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Chuck and Ron Mansfield of Goldbud
Farms See story page 4.
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Goldbud Farms Finds its Niche in El Dorado

Growing Top Quality Apples & Stone Fruit with Ron Mansfield

By Dan Clarke, Northern California Correspondent



Goldbud Farms grows apples. After all, it is situated right in the middle of an area called Apple Hill. However, it's a diversified farming operation that actually has more of its 60 acres of orchards devoted to stone fruit than to apples. In addition, Goldbud oversees nearly 250 acres of wine grapes, some of which it owns and some of which is managed for others.

Proprietor Ron Mansfield grew up near Bakersfield where his family grew hay, cotton and row crops. At the University of California Davis he was a Renewable Resources major, who gravitated toward elective classes in agriculture. He says it was about this time that he began to have great success in raising houseplants and discovered that he had "a green thumb." As a recent UCD graduate he had the opportunity to work for the El Dorado County farm advisor on a codling moth control project. He also worked on a computerized irrigation system that his local water district still uses in its predictive irrigation management program. Ron says that working outdoors he became familiar with much of the area. "I learned where the good soils were . . . and where the tough ones were. It was a tremendous learning experience."

Eventually, he purchased land of his own—a parcel at 2800 feet elevation in that part of El Dorado County now known as Apple Hill. "The soils on this particular property are volcanic clay loam from the Aiken series. A lot of plants really perform well here," explains Mansfield. "These soils have a large water holding capacity, but they're well-drained."

In 1979 we took out most of an existent pear orchard. People weren't growing much stone fruit at this elevation then. We planted sweet cherries, peaches and nectarines, and the fruit was spectacular. If Mother Nature cooperates, you're taking a small crop in the third year. With peaches and nectarines you're in full production in six years. With cherries it's a little longer—eight or nine years."

The orchards have grown and diversified. Three-and-a-half decades after the beginning, they now include Fujis and other apple varieties—some Galas, Braeburns and a few Jonagolds. There are peaches (predominately O'Henrys), but also Redtops, Suncrests, Cal Reds and the late variety Fairtime. Red Diamond, Summer Grand and
(continued on page 20)



Ron Mansfield of Goldbud Farms



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Keeping it Fresh!

California Fresh Fruit News



California Fresh Fruit Association Annual Meeting, March 25-27

The California Fresh Fruit Association (CFFA) invites growers and industry friends to attend their 82nd Annual Meeting, held on March 25-

27, 2018 at The Inn at Spanish Bay, in Pebble Beach. The event will include an industry workshop, annual meeting and luncheon, as well as other fun



Kathleen Nave

activities in between. President of the California Table Grape Commission Kathleen Nave has been selected for the association's 2018 Mentor's Award and will be honored with this recognition at the annual meeting. This esteemed award recognizes an individual who has been a leader in the industry – one that can be described as a: counselor, guide, loyal advisor, tutor, coach, teacher; and a person who, through effort, discovery, innovation, dedication, and/or perseverance, has influenced the industry in a positive way; and Kathleen Nave has exemplified that.

California Fresh Fruit Magazine is a proud sponsor of the annual meeting, so be sure to come and see us there. For more information on the conference, visit CalFreshFruit.com.

Tulare County Crop Update

According to the Tulare County Ag Commissioner's report, stone fruit growers in Tulare County are completing pruning and debris shredding. More stone fruit orchards are beginning to bloom, with the earliest varieties in full bloom. Bee colonies continue being moved into almond and stone fruit orchards in anticipation of the bloom.

Navel and Cara Cara oranges, Minneola tangelos, and lemons continue

to be harvested. Some pruning and skirting of orange groves is occurring. Navel oranges continue to be packed and shipped domestically and exported to Australia, China, Hong Kong, Korea, the Philippines, Singapore and Taiwan. Packinghouses are grading fruit to maintain good quality going to market. Cara Cara oranges are also being shipped to Japan and other Asian countries. Growers are applying frost protection measures and carefully watching for damage. Weed control activities are happening in some groves. Blueberry plantings are progressing well and some are starting to bloom.



Finishing up some winter pruning before bloom in a peach orchard



Freshly Shredded Orchard Debris Postpruning

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Avocados



Upcoming Avocado Grower Meetings

The California Avocado Commission (CAC) will be holding its 2018 Annual Meetings in Temecula, Ventura and San Luis Obispo this March. The meetings will cover important updates concerning the Commission and the avocado industry, and input from industry stakeholders is highly encouraged.

The meetings will be held as follows:

- **Temecula — Tuesday, March 20, 2018**

- 10:00 a.m. – 12:30 p.m.

