LOS ANGELES CHAPTER

2020 Volume XXV Issue 4

http://www.crfg-la.org

2020 Chapter Officers & Committees

Chairman: Jerry Schwartz	chairman@CRFG-la.org
Vice Chairman:	co-chair@CRFG-la.org
Treasurer: K.Payton	treasurer@CRFG-la.org 818-222-7556
Secretary: Margaret Frane	hospitality@CRFG-la.org 310-429-9455
Newsletter Editor: Deborah Oisboid	editor@CRFG-la.org
Program Chairman: Pat Valdivia	program@CRFG-la.org
Photographer: Edgar Valdivia	photo@CRFG-la.org
Historian: Emory Walton	historian@CRFG-la.org 805-497-8835
Food Coordinator: Chris Warren	food@CRFG-la.org 818-362-8537
Plant Sales Chairman: David Payton	plants@CRFG-la.org 818-222-7556
Plant Sales Associates: Ian Marabe Anwar Hachache Kiran Kaur	
Members at Large: Debbie Schopper Andy Neiman	atlarge@CRFG-la.org 818-362-3007

CRFG-LA meetings at Sepulveda Garden Center are currently suspended. We hope everyone is staying safe and healthy.

Upcoming Chapter Zoom Meetings
For those without computer or smartphone, you will miss the visuals, but you can still listen to the audio stream. Zoom login links and instructions will be sent about a week before each meeting.

ZOOM MEETING:
Saturday, July 25, 10:00 am
Speaker: Dave King
Topic: "Sowing and Preserving Seeds"

Dave King was born into a mid-west farming tradition, and his life has always been "rooted" in growing food. His work concentrates on the concepts of growing wholesome fruit and vegetables, and creating communities to find answers for our turbulent times. Whether it is working with the American Community Gardening Association, or the Seed Library of Los Angeles (SLOLA), his focus is always on growing organic food, saving open-pollinated seeds and creating food independence for everyone.

An instructor for UCLA Extension's Gardening and Horticulture Program for the past 10 years, with about 50 years of gardening experience under his fingernails, King has been down a row or two in the garden. But that isn't enough to make a good speaker. With his off-the-wall sense of humor and his passion for the topics, King is a talented and engaging speaker with not only the data, but the experience to support his reasoning and the ability to formulate a vision that works. While he is entertaining, it is not a fluff. There is real dirt here.

ZOOM MEETING:
Saturday, August 22, 9:30 am
Note the early start time!
"Houston, we have a Problem!"

Someone once said "None of us is as smart as all of us." So let's brainstorm and solve some problems. Sign in early to the meeting, and have a photo or (very short!) video of a garden problem. We will put them on display starting at 10:00 am and try to identify, if not solve, as many as we can using our own knowledge and experiences.

Words From Our Chairman

By Jerry Schwartz

THIS is what CRFG is all about. Pictures are of pluerry and other stone fruit. Taste great. Sorry I can't share with you. I'm still locked in with my fruit.
--Jerry




LOOKING BACK

By Deborah Oisboid, Editor

May 25 – Pomegranates – A Breeder's Perspective
Our guest speaker for May was Dr. John Chater, a post-doctoral scholar at U.C. Riverside and Ventura Extension. He is also the grandson of Sassin "John" Chater of pomegranate fame. Grampa bred pomegranates along coastal California. Now in the public domain, the varieties he developed can be propagated freely by anyone. They include Purple Heart, Eversweet, and Rosa Mia.

The younger John Chater is happy to continue his grandfather's work, focusing his attention on HOW pomegranates grow and how the environment affects them: temperature, humidity, moisture, soil. Some of his studies have used drones flying over cultivar trials - you can collect large quantities of data that way. Tree height, canopy diameter/volume, fruit quantity on tree, how HOT the leaves or fruit are, and so on.

COVID-19 affected the UC Riverside breeding program. They normally have a large number of students doing the testing, measurements, crossbreeding, etc. But with students not being allowed on campus the testing effort has been significantly reduced.

