Redwood Empire Chapter Newsletter

October 2010

The 2010 Festival of Fruit: the Year of the Pitahaya

Festival of Fruit Journal,

by Phil Pieri:

Wednesday: Up at the crack of dawn. I try to remember if I forgot to pack anything the night before, but can't think of anything, so we jump into the car and head south. It is commute time in the Bay Area, so it takes a couple of hours before we hit I-5. Of course, that's when I remember all the things I forgot to pack.

Along I-5, there seem to be lots of new citrus orchards, but also some orchards that look like skeletons, as if their owners just stopped watering them. We wonder what's up with that.

We arrive at the Cal Poly campus in Pomona late in the afternoon and after a few times around some blocks locate our hotel on a hill right in the middle of the campus.

Thursday: up early in the morning, and after our free breakfast in the hotel, we're off to Irvine and the South Coast field Station: a farm owned by the state college system where any California college can have space for conducting studies. We toured the pitahaya planting of Cal Poly Pamona, and after the field tour we were ushered into a hall where there were many varieties of Dragon fruit cut up and waiting to be tasted. Let the feast begin, I thought, and it did; there seemed to be a never ending supply, and I ate more than I should have.

Thursday evening was low key, a glass of wine (or two) around the pool at the hotel renewing old friendships with people we only see at these festivals.

Friday morning and off to Melissa's Fruit Company in the city of Vernon in the shadow of LA's skyscrapers. A tour of her place is a walk through a tropical fruit market, only in 30 degree weather; it's all in refrigeration rooms. I believe Melissa's is the largest supplier of tropical fruit in the State if not the country, and at the end of the tour – you guessed it – all the tropical fruit you can think of and all for our tasting. Now I know what gluttony is.

Saturday, of course, is seminar day on campus. The lineup of prestigious speakers makes it hard to decide which talks to go to. I want to hear them all but of course the people I want to hear were usually speaking at the same time in different rooms. Decisions, decisions. I make my picks, finally, and have a wonderful time of it.

At noon I manage to attend a board meeting and visit the vendors in the parking lot, where I proceed to buy plants that I know do not grow in our area but I must try anyway – a Brazilian Cherry, Green Sapote, Macadamia nut, Jabotacaba, and a Che.

Sunday, we drive down to Oceanside to visit an old family friend, and on Monday we start the long trek home. On our way north we go by Simi Valley, where Edgar Valdivia lives. Edgar is a Dragon Fruit expert and the person most responsible for the 2010 Festival. At Edgar's, we're given the grand tour. He lives on about a half acre, and the lot is so crowded with trees and plants that it is barely navigable. Before we're allowed to leave he invites us to lunch, and afterward invites us to select some pitahaya to take home. I manage to select 10 varieties. Thank you, Edgar!

A vendor at the Festival of Fruit

Festival of Fruit,

by Linda Robertson

This is the year I finally learned to spell pitahaya (or is it pittahaya?) – okay, maybe not.

My partner Michael and I drove down to the festival on Thursday. Like Phil, we saw stands of dead fruit trees on I-5. We also saw some fields of grass near the freeway with signs reading "Congress Created Dust Bowl," which made me suspect the dead trees were a political statement by farmers about the fact that they aren't being allowed to divert as much water as they'd like from the Sacramento Delta. I'd just finished reading *The Worst Hard Time*, a book about the real Dust Bowl, and wondered what the posters of those signs were thinking. Those fields, some with sheep grazing on them, weren't even the beginning of a dust bowl, and beyond those little grass patches, a couple hundred feet off the freeway, we could see many acres of fruit and almond trees.

But enough of politics: we reached Pomona Thursday evening, and on Friday morning we drove to the Huntington Gardens in San Marino and joined the CRFG group on a couple of tours led by very pleasant docents. The gardens are the grounds of the former Huntington estate, which is now a museum and library. There are several hundred acres, all in cultivation, with a citrus orchard and other trees and plantings from all over the world. In the couple of hours we had, we could see only a fraction of it, but it was enough to make me want to make another trip there next time I'm in the LA area. Afterward, we snacked on lemonade and sliced pitahaya – the only dragon fruit I managed to taste during the festival.

In the afternoon, I tried to take the tour of the Cal Poly pitahaya garden, but my GPS steered me in strange directions, and I never found the tour.

Saturday was, of course, the big day, and there were so many interesting talks that I had trouble deciding which ones to go to.