South Coast Winery

34843 Rancho California Road

Temecula, CA 92591

Lunch provided

- **Ventura — Wednesday, March 21, 2018**

- 10:00 a.m. – 12:30 p.m.

Ventura Museum

100 East Main Street

Ventura, CA 93001

Lunch provided

- **San Luis Obispo — Thursday, March 22, 2018**

- 9:00 a.m. to 11:00 a.m.

SLO Farm Bureau

4875 Morabito Place

San Luis Obispo, CA 93401

Breakfast provided

No RSVPs are required. For more information, contact CAC at 949.341.1955 or cac.iaf@avocado.org.

Avocado Produce Safety Field Day, March 7

The Produce Safety Rule of the Food Safety Modernization Act became effective on January 26, 2018 for farms that produce more than \$500,000 in average annual produce sales during the previous three-year period. All remaining 'small' farms will be phased in over the next two years. Beginning in 2019, the California Department of Food and Agriculture (CDFA), acting as enforcement agents for the U.S. Food and Drug Administration, will commence random farm compliance inspections.

To help California avocado growers prepare for these random inspections, the California Avocado Commission is holding a field day at our Pine Tree Ranch demonstration grove, located at
(continued on page 8)



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News Briefs

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19455 E. Telegraph Road, Santa Paula, CA 93060, on Wednesday, March 7, 2018 from 9:00 am – 11:00 am, to provide growers an understanding on Produce Safety Rule implementation requirements. CDFA staff will be present and walk growers through an On-Farm Readiness Review at Pine Tree Ranch so you know what to expect if your operation is selected for inspection.

Ventura Fire Recovery Program Deadline, March 19

The Ventura County Resource Conservation District (VCRCD) was awarded approximately \$152,000 in grant funding through the State Water Resources Control Board to purchase materials for erosion control purposes on fire-impacted lands within Ventura County. Landowners impacted by the Thomas Fire are able to apply for the

materials they need to help mitigate fire-based erosion on their properties.

Materials include, but are not limited to: silt fencing, jute netting, sandbags, Filtrexx Siltsoxx, livestock fencing, native plants, seed, straw wattles and alternative water supplies (livestock). The last day to apply for erosion control materials is March 19, 2018.

Citrus



Citrus Showcase in Visalia, March 8

Join California Citrus Mutual for the 25th Annual Citrus Showcase on Thursday, March 8th, 2018 at the Visalia Convention Center. Doors open at 7:30 a.m. with coffee and pastries available for all attendees. There is no cost to attend the Showcase; however, the luncheon, featuring Ray Starling, White House Advisor to the Administration on agriculture, does cost \$40/person. Contact California

Citrus Mutual at (559) 592-3790 for lunch tickets.

The first workshop begins at 8:00 a.m. with *All Things Water*, covering changes the growers will be facing in regards to ILRP, what's next with Nitrates, subsidence issues, and the water bond. The second workshop will begin at 10:00 a.m. and will cover *Food Safety: What's next from the State and Federal Perspective*. The third and final workshop at 2:30 p.m. will feature Dr. Beth Grafton-Cardwell on *The Latest Available Strategies for Managing ACP in Your Orchards*. She will provide an overview of the psyllid management tactics that are currently being conducted around the state and the level of control being achieved.

February Freeze Concerns Valley Citrus Growers for Next Year's Crop

An unusual late-season freeze event swept through the Central Valley mid-
(continued on page 10)





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News Briefs

(continued from page 8)

February causing temperatures in the citrus belt to dip into the low 20s for up to 5 hours in the coldest locations. The drastic swing in temperature will undoubtedly affect the area's citrus crop, although the full extent of which won't be known until the Spring.

The current year citrus crop - navel oranges and mandarin varieties, specifically - were approximately 45-50% harvested by the February 20th freeze event. This late in the season the fruit remaining on the tree has a higher sugar content which can act as a natural defense against freeze damage. With frost protection measures in place, temperatures stayed in the mid to upper 20s for durations lasting as long as 5 hours. Generally, temperatures below 32 and 27 degrees can create an opportunity for damage in mandarin varieties and oranges, respectfully. Given the timing of this freeze event and the good size and sugar content of the crop at this point in the season, growers do not anticipate any damage.

However, the warmer temperatures and Spring-like conditions of the past several weeks have caused trees to start blooming 2-4 weeks earlier than usual. The quality and quantity of bloom is a direct indication of the size of next year's crop and the quality of the fruit. Drastic swings in temperature



Freeze-Damaged Mandarin

such as what we are experiencing now may cause the early, fragile blooms to "drop" which could translate to a smaller crop for the 2018-19 season. Young trees are especially susceptible to cold snaps during the bloom phase. In the coming days and weeks growers will start surveying groves for potential frost burn on the new plant growth that is so vital going into the new season.

