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Upcoming meetings:

Date	Event	Location	Contact
February 21	Tehama Prune Day	Elks Lodge, Red Bluff	(530) 527-3101
March 7	Prune growing in California in 21 st Century: Turning the corner	Vets Hall, Yuba City	RSVP for lunch to mlsearcy@ucanr.edu or call (530) 822-7515

PRUNE ORCHARD ACTIVITIES TO CONSIDER IN MARCH:

- Bee activity in a prune orchard is necessary to set a crop. Decide if you want to put out bees in your orchard this year and order hives. The general rule is one hive/acre. An experienced grower I know uses less bees when the bloom weather is cool and more bees when hot, dry weather is predicted for bloom.
- Get orchard ready for bloom -- a plowed or closely mowed orchard is warmer than an orchard with tall weeds/cover crop.
- Get air-blast sprayer ready to apply bloom fungicides. Check calibration and do general maintenance (check sprayer filters, replace nozzles to start the season, etc.)
- Make plans to protect flowers from brown rot -- if bloom time weather is wet. Prune flowers are susceptible to [brown rot](#) beginning at [green bud](#). Alternate between different fungicide chemistry classes when planning a two-spray program. Check the FRAC numbers on the label to make sure you are making a chemistry change. For example, Vanguard (FRAC 9) at green bud and Tilt/Bumper (FRAC 3) at full bloom, is a solid rotation. (See efficacy and timing tables in this newsletter).
- Spray fungicides late in the day and into the evening/night to avoid spraying pollen and bees.
- Consider spraying captan or chlorothanil (Bravo/Echo) at full bloom to reduce [russet scab](#) on fruit at harvest.

- If you have sprinkler (impact or micro-jet) irrigation, check out/maintain irrigation system used for frost control/orchard cooling.
- Evaluate cropload (mid-April) **before** applying nitrogen or potassium fertilizer. Cropload is THE major factor deciding nutrient needs in a mature orchard. The more fruit, the more nutrients required.
- Place order for [peach twig borer](#) traps. Traps should be up by April 1 (maybe March 15 this year?), and UC recommends 2 traps per block. Post [San Jose scale](#) pheromone traps in the orchard by the end of this month.
- Make sure newly planted trees (replants and new orchards) are protected from sunburn and herbicides by paint + “nursery boxes”. If nursery boxes are used without painting trees, the boxes should be flattened (look like ◊ this from the top, not this ◻) to avoid “box burn”.



Prune growing in California in 21st Century: Turning the corner

Co-sponsored by University of California and the California Dried Plum Board

March 7, 2014

[Veterans Memorial Community Building, 1425 Veterans Circle Dr., Yuba City](#)

Morning Refreshments and Lunch courtesy of Farm Credit West. Thank you!

PCA and CCA CE hours requested

Please RSVP for lunch to
mjsearcy@ucanr.edu or
call 530-822-7515

- 8:30 **Sign-in and refreshments**
- 9:00 **Welcome and Introduction**
Joe Turkovich, grower & CDPB research sub-committee chairman
- 9:15 **Dried plum nutrition research and marketing outlook: turning the corner**
Donn Zea, Executive Director, California Dried Plum Board
- 9:45 **The view around the corner: Orchards to maximize yield and grower returns**
Ted DeJong, Professor, UC Davis Plant Sciences Department
- 10:15 **New possibilities for rootstock selections in the 21st century**
Rich Buchner, UC Farm Advisor, Tehama County
- 10:45 **Break**
- 11:00 **Food safety in 21st century prune production**
Tom Jones, DFA
- 11:30 **Keeping your orchard productive: wood diseases and cankers**
Themis Michailidies, Professor, UC Davis Plant Pathology Department
- 12:00 **Hosted Lunch by Redbelly Catering with vegetarian option available**
- 12:30 **Weed management in prunes**
Brad Hanson, Extension Specialist, UC Davis Plant Sciences Department
- 1:00 **Sutter and Yuba Ag Commissioners' Update**
Todd Quist; Yuba County Ag Commissioner's Office
- 1:30 **Flower, leaf and fruit disease control in dried plums**
Jim Adaskaveg, Professor, UC Riverside Department of Plant Pathology
- 2:00 **Nitrogen management in prunes**
Franz Niederholzer, UC Farm Advisor, Colusa/Sutter/Yuba Counties
- 2:30 **Adjourn**