Michael and I both went to Doug Fierri's presentation on honeybee, an interesting lecture and slide show on the basics of how bees operate and the useful products they make. Doug told some scary anecdotes about Africanized bees, and I was relieved, to say the least, when he said they haven't made it to northern California because they don't survive well north of the 37th parallel.

While Michael checked out Joe Real's talk on making fruit wine, I heard Bev Alfeld, the Jamlady, explain scientific canning. Her talk was crammed with more facts than I could write down. Fortunately, she has reprised the gist of her lecture in the September-October *Fruit Gardener*, and Bill Grimes has also promised to post her informational handouts on the CRFG web site.

Over the lunch break, Dave Wilson Nursery hosted a sampling of summer fruit. The line was long, but I managed to taste a few varieties of peach and plum, all delicious. I browsed the vendors' booths outside and bought a little bay laurel tree that I figured would be tough enough to survive the drive home.

In the afternoon I heard Axel Kratel's talk on rare and unusual apples and was able to take down some useful information about early and late varieties of apples and those that are especially good for storing, cider, or pies. He also talked at length about the commonest diseases of apple trees and how to prevent and cure them.

After that I heard a presentation about UC Riverside's citrus variety collections and ended my day of learning with a fascinating discussion of the history of the locavore movement. Did you know that the U.S. Government was encouraging home gardening and eating local even during World War I? We're more familiar with "victory gardens" from World War II, but during both wars, it turns out, the government sponsored programs encouraging people to plant gardens for themselves to "reduce the food mile" and save much needed oil and gasoline for the military overseas.

The day ended with the festival raffle and dinner. I didn't win anything in the raffle, but we all got consolation prizes of apple rootstocks, so I left happy.

We had family visits to make on Sunday, so we didn't do any of that day's tours.

All in all, even though I missed out on most of the dragon fruit, I had a good time and learned a lot of useful information. And because I know from our experience in 2009 how much work it takes to host the FOF, I'm even more grateful to the volunteers in the Los Angeles chapter for creating such a great event.

Fig and Grape Tasting at Wolfskill, 2010

By Linda Robertson

Wolfskill Ranch, in Winters, is one of my favorite places to visit. I've been to the annual fig and grape tasting there three or four times, and I've loved it and learned something new every time.

This year, the event was in late August, a little earlier than usual. Summer temperatures in Winters had been unusually cool, like everywhere else in northern California, but enough figs and grapes were ripe that there was a good selection of both for sampling. Howard Garrison made his wonderful grilled Brown Turkey figs with goat cheese and prosciutto, and the organizers of the event had also invited people attending to show off their favorite recipes using figs, so there were a couple of other grilled fig dishes, fig bread, and some good non-fig dishes, too, including tilapia grilled in a banana leaf.

John Preece, the new curator of the Germplasm Repository, spoke about the ranch, its mission, and the types of fruit trees and vines grown there. Nothing is patented, so all the varieties are available for propagating. He also talked about how to order scions from Wolfskill. To save shipping costs, he recommended that CRFG chapters consolidate orders from their members and send them to the ranch in a single order.

Bernie Prins, the crop manager for the grape collection, gave a lecture and a guided tour through the grapes. As always, we were free to sample anything on the vines, but since Wolfskill grows over 6,000 varieties, it was impossible to try more than a tiny fraction of them. Many are hybrids produced for research or wild varieties grown to preserve them for diversity and useful qualities such as disease resistance, and not all of them were particularly tasty. I ran across a couple, though, that I particularly liked. One, Sovereign Rose, was a seeded grape with a nice muscat flavor. The other, Kyoho, had huge purple fruit that tasted like grape candy.

Howard Garrison then led a tour of the fig orchard, where I ate figs until I was a little wobbly and collected as many as I could carry. I can remember only some of the varieties we tried: Panachee, Osborn's Prolific, Black Mission, Kadota, Violette de Bordeaux, Col de Dame, Rouge d/Argenteuil. When I got home with my random, multihued collection, I dried most of them. Some dried beautifully, others not so much, but I had no idea which was which. So next year, I plan to be more scientific – bring something better than my jacket to collect them in and figure out a way to label what I collect.

Here's a list of the grape and fig varieties presented for the tasting, with descriptions of some of them:

Grapes:

– Hernito (*vitis hybrid*): black, seeded, slip-skin, Concord-type flavor, tight bunches.

– Aurelia (*vitis hybrid*): green, seeded. Bred for disease resistance in southern U.S.

– Southern Queen (*vitis hybrid*): very sweet, one of the hits of the event. Looks like an unripe grape when ripe, with opaque bright green skin.

