

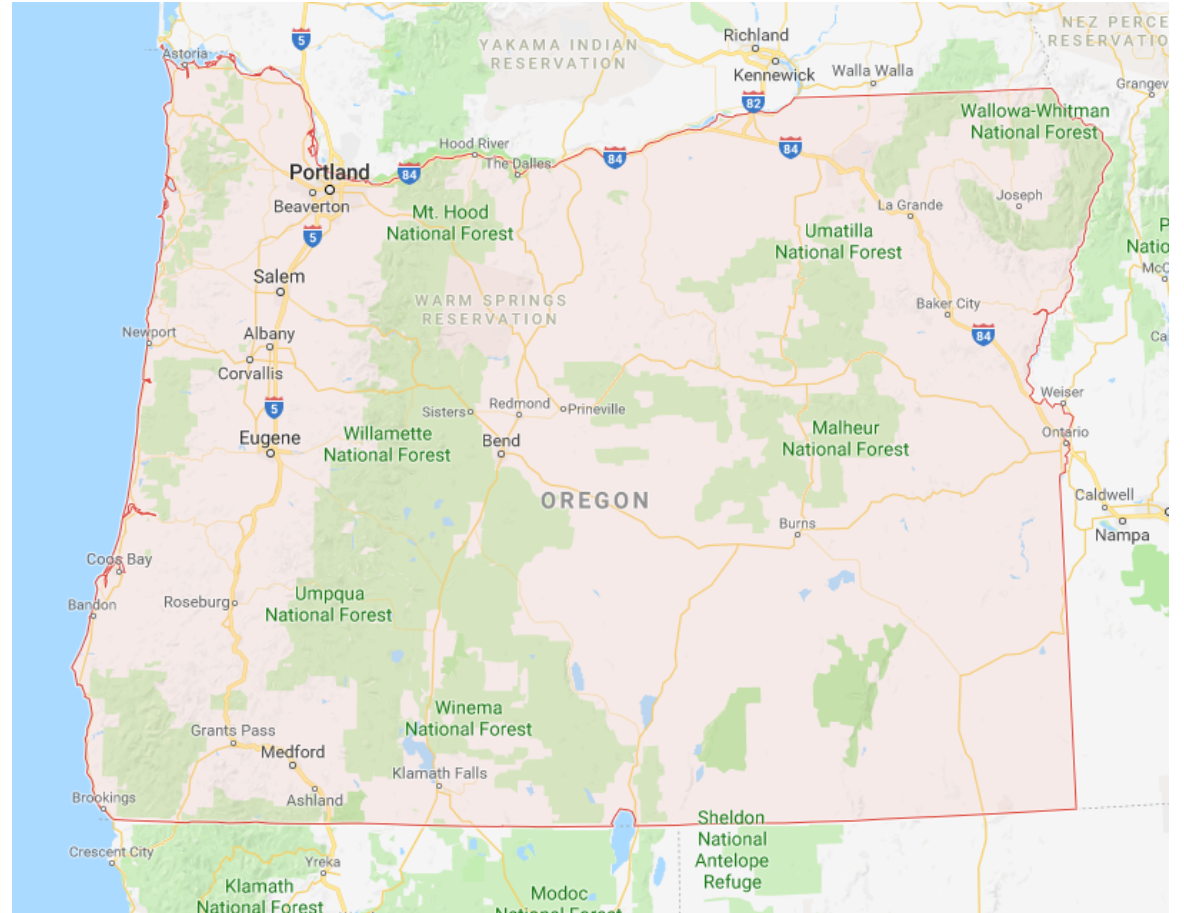


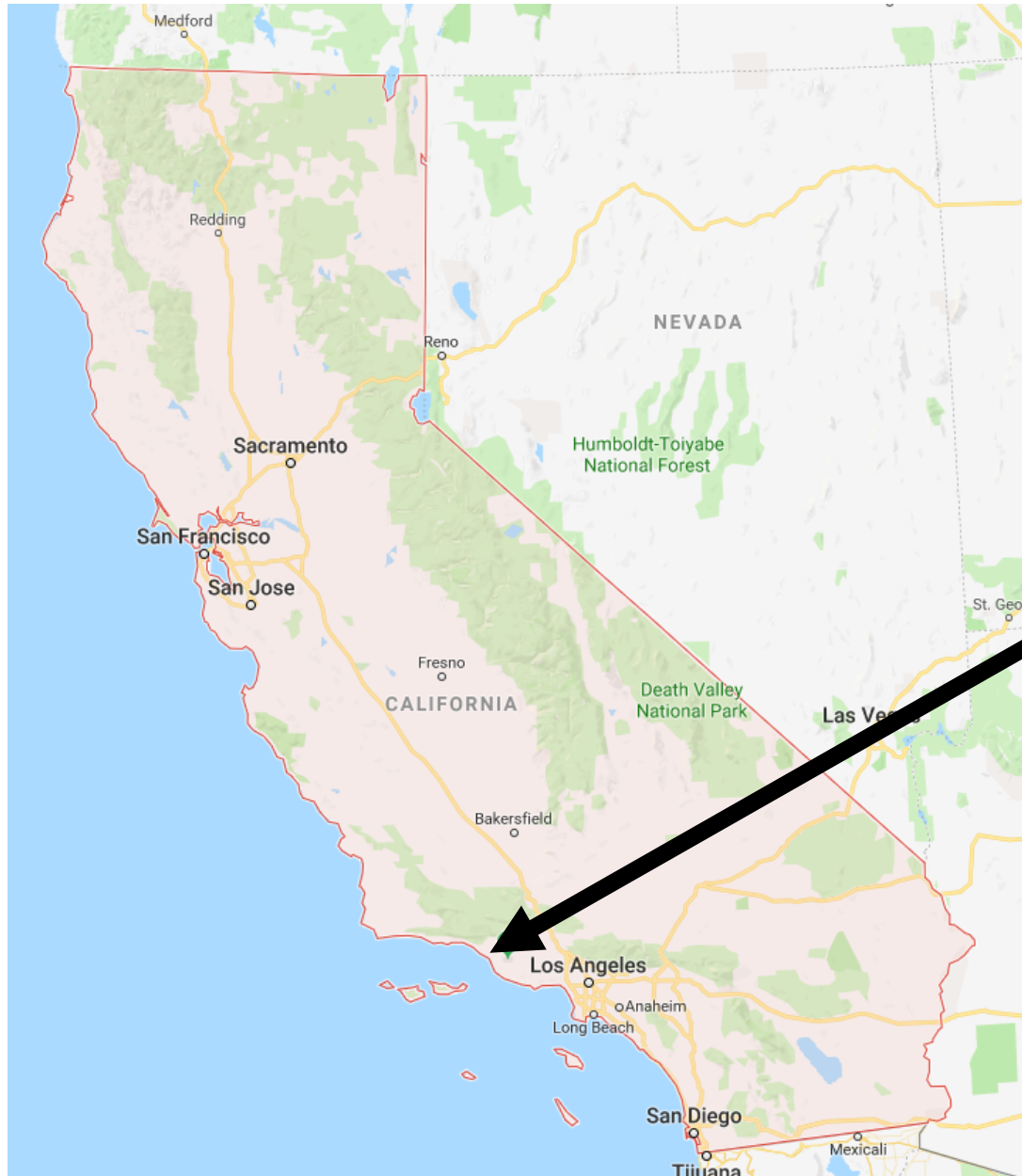
learned working
for *Driscoll's*
Only the Finest Berries™

