

Olive Knot

- Bacterial disease carried through spores
- Creates knots on trees through any entry point
- Knots create more inoculum once exposed to moisture
- Without proper management olive knot can decrease tree vigor and health and reduce yield

Olive Knot Infection Points

- Infection through:**
 - Leaf scars – spring leaf drop
 - Cold injury – frost
 - Mechanical injury - pruning, harvesting, hail
- Increase in olive knot**
 - Olives (especially oil varieties) growing areas have expanded into areas that are more prone to winter freezes.
 - Hard freeze conditions and hail damage can lead to “systemic” olive knot

Management of Olive Knot

- Cultural:**
 - Maintain tree vigor, reduce tree stress, reduce leaf drop
- Sanitation:**
 - Pruning and removal of knots during dry periods (inoculum reduction)
 - Disinfection of pruning tools and machinery
- Foliar applications to trees:**
 - Spray applications with copper-containing bactericides to reduce inoculum and protect wounds
 - 24 hours of any kind of injury is key!
 - Post harvest
 - Spring application (residual)

CALIFORNIA OLIVE RANCH

Timing of Bactericide Applications Relative to Occurrence of Injuries

Treatments with 100 ppm kasugamycin

Treatment	Severity (rating 1-4)
Control	~3.8
0 days	~0.5
1 day	~2.5
2 days	~2.5
3 days	~2.5
7 days	~2.5

Treatments with 6 lb Kocide 2000

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Severity of disease (rating 1-4)

Treatments are only effective when applied within one day of injury (e.g., pruning, harvest)!

**credit of this slide to Dr. Jim Adaskaveg, UC Riverside

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New Research Highlights

- Dr. Jim Adaskaveg commissioned by the California Olive Oil Commission to continue research regarding olive knot control
- Latest Field Application Findings:
 - Registration of Deccosan (quaternary ammonium)
 - Determination of application intervals
 - Copper is still effective if applied with the proper coverage and timing
 - New alternatives to copper currently in IR-4 program (2018-2020 registration for olives)
 - Most olive knot wounds are not susceptible to olive knot after 10-20 days of healing under normal orchard conditions



Some Techniques

And
Trials for Olive Fruit Fly Management

Trapping For monitoring only



Sticky traps and tape

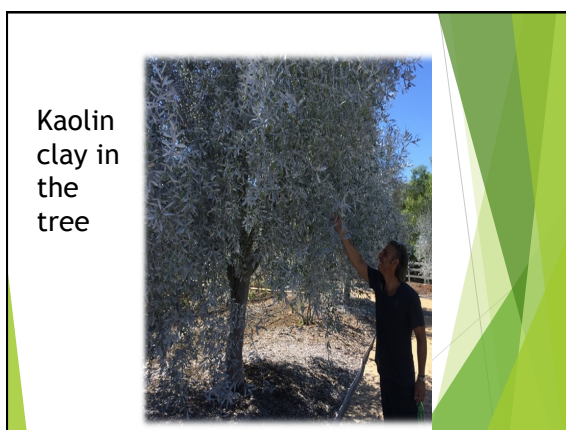
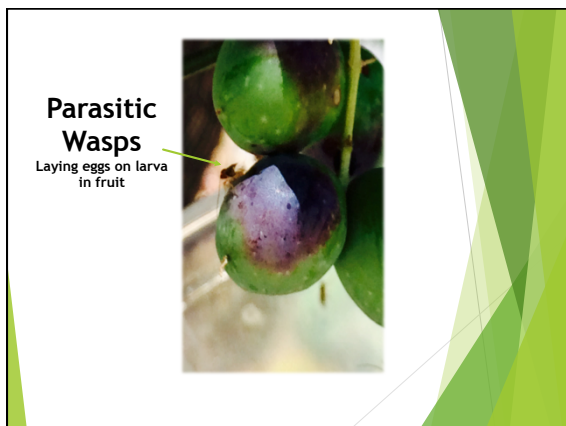


Deficit Watering



Parasitic Wasps





► Entomopathogenic
fungi (FF)



Some Thoughts

- Keeping Alert to new pests
 - Xylella Fastidiosa
 - Olive Thrips
 - ???????

May Olive Your Dreams Come True