With the fate of next year's crop of top concern, growers started implementing freeze protection measures early the day before in anticipation for a cold night, possibly *nights*, ahead. Growers report

running water in the groves to keep the orchard floor moist. Wind machines were also used to elevate temperatures. The warm orchard floor coupled with a decent inversion layer allowed wind machines to raise grove temperatures a critical 2-3 degrees. On average, wind machines were on for 8 hours, starting as early as 10 p.m. in some areas.

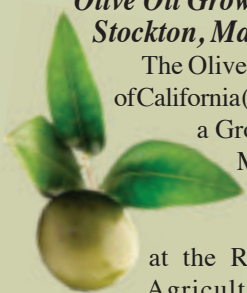
The coming days will reveal if damage was incurred. Growers are optimistic that if there is damage the trees will have ample time to bounce back and push out another set of blooms this Spring - *California Citrus Mutual*

Olives

Olive Oil Grower Meeting in Stockton, March 19

The Olive Oil Commission of California (OOC) is hosting a Grower Meeting on Monday, March 19, 2018 (9 a.m. to noon) at the Robert J. Cabral Agricultural Center in Stockton, CA. Oil olive

growers and producers are encouraged to attend the meeting where updates on all OOC activities and funded research will be provided, PCA Continuing Education Credits are pending. Some of the topics will include: olive knot research, Neofabraea research, and an update from the UC Davis Olive Center. For material and lunch counts, please RSVP to Tyler Rood at tyler@agamsi.com by Thursday, March 15, 2018.



Pomegranates

Pest/Disease Management in Pomegranates with Craig Wylie

With high insect pressure last season followed by some interesting winter weather, pomegranate growers are not too sure of what the 2018 season will bring. Orchard sanitation has been key this winter, and with little rain, it has been easy for growers to get into the field, as opposed to last season.

"We have some key pests that overwinter in our cull fruit, so after harvest, we get right to blowing the fruit off the berms and shred them," says Craig Wylie, a pomegranate grower who manages about 250 acres in the Madera Ranchos (Central Valley).

Wylie also grows tree nuts, and his pomegranate orchard is surrounded by almonds and pistachios - two other crops



that have issues with similar pests, like leaf-footed bug and navel orangeworm (NOW). So pest management is a must



Craig Wylie



for the sake of all three crops. “I’ve been growing pistachios for many years, but I’m much less experienced when it comes to growing pomegranates, and I lost the entire crop to Navel Orangeworm one year,” he expressed. Since then, he has employed mating disruption puffers during the season, and sprays pesticides to keep infestation

to a minimum. Wylie also sprays for thrips to prevent them from feeding on new foliar growth.

Leaf-footed bug hasn’t been as problematic for Wylie, and winter sanitation practices do make a big difference for this pest. Sulfur applications in the late summer also does a great job at deterring stinkbugs

and mites, as well as keeping the fruit dry. “We tried it for the first time last year, and it was great,” he shared. “The only thing bad about the sulfur is that the pickers don’t like it. We used a wettable form rather than a dry form, which is much easier on the employees.”

Alternaria is another issue pomegranate growers have to deal with, as it infamously causes “blackheart” of the fruit. Wylie is happy to say that they have pretty well eradicated blackheart with about three applications of fungicides in the spring during bloom.

Moving into a new season, Wylie plans to stay on top of his pest and disease management programs; but he is also excited to try out some new fruit thinning technologies. “You don’t want more than 50-60 fruits per tree, otherwise they won’t size up right,” he said. “Pomegranates are very expensive to thin, so we are going to experiment with some machinery to knock down some of the flowers during second and third bloom, as see how it goes.”

Prunes

New Hazard for Interplanted Prune Orchards

Interplanting existing prune orchards where established trees don’t fill their space is a long accepted practice to increase grower income while limiting



costs compared to complete orchard removal and replanting. This is often done in older orchards

either by interplanting down the existing tree row or changing the direction of the tree rows 45° and interplanting on the diagonal between two existing trees.

Research by Dr. Themis Michailides since 2016 has shown pruning wounds on young trees are especially vulnerable to infection by *Cytospora*, *Botryosphaeria*, and/or *Lasiodiplodia* fungi. These infections damage developing scaffolds, potentially limiting orchard productivity over time.

Growers should reconsider interplanting prunes – or at least how they treat interplanted trees – due to the risk of pruning wound infections. The primary sources of the infections in interplanted trees are the mature trees in the orchard – often in decline



Cytospora on Prune Branch

themselves due to those same canker and wood rot diseases.