Sam Tochen, Ocean Spray Agricultural Scientist, WA

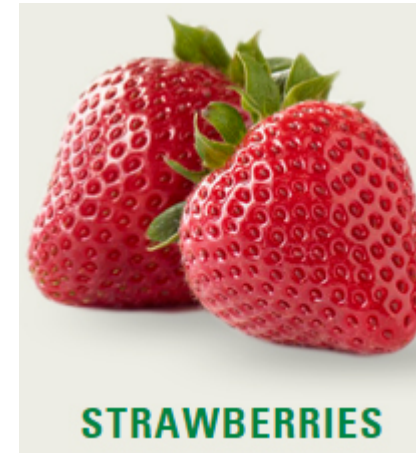
About me

- Oregon native
- BS/MS from Oregon State University
 - Spotted wing drosophila (SWD)
- Background in Entomology and Plant Pathology





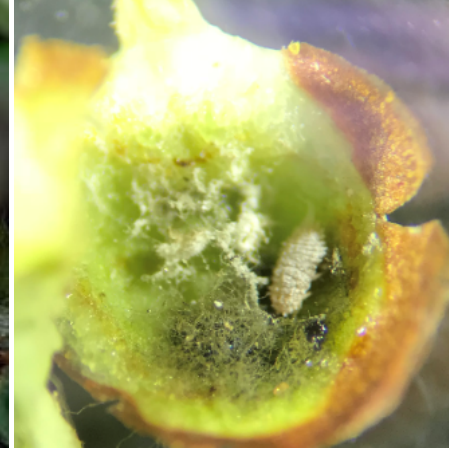
- 2017-Started at Driscoll's working in Entomology Dept.





“favorable climate, long growing season”

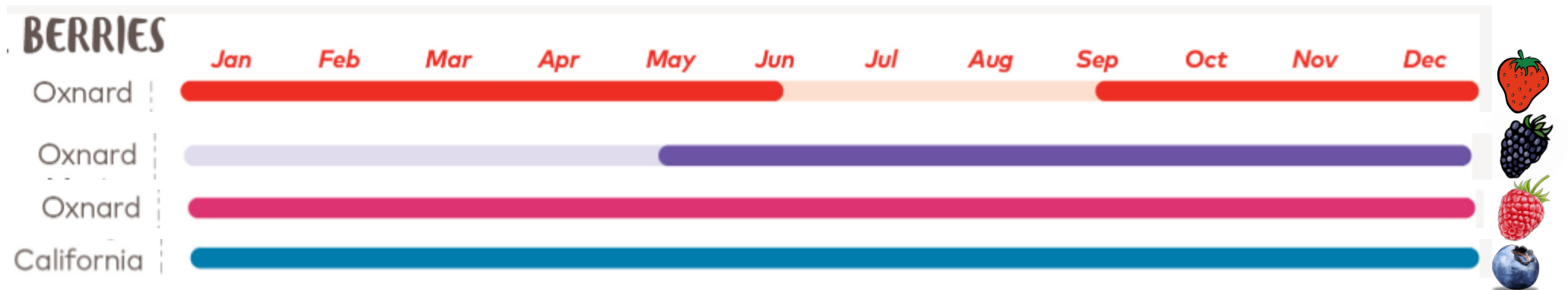
Great for crops, great for pests and pathogens



“favorable climate, long growing season”

Complications

- Restrictions on pesticides
- Overlapping cropping systems



- Year round pest/pathogen pressure

Solution

What is IPM?

Integrated Pest Management is a science-based approach that combines a variety of techniques. By studying their life cycles and how pests interact with the environment, IPM professionals can manage pests with the most current methods to improve management, lower costs, and reduce risks to people and the environment.

IPM tools include:

- Alter surroundings
- Add beneficial insects/organisms
- Grow plants that resist pests
- Disrupt development of pest
- Prevention of pest problem developing
- Disrupt insect behaviors
- Use pesticides

1 IDENTIFY/MONITOR

Determine the causal agent and its abundance (contact your local extension agent for help).