– Sultana Crimson (*vitis vinifera*): red, variation on Thompson seedless.

– Centennial 4X (*vitis vinifera*): has a doubled chromosome, which makes larger fruit and more spread out bunches. Sweet, seedless, nice acidity.

– Emerald seedless green (*vitis vinifera*): An older supermarket variety, with a few seeds and great muscat flavor.

– Chasselas Rouge (*vitis vinifera*): A very popular table grape in the 19th century. Red, thin-skinned, very translucent (you can see the seeds inside). Soft texture, unexciting flavor.

– Muscat Angel (*vitis hybrid* (with *labrusca*): More disease-resistant than *viniferas*. Red, seeded, mild muscat flavor.

Figs (with type of each):

Common figs ripen without needing pollination by the fig wasp. San Pedro figs produce an early crop (called breba) that ripens without the aid of the fig wasp, and a late crop which does require the wasp for pollination. Caprifigs are figs which act as hosts to the wasps.

– Panachee (common)
– Excel (common)
– Kadota (common)
– Violette de Bordeaux (common)
– King (San Pedro)
– Brown Turkey (common)
– UCR 66.31 (caprifig)
– Pied de Boeuf (San Pedro)
– Ischia Black (common)

RECRFG PLANT SALE

The RECRFG chapter plant sale, on July 24, was a success again this year. The sale was held again at the Santa Rosa farmer's market next to the Veteran's Building. This has turned out to be a very good venue. Many people stopped by, not just to buy plants, but also to chat about fruit and orchards or ask questions. One man interviewed Phil Pieri for a podcast.

The lively interest we saw at the scion exchange seems to be continuing, and we met surprising numbers of people who had backyard ochards and were buying trees to add to them.

After expenses, the sale netted about $1,100, a nice profit for our treasury. Many thanks to everyone who grafted trees or contributed plants and vines for the sale.

Chatting at the Plant Sale

The Redwood Empire needs you
Write an article for the Newsletter and email it to
lindarobertson@mindspring.com
and share your knowledge with your fellow members.

Orchard Mason Bees As an Aid to Pollination in Fruit Trees and Berries

By Steve Ehrman

Upcoming Workshop:

Last February I held a workshop on Orchard Mason Bees at my house. A key number of participants purchased kits or portions of kits that included bees in their larval stages and housing to start their own bee populations. Previous experience and knowledge varied among those present. All had positive results from their efforts this last Spring.

I will be presenting another workshop this Fall on Sunday, November 7, at my home, at 4243 Bartleson Rd (midway between Cotati and Sebastopol, and just off of Hwy 116).

Discussion for Basic Topics will begin at 1:00 for an hour and a half or so, with more advanced questions and conversation trailing on until everyone is satisfied.

Full kits with rudimentary housing: $35.00 Partial component kits to be discussed. All orders can be taken at the workshop, or by telephoning me at 707-823-9885.

Background:

Years ago farms had wild spaces among them, allowing native pollinators to thrive. In this way farmers could rely on any number of bees, flies, moths, wasps, and butterflies to pollinate their crops.

In contrast today, agriculture has tended toward monocultures with orchards and row crops planted fence line to fence line, and habitat and vegetation for the native critters has greatly diminished. Added to that pressure is the frequent use of pesticides and herbicides, and the populations of native pollinators have declined dramatically.

Nowhere is the need for pollination more keenly felt commercially than in the almond industry, California's largest dollar-value crop. Almond trees in the Central Valley of California begin their bloom in mid February. Even native pollinators tend to emerge later in March and April. With almonds (and cherries), percentage of pollination and fruit yield are proportional; there is no need for thinning. To assure a good almond crop, farmers import up to 1.5 million honey bee (Apis mellifera) hives from around the U. S. and as far off as Australia every year into California. The health of the honey bee populations has been severely taxed within the last few years from various factors, and this is where our story can hopefully turn to supplement aid from other pollinators.

North America has about 4000 native species of bees alone. Key among them for pollinating spring agricultural crops is the blue Orchard Mason Bee (BOB), Osmia lignaria, which has both a western and an eastern North American sub-species. It is dark blue to black in color, and the female is slightly smaller than a honey bee. Males are smaller yet, with longer antennae and with a white patch on their face. It is said that the female rarely stings, and I have spent hours in front of their flight path at their nesting sites without their becoming aggressive. The males don't have stingers at all. These bees are mesmerizing to watch.