Pruning wound infections can be minimized by 1) pruning in late summer or spring with no rain in the forecast or 2) pruning during winter and spraying Topsin-M or Topsin-M + Rally after pruning and before the next rain to protect the cuts from infection. Dr. Michailides reports that Topsin-M is especially effective against *Botryosphaeria*. Adding Rally could

be helpful for resistance management.

With yield and net income limited by tree spacing that is too wide and/or tree health in some older blocks, growers must choose between interplanting and removal/replanting. While interplanting costs less up front, pruning wound infections can speed the rate of tree decline in interplanted orchards reducing grower returns. – *Franz Niederholzer, UCCE Farm Advisor, Colusa & Sutter/Yuba Counties*

Annual Citrus Fruit Display Pleases the Senses

CCPP Brings Value & Security to the Citrus Industry

By Nancy Vigran, South Valley Correspondent

The Lindcove Research and Extension Center's annual Citrus Fruit Display and Tasting Event did not disappoint attendees with 160 or so, oranges, lemons, limes, grapefruit, pummelos and more, picked and sliced to satisfy those curious about new and/or improved varieties of citrus currently available. Held in December, the event tantalizes most of the senses with an aromatic display that is a visual delight, with various fruit available to touch and taste.

The main focus of the Research station and its work with the University

of California, Riverside (UCR) is to not only help develop citrus lines, but to protect each viable fruit for many years to come. Dr. Georgios Vidalakis, director of the Citrus Clonal Protection Program (CCPP) and professor/UC Extension specialist in plant pathology, offered a presentation on how this is accomplished. A native of Greece, Vidalakis came to the US in 1999 to work in the UCR Citrus Virology Program under former CCPP director David Gumpf. "The benefits of this program in cooperation with the nurserymen and

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Dr. Georgios Vidalakis, director of the Citrus Clonal Protection Program, gave an introductory presentation just outside of the Lindcove screen houses on the origins of the CCPP program and the positive effects of the CA citrus industry working together with scientists, researchers, nurserymen and governmental entities.

The citrus display at the Lindcove Research & Extension Center's annual Citrus Fruit Display & Tasting was a visual delight with aromatic properties and tastes from very sweet to quite tart.



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Citrus Display

(continued from page 12)

the growers cannot be emphasized enough,” Vidalakis said.

Since the 1930’s, the CCPP “has been on the pioneering forefront of dealing with citrus diseases and citrus therapy, and is allowing us to introduce citrus varieties into the United States,” he said.

The Code of Federal Regulations 319.19 prohibits the entry of any green plant, or citrus plants parts into the US. It is a felony for anyone to attempt to do so.

Start of the Citrus Clonal Protection Program

During the 1930’s, psoriasis of a citrus tree was found infectious to other trees propagated from it. As a result, the Psoriasis Freedom Program started in 1937. In cooperation with the California citrus industry and the Department of Food & Agriculture, the University of California started studying the situation – the scaly bark and leaves that looked sickly. Nurserymen and growers became knowledgeable in what to look for and soon started culling diseased trees.

“Twenty years later,” Vidalakis explained, “we start discovering how to diagnosis these diseases with biological indexing and laboratory tests – there was a big explosion in the ‘50s of all those activities and later on in the ‘70s they figured out a way to remove those diseases . . .

“And now, in the ‘90s and the 2000’s, with molecular technology, all of these things have come together and the CCPP basically has exploded in terms of its capacity to move varieties through the introductory process, and with how many successions we have had in the foundation block of screen houses behind me.”

When a nurseryman, grower, or any individual wishes to bring a new variety of citrus into the US, the budwood is sent to the UCR facility. Testing is performed to check for diseases. Once cleared, the budwood goes into a pseudo-grafting process and basically the propagation of a tree is done on a microscopic scale. It is similar to what a nursery would do, applying the budwood to rootstock through the same process, but under the



Cara Cara Navels attracted a lot of attention at the Tasting Event as they garner more attention in the marketplace as well. The Cara Cara has been in the Lindcove Field Station demo block since 1994.



Each citrus variety in the test block is well marked with signage indicating the name and date when first placed in the block, such as this Cocktail Pummelo Hybrid first planted there in 1994

microscope and using a piece that is less than a millimeter, Vidalakis explained.

“With that process, we generate a new tree,” he said. “It takes roughly a year for us to have a good-size tree. Then, we take that tree and perform more than 25 different tests to make sure that the therapy was successful. At that point we are roughly 24-48 months into the process. When the lab and the screen house say this plant is healthy and there are no detectable pathogens in it, I write a letter to the State and tell them this budwood arrived in California under this permit. We did all these things

(continued on page 16)



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Citrus Display

(continued from page 14)

to ensure it doesn't have any pathogens, and that I am requesting this variety be

released from quarantine."