Poms are native to central/east Asia. They have a berry or berry-like fruit. Most are grown as a shrub due to suckering around the base. They are considered drought and salt tolerant, especially once they are established. Trees do need water to become established, and will want water while flowering or they won't produce well or at all. If they are grown in an area with frost, sometimes it's better to have multiple trunks to help them survive hard freezes.

The fruit is very high in potassium. "Wonderful" has as much potassium as a banana! Because pomegranates are deciduous, the minerals that build up during growing season could be lost unless you let the leaves decompose back into the ground to re-feed the trees. Otherwise, feed them with nitrogen and potassium.

Part of Dr. Chater's work involves sequencing the genomic data of pomegranates. He hopes to use this information to cross fruit for the desired traits.

Instead of Luther Burbank's program of MASSIVE crossbreeding, he hopes to do a DNA test, grow a few crosses, genetically test and keep those dozens that have the desired traits. Both domesticated and wild fruits are being sequenced for this purpose

DNA extraction is an intense, time-critical process. And very few patent owners are willing to share genomic data. Sequenced data looks like this on a computer: Lots of AAATTTCCCCGG's.

To propagate pomegranate, you could start from seed. However you need to remove the aril (juicy stuff). It takes roughly 6 weeks to germinate.

Pomegranates can also be propagated from cuttings. Sometimes cuttings start to grow, but then they die. Dr Chater's own tests to propagate Green Globe cuttings were only 10% successful. Unfortunately this is not enough success for this variety to go into mass production.

Dr Chater has a lot of projects under his belt. In addition to studying pomegranate environments, genomics, and metabolomics (understanding the chemistry of the fruit, leaves, and plants), he recently received a grant to investigate tree spacing. He runs Sensory Panels where students sample various poms and rate the taste, acidity, sweetness, and so on. He measures the antioxidant levels ("Punica Langians") in the fruit. And he is working on developing more pest-resistant pomegranate.

For a glimpse into some of Dr Chater's work search for "Chater Pomegranates" at Google scholars:
https://scholar.google.com/
https://tinyurl.com/ChaterPapers

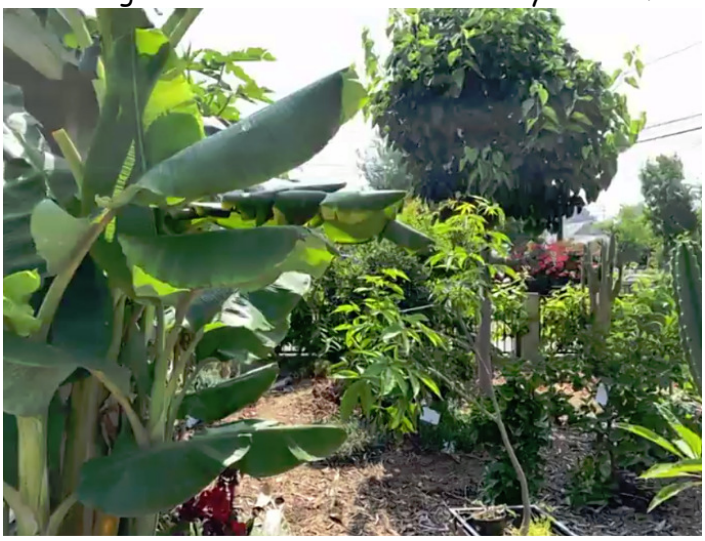
We are very thankful to Dr Chater for spending his day with us and sharing so much knowledge about pomegranates.

June 27 – Virtual Garden Tour

Although he only recently became "addicted" to rare fruits, the gardens of Kelly Gabrysch are astonishingly full of them! He graciously invited us on a Zoom tour and we were amazed at how many fruits he managed to squeeze into a 700-square foot front yard and a 1000-square foot back yard.

When Kelly and his partner, Matt Henson, first moved in, the house had sod and sunlight and not much more. Kelly told us how, at a Foothill CRFG chapter meeting seven years ago, he had bid on 10 Eugenia seedlings at their plant auction. After all, they have a backyard, maybe he could put them in a pot or something? They sold for $1 each, and he was hooked.

