

A very special THANKS to Suterra for donating
vine mealybug pheromone traps for today's outreach meeting!

THREE WAYS TO USE YOUR NEW TRAPS (see backside for more specific info):

1. DO I HAVE MEALYBUGS?

Don't think you have vine mealybugs in a vineyard block? Put a trap out and see! With the widespread populations of mealybugs occurring naturally in our region, you would be hard-pressed to find a vineyard without any at all. Vine mealybugs like to hide under the bark. The highest male flight rates (only the males have wings) occur later in the season, close to harvest.

2. START YOUR NEIGHBORHOOD CONVERSATION.

Use the traps to start a conversation about mealybugs and leafroll virus with your neighbors – bring a trap home for your neighbors so you can learn together. If you want to be a leader in your neighborhood, host a Mealybug Meeting – contact anyone in the Grapevine Virus Focus Group for support.

3. A DECISION-MAKING TOOL.

Traps can be used as a decision-making tool to know when to begin a pheromone mating disruption program or another treatment. Overwintering mealybugs start coming up from the roots and the base of the trunk in the spring as temperatures become warmer, slowly moving higher up the vine and into the canopy during the growing season. Between May-June are when the males start flying around in larger numbers.

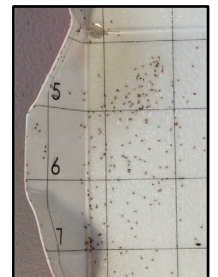
Traps can also help to show you how late in the season you have mealybug mating – you may be surprised to learn that even after harvest the mealybugs are mating, determining your population levels for the next growing season.

Finally, traps can help you monitor mealybug populations over time, from one year to the next, determining how effective your management programs are under different seasonal conditions.

I PUT MY TRAPS OUT...WHAT NEXT?

If you need help identifying the winged vine mealybug males in your traps, you can bring your used trap to any of our CD11 LODI PCA NETWORK BREAKFAST MEETINGS where after the discussion, a microscope will be available for use. These meetings are held on the first Tuesday of almost every month from 8 to 9:30am in Burgundy Hall, Lodi Grape Festival Grounds, 413 E. Lockeford St., Lodi.

RSVP to lwwc@lodiwine.com or 209.367.4727.



NEIGHBORHOOD COORDINATION: why it matters

It's common sense to control mealybugs, viruses, mildews, invasive weeds, and other pests on the vineyard blocks that you manage. However, what may *not* be as intuitive is why it is SO important to coordinate some of your pest/weed management activities with your neighbors. It is much more EFFECTIVE and CHEAPER if we work together when it comes to rotating mildew chemistries, lowering the amount of vine mealybugs and virus inoculum in our region, making sure not to use chemistries which kill off our region's beneficial insects, eradicating invasive weeds, and coordinating VMB mating disruption.

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Excerpt from UC IPM Pest Management Guidelines: Vine Mealybug for Grapes

last reviewed 7/2015, accessed on 3.27.19 @ ipm.ucanr.edu/PMG/r302301911.html, adapted for this handout

Pheromone traps can help determine if vine mealybugs are present within or near your vineyard. Place pheromone lures in small orange delta traps in and around the vineyard early in the growing season (in Lodi traps are going out in mid-March and early April):



- Choose two trap sites for each 20-40 planted acres.
- Put one trap in the center of the block and the other on the edge near a staging area. These traps can attract vine mealybug males from as far away as 1/4 mile.
- Attach traps to the trellis wires so that they are in the cluster area/fruiting zone.
- Label the trap with the block name and row number of its location and the dates it remains in the vineyard.
- Check traps for the presence of male vine mealybugs every 2 weeks through November. (Some growers have started trapping year-round.)
- Follow the manufacturer's recommendations for storing and replacing pheromone lures.
- Record observations on a monitoring form.

You'll want to use a dissecting microscope to identify the male mealybug. (Male vine mealybugs are smaller than adult thrips and are very difficult to see even with a hand lens.) The sex pheromone is specific to the vine mealybug, but the traps may also contain other male mealybugs depending on the site. If you need help, take your traps to a farm advisor or county agricultural commissioner or refer to the Male Vine Mealybug Identification Sheet (included in this packet).

The number of males found in a trap depends upon its proximity to the infestation and the time of year. In the North Coast, new infestations have been located near traps that caught very low numbers in June (5 to 10 males per trap per week) and high numbers in fall (more than 50 males per trap per week). In the San Joaquin Valley, an infested vineyard will have between 20 to 300 or more males per trap per week. In either region, low numbers of male vine mealybugs found in a trap may mean that the infestation is located in an adjacent block or in a more distant vineyard. If males are found, increase the number of traps in the vineyard, and locate the infestation by examining lower leaves for honeydew.

NOTE: If any neighboring vineyards are using pheromone mating disruption, your traps could be indicating lower numbers of male mealybugs than are actually present, so be aware.

How long can a trap stay up before I need to replace it?

Cleaner traps are easier to read. Traps may get covered with dust and insects, making them lose their stickiness. The age of the lure is more important than the age of the trap. The lure you were given today by Suterra is called a septa lure and they officially last 4 weeks in the field. Traps are usually checked every 2 weeks. So, if you need to replace a trap while the lure is still viable, remove the lure from the old trap with tweezers or a stick and place it in the new trap.

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