To date, the CCPP has not been challenged. The approved variety is then eligible to be distributed to the public or



The Excalibur Lime was brought into the US by Excalibur Nursery in Florida, and is currently in being held at UC Riverside. This orange-colored lime is a cross between a kumquat and a Rangpur Lime, although its exact pedigree is unknown. This fruit from the tree was brought for display – tasting was not allowed, although it is said to have an acidic, lime-like flavor.



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Dr. Tracy Kahn, curator of UCR Citrus Variety Collection, explains to attendees how to locate particular trees within the demo grove.

California Fresh Fruit / Jan/Feb 2018



While not as much interest was paid to limes and limettas, various varieties were on display at the Tasting Event.

returned to its owner, if it is a licensed, or private variety. A sampling is placed into the USDA Germplasm Repository at UCR for long-term preservation.

In the case of the varieties that would be available to the industry and the public, young trees are sent to the Lindcove Research Foundation block. There are roughly 1,000 budwood source trees right now, representing 400+ different varieties.

The foundation block has its own history, Vidalakis said. The first tree was planted in the hills there in 1961. The outside foundation block, or field foundation block and evaluation block, was used continuously from 1961 to 2007. It was one of the few places in the world that could distribute budwood from an outside block, because California had a system to protect the industry from diseases. That system has different layers – one program cannot do everything. The most important thing that happened in California is that the industry came together to develop the Citrus Research Board in 1968. The industry has been protecting itself, developing funding to maintain a healthy industry to support the CCPP and other research programs.

“In 2007, we had an increase in finds of Tristeza virus in the station in Lindcove,” Vidalakis told the group. “So, the decision was made to start

(continued on page 18)



The Lindcove Research and Extension Center has added many screen houses in the past several years as added protection for one of the largest section of citrus in the world, guarding against insects and diseases.

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Citrus Display

(continued from page 17)

distributing budwood exclusively from the protective structures [screen houses].”

“The important message is that this system exists because the industry supports it and needs it . . . With the spread of the Asian Citrus Psyllid and finds of the HLB-positive trees in California, these structures are already in place. We don’t have to worry as much about what happened in Florida, for example, where nobody did anything from 1998 to 2005 in terms of controlling and monitoring the Asian Citrus Psyllid.”

Protection comes in these layers. The first layer is the quarantine set up in Riverside, surrounded by apartments and concrete. So, even if there was human error, or a gust of wind blew off the roof of a screen house, it would not be a big deal. The location is in an urbanized environment, he further explained. Once cleared from quarantine, budwood sources are established in the Lindcove screen houses, which is the second layer. The third is that a sampling of each variety is sent to the UCR Repository. The fourth – samples are also sent to the Cryopreservation facility in Colorado.

Layer five – all the varieties are maintained in the positive pressure screen house. Furthermore, the screen house has two sections, so everything is duplicated in each section. Layer six – the industry’s citrus nurseries follow the 2010 regulations, maintaining most, if not all, of the varieties in their protective screen houses. Human errors and/or natural disasters are going to happen, but the materials will not be lost.

Lindcove budwood is available to most anyone now with online ordering.



Citrus Tasting attendees were offered the opportunity to sample some of the fruit right off the tree, and invited to take some fruit-only samples home, as well.

The budwood program began in 2012 so that anyone could order. Despite the roughly 20 production nurseries in the State, Vidalakis said that more than 1,400 have registered to order through the Lindcove system. Last year, approximately 600 orders were filled of 300 different varieties for a total an estimated 65,000 buds.

Vidalakis closed his presentation by discussing the importance of scientific research supported by the industry.

“Coming from an outside perspective – I was born and raised in Greece – the system here is not the rule; the system is the exception... and that is why this has been successful because there has been a continuum of decades of productive collaboration between the players. You are the only industry I know of, with direct access to researchers and professionals. You can pick up the phone and speak with us anytime you wish. That opportunity doesn’t exist in other parts of the world.”

Following the presentation, attendees were invited back inside for more taste and talk, although many followed Dr. Tracy Kahn, the curator

of UCR Citrus Variety Collection, to the outdoor demo block, to look at trees and taste fruit right off them. There, visitors could follow field maps to find the varieties they were most interested in. Kahn and other staff were available for questions on the Integrative Citrus and Evaluation Program. It is a vast program, she explained, “but the current focus is on breeding varieties tolerant and resistance to HLB.”

