Sacramento Valley Walnut News

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In This Issue

- New Summer Management Considerations
- New Orchard Advisor!

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New Summer Management Considerations

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In a tough year for walnut production, critical management decisions must be made to maintain tree health while allocating resources wisely. Here are considerations for walnut during the summer months and potential consequences of actions.

Summer Walnut Considerations		Potential Consequences
July		
Irrigation	Be mindful of water stress. Use a pressure chamber to schedule irrigation when trees reach 2-3 bars below baseline. Careful irrigation around heat waves.	Shells harden in June and kernels are developing in July, August, and September, so water stress at this time can impact kernel size and quality. Also, buds develop for the following season during this time, so severe stress during this period can also reduce flowers for nuts the following year. Last year, excess water application just before the September heat wave may have contributed to poor nut quality.
<u>IPM</u>	Continue to monitor for Walnut Husk Fly using yellow sticky traps charged with ammonium carbonate. Begin tre `atment as soon as you detect eggs in trapped females or when the number of WHF in your traps increases significantly.	A husk fly infestation early in the season (late July to mid-August) leads to shriveled and darkened kernels, increased mold growth, and lower yields.
	Monitor weekly in July and August for spider mites and their predators. Check 10 leaflets (5 from higher branches), from 10 trees each time you monitor. If more than half of the leaflets with spider mites don't also have predators, consider treatment.	Mite feeding causes stippling and browning of leaves. High numbers produce copious webbing, and their feeding causes leaves to desiccate and drop. Defoliation early in the season can reduce nut yield and quality; defoliation late in the season will interfere with harvest.
	Monitor codling moth traps to decide when to treat. The third codling moth biofix occurs in late July or early August (about 1100-1200 degree days after the second). Treat if there is greater than 2% evidence of canopy infestation.	Later generations can cause significant damage. Older larvae leave the nuts and move to tree trunks or debris to spin cocoons and overwinter.

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Summer Walnut Considerations, cont.		Potential Consequences
Disease	Botryosphaeria (Bot) or Phomopsis:	Removing dead limbs can reduce severe
	Prune dead limbs and remove them from	infection by removing disease inoculum.
	your orchard. Consider spraying for Bot	Bot reduces yields by killing small fruit
	in early July if your orchard has a history	wood and large branches and directly
	of Bot infection	infecting the nut.
Harvest	Consider <u>using/ordering</u> ethephon for	Depending on your operational needs,
prep	<u>harvest</u> .	ethephon can be used two ways to
		improve economics in a low price year:
		to increase kernel quality with an early
		harvest or to promote a one-shake
		harvest.
August		
IPM	Begin monitoring for navel orangeworm	Nuts infested with navel orangeworm
	in your orchard. Healthy walnuts are only	are unmarketable. Shells of heavily
	susceptible to NOW at and after hull	infested nuts will have an oily
	split. If egg laying is occurring at hull	appearance.
	split, consider an insecticide treatment	
	and harvest promptly to avoid damage.	
Disease	Mold: Practices that help maintain hull	Blight, Bot, sunburn and insect damage
	integrity are part of the pre-hull split	all predispose walnuts to mold. Bot
	management of kernel mold. Some	sprays alone do not protect against
	fungicides may be applied prior to hull	Fusarium and Alternaria species, which
	split to prevent mold, with ongoing	also cause walnut mold.
	research for optimum timings.	
Harvest	Monitor for Packing Tissue Brown (PTB)	Early ethephon application results in
prep	about 35 days before the expected	losses in weight, nut quality, and
	harvest date to plan ethephon	hullability. The benefits of ethephon
	application, if applicable. Do not treat	application are usually seen 14 to 23
	until 100% of nuts are at PTB.	days after application.
	Plan for timely harvest to ensure <u>walnut</u>	The longer nuts are on the ground, the
	quality.	more susceptible they are darkening.
		Walnuts left on damp ground are more
		susceptible to mold damage.

New Orchard Advisor Introduction



My name is Becky Wheeler-Dykes and I am thrilled to join UC Cooperative Extension as the new Orchard Systems Advisor serving Glenn, Tehama and Colusa Counties. I'll be based in Orland at the Glenn UCCE Office. As an Orchard Crops and Weed Ecology Advisor, I'll be covering olives, prunes, walnuts and almonds as well as emphasizing weed management research in these cropping systems. I grew up on a small prune and walnut farm in Gridley and am happy to be settling down near family. After completing my undergraduate degree in Crop Science and Business Management at UC Davis, I continued on for my Masters in Entomology, where I focused on IPM in orchards. I have since worked in ag research in several crops and disciplines, and I'm excited to bring those experiences to the Sac Valley as the newest Farm Advisor.

I hope to spend the first few months getting to know the growers, producers, and ag community of our beautiful region. I look forward to learning from and with you all, and I can't wait to build a research program to support your unique needs in Glenn, Tehama and Colusa Counties. Please give me a call to come out and troubleshoot problems in the field, learn about the challenges you face in agriculture, or just get to know you and your orchards! I can be reached by email at bawheeler@ucanr.edu or telephone at 530-865-1152.



Up-to-date *orchard*-related events, news & articles from UC Cooperative Extension *farm* advisors from the *Sacramento Valley*.



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