2 EVALUATE

The results from monitoring will help to answer the questions: Is the pest causing damage? Do we need to act? As pest numbers increase toward the economic threshold further treatments may be necessary.

3 PREVENT

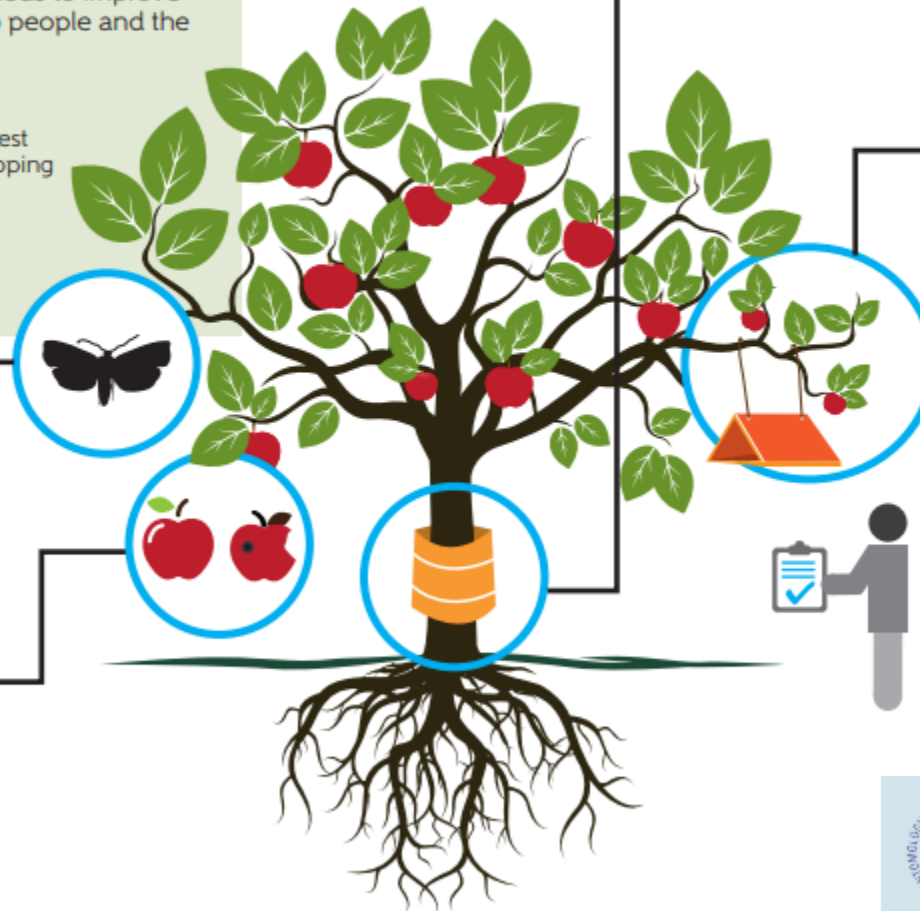
Some pest problems can be prevented by using resistant plants, planting early, rotating crops, using barriers against climbing pests, sanitation, and sealing cracks in buildings.

4 ACTION

IPM uses multiple tools to reduce pests below an economically damaging level. A careful selection of preventive and curative treatments will reduce reliance on any one tactic and increase likelihood of success.

5 MONITOR

Continue to monitor the pest population. If it remains low or decreases, further treatments may not be necessary, but if it increases and exceeds the action threshold, another IPM tool should be used.



The Entomological Society of America is the largest organization in the world serving the needs of entomologists and other insect scientists. ESA stands as a resource for policymakers and the general public who seek to understand the importance and diversity of earth's most diverse life form— insects. Learn more at www.entsoc.org.

Genetics





Monitoring





Mating disruption



Trap/intercept crop



Physical removal



Biological control





Habitat manipulation





Take-aways

- Lots of tools
- Can be dual purpose
- Implementation could be improved
- Room for more research



Questions?