The program also evaluates new introductions as they are released from the CCP. There are a few new introductions that have been sent back to quarantine to be cleaned up like the Shoshoni Blood Orange and Variegated Cara Cara – although fruit was on display for visual appeal only.

Like others, Philip Sarreal with the Variety Improvement Program at TreeSource Citrus Nursery was eyeing the Cara Cara fruit and trees. “The color is deceiving,” he said, “the flavor is not quite there yet.” The fruit was not quite ripe. When evaluating citrus he said, “I look for existing traits. There are a lot of natural mutations and then we need to see if the trait is consistent.” 



The Lindcove Research Center demo and test groves are extensive, with samplings of trees from upwards of 400 varieties of citrus.

California Fresh Fruit

Late Winter Orchard Tasks

Prune Bloom Orchard Management Considerations

By UC Cooperative Extension Advisors Katherine Jarvis-Shean, Franz Niederholzer & Emily J. Symmes

- ✓ Order bees in February; generally, you want to install one hive per acre.
- ✓ If you're going to *winter irrigate* to backfill what Mother Nature didn't deliver this year, get it done before the end of February.
- ✓ Check *irrigation system* uniformity and perform maintenance before the system is needed for frost protection, orchard cooling at bloom, or the irrigation season starts.



✓ Get *air-blast sprayer* ready to apply bloom fungicides; check calibration and do general maintenance (check sprayer filters, replace nozzles as needed, etc.)

✓ If *San Jose scale* (SJS) dormant treatments were not applied, not effective, and/or SJS pressure is high, treatments targeting the late spring crawler stage can be effective. Place pheromone traps by mid- to late February. Apply crawler treatments



San Jose Scale

600-700 degree days after biofix (males caught on consecutive trap checks).

✓ Consider bee safety when planning your sprays.

✓ Winter chill accumulation (as counted in chill portions, as of February 7th) is stacking up to be similar to the winter of 2014-2015, though not nearly as low as 2013-2014.

✓ *If it's cold at bloom*, a closely mowed orchard floor is warmer than one with tall weeds/cover crop. Freshly disked soil is the coldest.

✓ *If it's hot at bloom*, consider irrigating to wet the orchard floor, and as much as the first foot of soil. This may provide some cooling if hot temperatures occur at bloom. Run sprinklers when temperatures reach 70-75°F and shut off when they drop below those temperatures. Evaporation of this water provides some small temperature reduction (usually just one or two °F). Experience has shown the extended cool weather (<60°F) or a few hours of hot temperatures (>81°F) at bloom pose the greatest risk to a prune crop.

✓ Plan for *brown rot* fungicide sprays if bloom weather is wet. In a wet bloom, two sprays (green bud and full

bloom) are recommended. One spray at 40- 50% bloom effectively controls brown rot in years with no rainfall since there's still a risk of brown rot infection from dew. Alternate fungicide classes (use fungicides with different FRAC numbers) if spraying more than once.

✓ *Russet scab* develops when there is significant rainfall during and/or immediately after bloom (before the fruit fills the floral "jacket"). Consider spraying captan or chlorothanil (Bravo/Echo) at full bloom to reduce scab at harvest, but pay attention to honey bee safety (both those fungicides are tough on bees).

✓ If *aphid* control measures were not taken during fall or winter, two oil sprays (4 gal/acre/spray) at bloom can be effective against mealy plum and leaf-curl plum aphids if applied 7-10 days apart at 1.5 mph. Oil should *not* be applied with or shortly before/after captan, chlorothalonil or sulfur because the combination can be phytotoxic.

✓ Monitor for *Peach twig borer* (PTB) during and after bloom. Chewing damage on buds during bloom indicates PTB activity and may warrant treatment. To protect bees, avoid any insecticide in the spray tank at bloom, except B.t. (Dipel®, Javelin®, etc.)