PRUNE (DRIED PLUM): FUNGICIDE EFFICACY

Fungicide	Resistance risk (FRAC#) ¹	Brown rot		Russet scab	Rust
		Blossom	Fruit ²		
Adament	medium (3/11)	++++	++++	---	+++
Bumper/Tilt ²	high (3)	++++	++++	---	+++
Distinguish**	medium (9/11)	++++	++	---	++
Elite/Tebuzol ^{2,7}	high (3)	++++	++++	---	+++
Indar ²	high (3)	++++	++++	---	+++
Inspire Super	high (3/9)	++++	++++	---	+++
Luna Sensation* ²	medium (7/11) ⁴	++++	++++	ND	ND
Pristine ²	medium (7/11) ⁴	++++	++++	ND	ND
Quash ²	high (3)	++++	++++	---	+++
Luna Experience*	medium (3/7) ⁴	++++	++++	ND	++++
Quadris Top ²	medium (3/11) ⁴	++++	++++	ND	++++
Quilt Xcel ²	medium (3/11) ⁴	++++	++++	ND	++++
Rovral + oil ^{2,5}	low (2)	++++	NR	---	NR
Scala ⁶	high (9) ^{3,4}	++++	+++ ⁶	---	ND
Topsin-M /T-Methyl/Incognito+ oil ^{2,4}	high (1) ⁴	++++	++++	---	---
Vanguard ⁶	high (9) ^{3,4}	++++	+++ ⁶	---	ND
Fontelis	high (3)	++++	+++	---	+++
Elevate ^{2,7}	high (17) ⁴	+++	+++	ND	---
Rovral/Iprodione /Nevado ²	low (2)	+++	NR	---	NR
Topsin-M/T-Methyl/Incognito ^{2,3}	high (1) ⁴	+++	+/-	---	---
Abound	high (11) ⁴	++	+	---	+++
Botran	medium (14)	++	++	ND	ND
Bravo/Chlorothalonil/Echo/Equus ^{8,9,10}	low (M5)	++	++	++	---
Captan ^{7,8,10}	low (M4)	++	++	+++	---
Gem ⁷	high (11) ⁴	++	+	---	+++
Rally ²	high (3)	++	++	---	---
Sulfur ¹⁰	low (M2)	+/-	+/-	---	++

Rating: ++++= excellent and consistent, +++= good and reliable, ++= moderate and variable, += limited and erratic, +/- = often ineffective, --- = ineffective, ? = insufficient data or unknown, NR=not registered after bloom, and ND=no data

* Registration pending in California.

**Not registered, label withdrawn or inactive

¹ Group numbers are assigned by the Fungicide Resistance Action Committee (FRAC) according to different modes of actions (for more information, see <http://www.frac.info/>). Fungicides with a different group number are suitable to alternate in a resistance management program. In California, make no more than one application of fungicides with mode of action Group numbers 1, 4, 9, 11, or 17 before rotating to a fungicide with a different mode of action Group number; for fungicides with other Group numbers, make no more than two consecutive applications before rotating to fungicide with a different mode of action Group number..

² Fruit brown rot treatments for fungicides in FRAC Groups 1,2, 3, 17, 7/11 are improved with the addition of 2% light summer oil. The oil is "light" summer oil (1-2% vol/vol). If applied in summer, fruit will lose their waxy bloom and look red. They will dry to normal color.

³ Strains of *Monilinia fructicola* and *M. laxa* resistant to Topsin-M and T-Methyl have been reported in some California prune orchards. No more than two applications of Topsin-M or T-Methyl should be made each year. Resistant strains of the jacket rot fungus, *Botrytis cinerea*, and powdery mildew fungi have been reported in California on crops other than almond and stone fruits and may have the potential to develop in prune with overuse of fungicides with similar chemistry. Subpopulations of both *Monilinia* spp. have been shown to be resistant to AP (FRAC 9) fungicides on prune in CA.

⁴ To reduce the risk of resistance development start treatments with a fungicide with a multi-site mode of action; rotate or mix fungicides with different mode of action FRAC numbers for subsequent applications, use labeled rates (preferably the upper range), and limit the total number of applications/season.

⁵ Blossom blight only; not registered for use after petal fall.

⁶ High summer temperatures and relative humidity reduce efficacy.

⁷ Registered for use on fresh prunes only.

⁸ Do not use in combination with or shortly before or after oil treatment.

⁹ Do not use after jacket (shuck) split.

¹⁰ Do not use sulfur, captan, or chlorothalonil in combination with or shortly before or after oil treatment.

¹¹ Quash, Elite, Tebuzol, Gem, Scala and Pristine are registered for plums and prunes (dried plum) in California.

PRUNE (DRIED PLUM): TREATMENT TIMING

Note: Timings listed are effective but not all may be required for disease control. Timings used will depend upon orchard history of disease, length of bloom, and weather conditions each year.

Disease	Green bud	White bud	Full bloom	May	June	July
Brown rot ¹	+++	+++	+++	----	+	++
Russet scab ²	----	----	+++	----	----	----
Rust ³	----	----	----	+	++	+++

Rating: +++ = most effective, ++ = moderately effective, + = least effective, and ---- = ineffective

¹ Flowers are susceptible beginning with the emergence of the sepals (green bud) until the petals fall but are most susceptible when open.

² A physiological disorder; no pathogens involved.

³ More severe when late spring rains occur.

