Sacramento Valley Walnut News
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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.	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.
	Careful irrigation around heat waves.	Last year, excess water application just before the September heat wave may have contributed to poor nut quality.
IPM	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.

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

Visit: **https://www.sacvalleyorchards.com/**