Peach twig borer

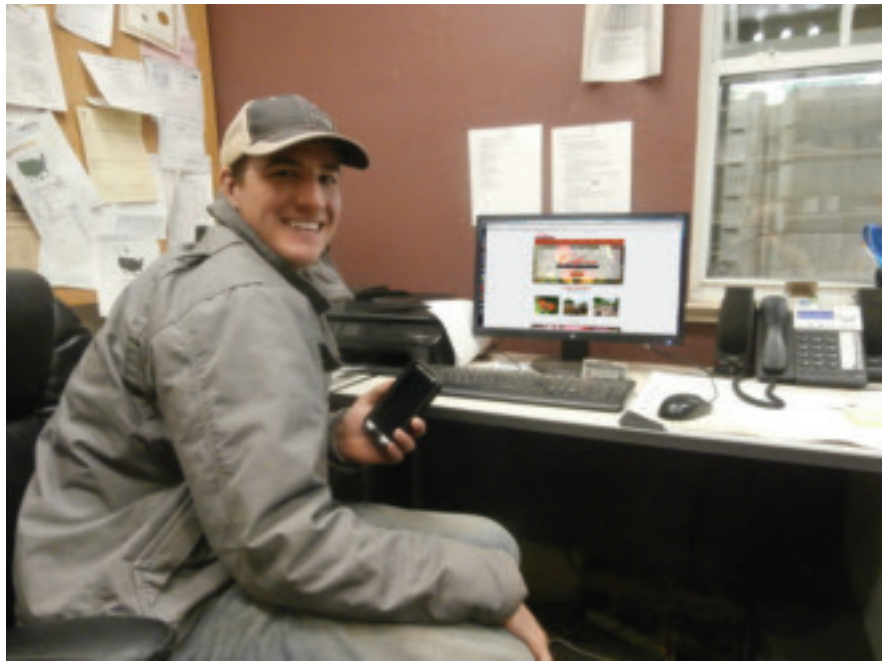
Goldbud Farms

(continued from page 4)

Red Gold are the mainstay nectarines, but Flaming Red and Royal Giant are in the mix, too. Plum varieties include Freedom, Rosemary, Elephant Heart and a few Kelseys.

Labor isn't a problem at Goldbud, which maintains a year-round crew. "They bring a lot of experience, a lot of years," says Mansfield. "Some, like Silvano Gonzales and Checky Garcia, have been here for 30 years. They understand what we're trying to do in all aspects of the farming. Checky's son, Victor, does a really good job for us in the packing and retail parts of our business. Without our employees we'd be up a creek."

Water is accessed through the El Dorado Irrigation District, which has



Chuck Mansfield



Mansfield in the Goldbud packing house.

always provided an adequate supply, according to Mansfield. "The only restriction was that the growers needed to follow the schedule provided for them. Irrigation amounts and timing can vary, as the program takes predicted weather into account."

Asked to explain how his practices might be different from other orchardists, Mansfield replies, "One of our most important issues is how we affect the gathering of sunlight by how we manipulate the canopy. Our summer pruning practices get rid of a lot of the upright growth that leads to excessive shading. This allows us to keep the canopy relatively open so you get sunlight completely through the canopy. We feel this enhances the flavor quality, but also gives a little more color and a little 'pop' when you can see the fruit on the shelf."

Picking dates are more determined by taste than measured sugar levels. "The sugar-acid balance up here is really good," comments Mansfield. Stone fruit is checked daily with a refractometer, though somewhat less frequently with the apples. "Brix reading we look at as a supplement to the flavors," Ron concludes.

Many Apple Hill growers generate a substantial part of their income from direct sales to visitors who flock to this picturesque area in the late summer and fall. Goldbud Farms also sells fruit to the public at their Carson Road location

from early July into December. The farm stand is a small part of their business, but Ron Mansfield justifies its operation explaining, “We’re here all the time anyway.”

Even beyond their Apple Hill farm stand, Goldbud is not a big operation. “We may produce 3-4,000 boxes of nectarines, 8,000 boxes of peaches and about 2,000 boxes of plums,” says Mansfield. “So, we’re tiny in the total scheme of things, but that’s fine with us.” Though small, Goldbud Farms does a thriving business with high-end wholesale customers. “Our production is split up between the San Francisco Bay Area and (the rest of) California and the Midwest and the East Coast,” explains Mansfield. “We do business with six to seven stores and wholesalers in the Bay Area and we do some significant business with the Northern California Distribution Center of Whole Foods. However, 30 to 40 percent of our production goes to the Midwest and East Coast.”

How did this unusual business model evolve? Mansfield recalls that in the early days, “We were invited by Sibella Kraus to ‘The Tasting of Summer Fruit,’ a big tasting in Oakland that put together growers with wholesale buyers. Sid Wainer from Boston tasted our products and was immediately interested. It was the start of a good relationship that’s lasted 30 years so far.” Sacramento specialty grocer David Berkley was also a significant early adopter of Goldbud fruit. “That was the only store we sold to in Sacramento,” says Ron. Berkley became acquainted with members of Ronald Reagan’s staff when he was Governor of California and was asked to become a wine advisor to the White House when Reagan became President of the United States in 1981. “He put our fruit in the White House,” recalls Ron, who still has a menu memorializing Goldbud cherries being served at a State Dinner.