Well, those 10 plants got him researching, which led to another 10 plants. And this and that and six years later brings us to see what he has in the yard now.



And what a splendid variety! He showed us gojiberries (black and red), guavas (he says he has at least 50 varieties!), jaboticabas (possibly 75 varieties!) jujubes, mulberry, che, moro blood orange, kumquats, anona and cherimoya, figs, passionfruits, dragonfruits, starfruit, coffee beans, loquats, curryleaf plant, jackfruit, apples (20 varieties grafted onto one Golden Dorsett tree!), bananas (his favorite is "praying hands" banana), Cherry of the Rio Grande, Surinam cherries, "Giant Raisin Bush," longan, papaya,

lucuma, sapote, Pepinos, a Dune Soapberry, mangosteen, marshmallow fruit, wax jambu, cinnamon apple (akin to lucuma), ice cream bean, cotton candy fruit, Rose apple, Kei apple, and lots and lots of Eugenias.

Kelly picked and tasted a kei apple for us. He described it as pleasant, acid, and sweet like an apricot. But they have huge thorns. Did you know kei apples are used as hedges in Africa to keep out lions? But you can trim some thorns off the stem without harming the plant. He is currently grafting female keis onto male shrubs and plans to share them with others.

The gardens are covered with wood chips. This was the first thing they did to the yard - Kelly knew it would break down in a year and help out. He notes that jaboticabas actually like the nitrogen-theft of bark chips.

There is also a small greenhouse on the property, as well as multiple benches with smaller pots for trial and new and rare plants.

Vanilla bean flower

Although Kelly focuses on plants that are, as he puts it, "edible to humans," Matt has his own preferences, including Hibiscus and keeping a tiny bit of grassy area to break up all the fruit. Kelly agrees that color and flowers and fruit are equally important.

Kelly collects plants from around the world that can grow in Southern California or are rare. He is particularly interested in growing endangered plants, such as those being destroyed with the Brazilian rain forests.

The two men recently purchased land in Hawaii to start a farm to grow super rare and endangered plants. Hawaii is not self-sufficient in terms of food, so they want to help the local economy. Their goal is to bring to the mainland fruits we've never thought possible. They want to grow there and distribute here (California) so the plants hybridize and gain cold tolerance.

Kelly does not depend on one particular brand of potting mix, but has developed his own. He finds it fun to come up with a mixture. Right now his favorite mixture is approximately 8 parts peat moss, 1 part vermiculite, 1 part perlite, 1 part lava rock, and 1 part compost and organic fertilizer. Sometimes he will add coco fiber.

He notes that lava rock is nice and porous, great for bacteria to live in, and water gets trapped inside as well. This helps the mix control itself but still keeps water and bacteria at hand. Top-dressing his potted plants with lava rock allows him to water every other day instead of daily.

He is also getting into mycorrhiza, the fungi which attach to roots and help the plants absorb nutrients. With the lava rock mulch, Mycorrhiza stays where rock meets the soil. He pours fertilizer on top. It sinks into the crevices of the lava rock when he waters. This keeps the fertilizer from flowing out the bottom of the pot and gives the plants more time to feed.

He uses the same mix for everything, regardless of whether the plants like low or high ph. It works for tropicals, subtropicals, and even some native plants. His yard doesn't get as much sun as it used to, due to the increasing foliar canopy. If he had more sun, he'd use less peat and more compost.

His fertilizer is another mix of everything: in a 5 gallon bucket he mixes Espoma Iron-Tone, granular fish fertilizer, all organic slow release fertilizer, bone meal, and blood meal. Mixed together, it provides a

wider range of nutrients than any one particular fertilizer.

Kelly prints beautiful plant tags on a computer, and laminates them. (He recommends getting a cheap $12 laminator from Amazon.) The tag shows the name, Latin name, description, plant origin, and a photo of the ripe fruit. He updates the picture with his own photo of fruit when the plant produces some.

All pots are hand-watered, and they have more pots than plants in the ground. One nice thing about the pandemic, Kelly observed, is that there is more time to water everything. He does plan to eventually set up some drip and automatic watering, especially necessary when he and Matt head to Hawaii for any extended amount of time.