Orchard Mason bees are not like honey bees in most respects. They are semi-gregarious, but do not live in colonies. There is no queen. The females lay their eggs optimally in existing tubular chambers such as old beetle holes. (They do NOT make their own tunnels, as Carpenter bees do in soft woods !). They respond well to artificial housing of various types. They visit thousands of flowers for pollen and nectar, making a mound of it in their nest site upon which they lay a single egg, and separate that birth chamber from other egg deposits by walls constructed from mud. Hence the derivation of their name "mason".

Orchard Mason bees have a brush of long hairs or scopa on their abdomen with which to collect the pollen, while nectar is collected by their proboscis and carried inside the bee's body in the crop or honey stomach. They lack the structures on their hind legs common to honey bees and bumble bees for carrying moistened pollen with nectar. The latter can collect saddlebags full of goods, and fly long distances to deposit them. The Orchard Mason must collect from the flower by scooting over the stamen and pistols. This disadvantage of not having saddlebags-like structures leads these bees to collect within only about 250 feet of their nest sites. This is a very important aspect when considering the keeping of these bees. If they decide to settle down at your preferred nesting site, they will pollinate the flowers within that radius of your property. Just as importantly, the method of pollen and nectar collection leads to extremely effective pollination. The USDA recommends the use of 250 individual female Orchard Mason bees per acre to pollinate apples, which can be readily contrasted with 1 healthy hive of 30,000 honey bees for the same area.

Unlike honey bees which have a strong selective tendency toward flowers of high nectar value, the Orchard Masons tend to visit many different kinds of flowers, and are believed to prefer flowers of the Rosaceae, which encompass most of our fruit-bearing plants such as apples, pears, and cherries. Honey bees will congregate in great numbers on rosemary for instance, and ignore the blossoming fruit trees adjacent to it.

The Orchard Mason bee also does not linger on any particular flower as a honey bee does. For this reason the Orchard Masons can seem very elusive when foraging. I have noted them in great numbers only on a willow in March and Ollalieberry flowers in late April. They move from flower to flower in great haste. It is said that they visit about 1,875 flowers with each egg cell construction, averaging one cell per day, and a tube of cells can consist of 5 to 9 of their young. They can fill three or four of these tubes in their relatively short lives.

Orchard Mason bees emerge naturally in our area in March and April. Commercially there is a lot of interest to supplement the pollination of the almond crop in mid February. It is possible to adjust the emersion time of males

and females to achieve that end by spring/summer incubation followed by prolonged diapause through refrigeration. I am doing that now with a number of my bees as a test. In this way the early pluots and plums can be pollinated in February and early March, followed on to the early and late peaches, the cherries, pears, apples in April, and lastly the blueberries on into later May by later-emerged tubes. By the beginning of June all of the adults will have died off. Next year's bees are set as eggs in the tubes that this spring's adults so busily filled and tended to for the 4 to 8 weeks of their adult lives.

References:

1) *Pollination with Mason Bees. A Gardener's Guide to Managing Mason Bees for Fruit Production* by Dr. Margriet Dogterom

2) *Managing Alternative Pollinators. A Handbook for Beekeepers, Growers, and Conservationists.* Eric Mader, etc.

3) *How to Manage the Blue Orchard Bee as an Orchard Pollinator.* By Jordi Bosch and William P. Kemp

UPCOMING EVENTS

Saturday, October 16, 4:00:

RECRFG Annual Apple Tasting
Main Street Trees, 2751 Beard Road, Napa, CA
Free.

Saturday, October 30, 9:00 to 4:00:

Insecta-Palooza! Explore the fantastic world of insects, with lectures, interactive labs, tours, children's activities, costume contest, silent auction, and more.
Darwin Hall, Sonoma State University, 1801 E. Cotati Ave., Rohnert Park, CA 94928, (707) 664-2733. $10 adults, $5 student with ID, $2 children.

Saturday, November 6, 2010, 10:00-1:00

Wolfskill Ranch annual pomegranate and persimmon tasting:
Wolfskill Ranch, 4334 Putah Creek Road, Winters, CA Free

Sunday, November 7: 1:00

Orchard Mason Bee Workshop, with Steve Ehrman
4243 Bartleson Road (between Cotati and Sebastopol off Hwy. 116) (Contact phone: (707) 823-8995
Workshop is free; mason bee house kits are available for $35.00.

Saturday, November 27 (tentative date), noon to about 3:00

RECRFG annual meeting and election of officers
Luther Burbank Gold Ridge Farm, 261 S. Main Street, Sebastopol

Newsletter staff:
Editor: Linda Robertson
Roustabout: Michael Kurland