On a September day at Goldbud, women are found packing peaches for air shipment that night. The fruit is trucked to Sacramento’s airport as they begin their journey to Missouri, where they are picked up by a buyer the next day and sent to the William Straub Company, which operates 33 stores in the St. Louis area. If the buyer was from either Boston or New



Mansfield and his packing house staff

York, the produce might be taken to San Francisco’s airport, where larger planes are available. In either case, the buyer is paying premium prices. “You have to really understand what you’re getting,” says Mansfield. “The fruit is ready, or nearly ready, to eat. It’s a highly mature piece of fruit. Ours is not a cheap product.” Of the Straub organization, Ron Mansfield says, “That’s the kind of customer we’re looking for—they want something nobody else has.”

Obviously, this Sierra Foothill grower has built a successful business. Asked if he has any plans for retirement, Ron Mansfield displays a slightly pained expression as he says he’s not sure he’s ready for that. A moment later he acknowledges that retirement—sooner or later—is inevitable and that he’s looking forward to turning over the business to his son one day

Chuck Mansfield is a Cal Poly San Luis Obispo graduate, who spent 10 years in the wine business. Eight of those years he was the winemaker for Hop Kiln in Healdsburg. Recently he returned to the family fruit business in El Dorado County. Besides a familiarity with grape growing, Chuck has brought substantial computer skills to Goldbud, according to his dad, and has the patience to navigate ever more complex governmental regulations. “He’s been extremely valuable in working things out so that we’re compliant,” observes

his father. Ron also has a daughter who is a counselor at Santa Rosa Junior College. Her two children “are tremendous fruit eaters,” according to their proud grandpa.

“There’s been a tremendous consolidation in the fruit industry,” Ron Mansfield says. “There used to be a lot of people with 40-50-60 acres and then the big guys with 1,000 acres or more. I believe that the stone fruit industry in California tasted itself right out of business looking for fruit you could ship around the world. We’ll continue to see a lot of consolidation. It’s going to be tough, but a number of fruit growers will maintain their niche. There will always be a niche for a unique operator.”

Goldbud plans to continue to deliver something many larger operations cannot. “What we are trying to do is provide the highest quality,” Mansfield says. “Our fruit is the highest quality—it’s cosmetically perfect. Our label and our packaging are high quality. The fruit goes out in hardwood boxes. The customers we have are going to stay in business. Several of them are third or fourth generation, so that’s staying power and that will help keep us in business, too. You just cannot compromise on taste and quality. If you don’t compromise you can make a living. I want to make Goldbud stand for something that the customer will know and appreciate.”

CDFA Awards Safety Training Contract

The *California Department of Food and Agriculture* (CDFA) has contracted with *Safe Food Alliance*, a division of DFA of California, to host 25 Produce Safety Training classes between January and June of 2018. The contract covers central and southern California counties beginning at Madera, Fresno, San Benito and Monterey counties along the north, to the border counties of San Diego and Imperial along the south.

CDFA received \$450,000 from the

U.S. Food and Drug Administration (FDA), to provide farmers with affordable access to food safety training courses which meet the requirements under the new Food Safety Modernization Act (FSMA) Produce Safety rule for growers, whose first compliance dates are January of 2018.

The *Safe Food Alliance* offers technical food safety services to assist growers, packers, processors, and manufacturers in meeting customer and regulatory requirements. *Safe Food Alliance* has approved trainers

who are able to conduct the classes on behalf of the *Produce Safety Alliance*. The food safety team includes four Produce Safety Lead Trainers and four Produce Safety trainers, making them the largest Produce Safety training facility in California.

Safe Food Alliance conducted 17 Produce Safety trainings for 662 growers in 2017, including 250 walnut growers as part of a partnership with the California Walnut Board. *Safe Food Alliance* will be partnering with the *California Walnut Board* to host six trainings in the spring of 2018 to train 500 additional walnut growers.

Over 50,000 produce farms in California are expected to be covered under the Produce Safety Rule, one of several sections of the new FSMA law. As part of this Rule, these 50,000 farms must employ at least one individual who has completed a food safety training course which meets requirements laid out in the new regulation.

Attendees of this course are eligible to receive a certificate from the *Association of Food and Drug Officials* (AFDO) which verifies that they have completed the recognized training course. Along with the standard curriculum, *Safe Food Alliance* will provide additional resources to attendees such as materials to help determine how the regulation applies to their farm; templates for creating required records; a calculation tool to determine if a small farm is exempt; a list of allowable water treatment compounds; and tools for conducting water analysis calculations.

For more information please contact foodsafety@safefoodalliance.com. More FSMA resources are available at <https://safefoodalliance.com/resources/food-safety-resources/what-is-fsma/>.

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