You can follow Kelly on Facebook and on Instagram ("Kelly the plant guy").

It was truly an incredible tour and we all thank Kelly and Matt for being such gracious hosts. We wish them the best of luck in their future plant ventures!

June 27 - Post-Tour Social

Kelly Gabrysch was taught the "squeeze" method of pollinating sapodilla flowers. You pinch each flower very gently to get the pollen to move from the anthers to the stigma. After the tour, CRFG member Fang Liu showed us another successful method: fingertip pollination. Point the flower down and place your fingertip over the open blossom. Flick it gently to get pollen onto your fingertip, and then touch your finger back to the stigma to pollinate. Fang gets nearly 100% success rate with this method.

Fang shows how to pollinate a sapodilla flower

Tagging Experiment, Conclusion

By Deborah Oisboid

Way back in March I placed a tray holding three types of tape, and two metal strips outside. The strips were marked all over with different types of pen (or pencil). The goal was to see which combination lasts the longest when exposed to the elements.

After 2 months in sun and rain, the longest-lasting markers appear to be paint pens on tape or etched metal. My favorite combination used to be masking tape and Sharpies, but this was actually the worst combination.

This table shows the final condition of each marker by the end of the test. On a scale of 5 (no change) to 0 (completely gone):

	Yw Masking Tape	Blu Masking Tape	Green Garden Tape	Brass Shim	Steel (Venetian blinds)
Black Paint	4	4	4	5	3
Gold Paint	2	3	3	n/a	2
Orange Paint	3	3	3	n/a	3
Blue Sharpie	0	0	0	0	0
"JOT" Sharpie	4	3	1	2	3
Pencil	4	n/a	n/a	4	4
Ballpoint pen (ink)	1	1	0/1	n/a	1
Etch	n/a	n/a	n/a	4	5

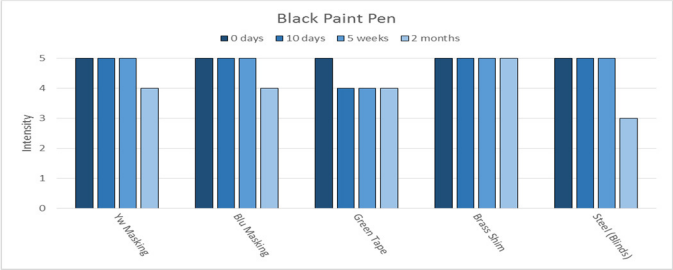
The gold paint pen turned a fainter gold, but the orange paint pen faded to white over time. The Jot permanent ink marker lasted almost the entire test period, a tremendous improvement over the blue Sharpie, which was the quickest to fade.

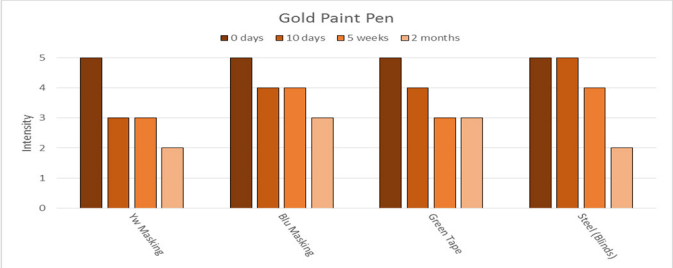
Pencil was surprisingly resilient, but ballpoint pen, which I had high hopes for, was hardly visible by the end of the test period. .

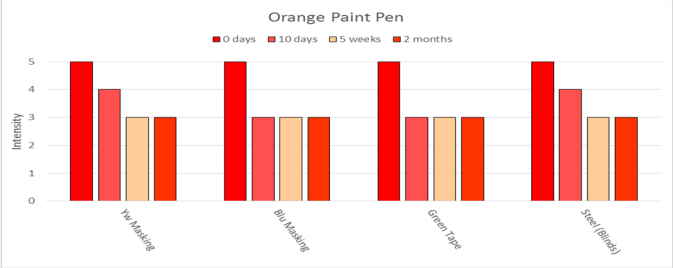
I would like to try a few more marker types, but need to purchase them first. They are: laundry marker and ebony pencil. I also want to find some "flagging tape," which is supposed to be great for plant tags.

