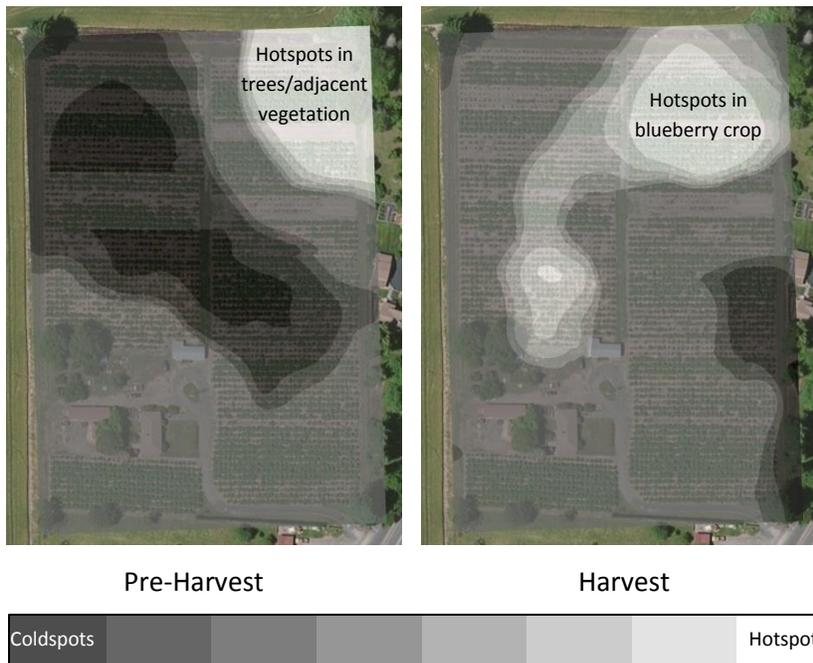


## Hot on *D. suzukii*'s trail: identifying and managing high-risk areas inside and outside the crop

Amy Dreves, Amanda Ohrn, Tammy Winfield, Oregon State University 6\_1\_2014

- Data from a 4-year trapping study (500-1000 traps) on a commercial blueberry farm have shown that from pre-harvest to harvest, the majority of SWD caught in traps shifts from perimeter vegetation/trees to the blueberry crop. SWD appear to disperse into the crop as soon as ripe blueberries are available, and likely exhibit the same behavior in other susceptible crops as seen in commercial blackberries and strawberries.
- Traps were distributed vertically at varying heights, as high as 25 feet within tree canopies, and horizontally along a transect from the crop border to the interior of crop.
- Localized areas of significantly high SWD abundance (hotspots) in the crop during harvest were predicted based on hotspots that appear earlier in the year in adjacent trees and vegetation.
- Key characteristics of non-crop 'hotspots' include: high plant diversity, close proximity to alternative hosts (oviposition), riparian habitat, landscape refuge and areas with a high degree of canopy cover. These high-risk areas in trees and adjacent vegetation are ideal locations to employ management strategies prior to commercial crop harvest periods.



Maps show statistical significance of SWD trap counts, with white representing significant clustering of SWD in traps (hotspots) and black representing significant dispersal (coldspots).

### Potential Management Strategies:

Mass trapping on Landscape periphery

Attract and Kill in high risk, concentrated and isolated areas in spring, late fall

Selective precision sprays

### Keys to Effective Management:

**Timing:** Time management practices to target SWD **before** they penetrate the crop and lay eggs

**Location:** Identify potential hotspots along the perimeter of your crop and in trees, and implement management practices in these areas