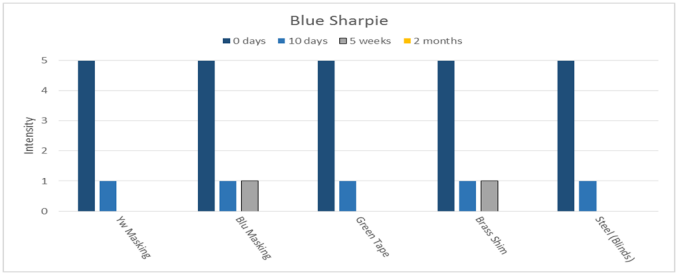
The following charts show the amount of fading of each marker type for each material. The markers and the base materials are in the same order listed on the table above. (The first chart shows Black Paint Pen for all 5 types of base material: Yw masking tape, Blue masking tape, Green garden tape, Brass Shim, Steel blinds.) Each vertical bar shows the ink intensity at each inspection date (start, 10 days, 5 weeks, and 2 months).

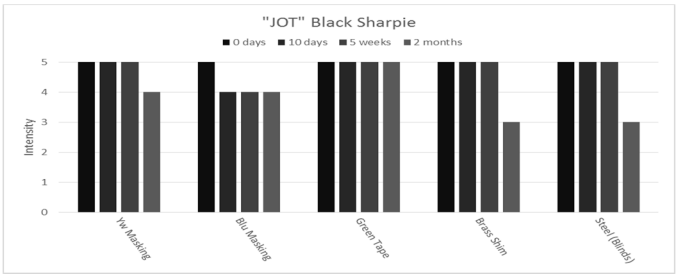
In conclusion, Black Paint, Black Jot permanent ink, and pencil faded the least. Blue Sharpie and blue ballpoint pen faded the fastest and the most. Gold paint and orange paint pens faded but were still mostly visible. Etched metal lasted the longest.

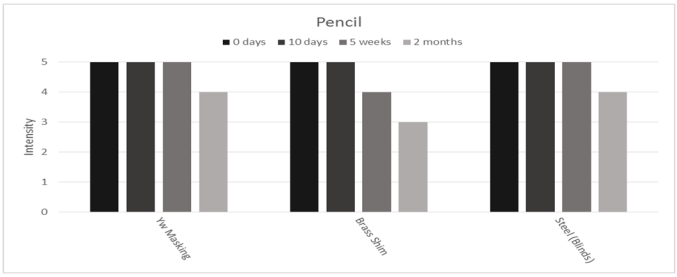


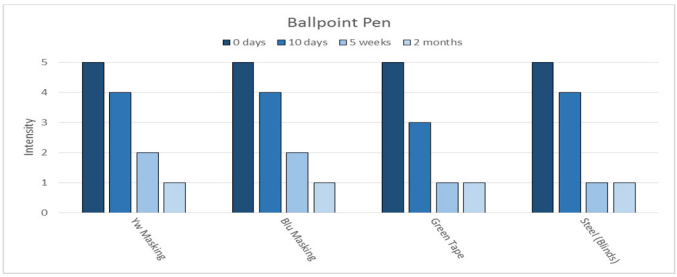


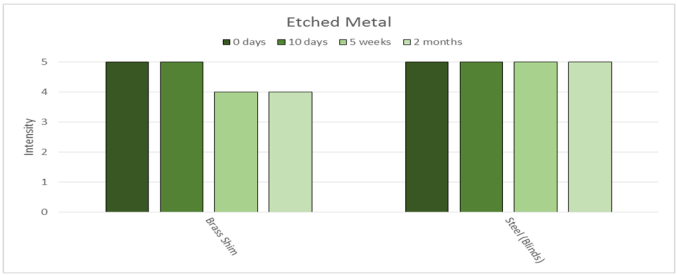












The final set of photos are on our CRFG-LA website. View them at:
http://www.crfg-la.org/piwigo/index.php?/category/5
Let me know what you think! editor@CRFG-la.org