

### http://www.crfg-la.org

#### 2023 Chapter Officers & Committees

Ch

An

Tr

K.F

Se

Ma

Ne

De

**Pr** Ar

Hi

En

Fo

Ch

**Pla** Da

**M** Ev

Ка

Ke Ar

En Pa Ed

<b>airman:</b> war Hachache	chairman@CRFG-la.org
<b>easurer</b> :	treasurer@CRFG-la.org
Payton	818-222-7556
<b>cretary</b> :	hospitality@CRFG-la.org
argaret Frane	310-429-9455
w <b>sletter Editor</b> : borah Oisboid	editor@CRFG-la.org
o <b>gram Chairman</b> :	program@CRFG-la.org
na Josenhans	323-450-6688
<b>storian:</b>	historian@CRFG-la.org
hory Walton	805-497-8835
<b>od Coordinator</b> : ris Warren	818-362-8537
<b>int Sales</b> :	plants@CRFG-la.org
vid Payton	818-222-7556
embers at Large: e Guth thleen Doran vin Lieu : Fitzsimmons heritus Members: t Valdivia gar Valdivia	guth_atlarge@CRFG-la.org doran_atlarge@CRFG-la.org kevin_atlarge@CRFG-la.org art_atlarge@CRFG-la.org edpitaya@gmail.com

## LOS ANGELES CHAPTER

2023 Volume XXVIII Issue 2

#### GARDEN TOUR

NOTE THE NEW TIME FOR THE EVENT!!!!!

Date: Saturday, March 25, 1:00 pm Location: Sylmar High School Agricultural Center, 13050 Borden Ave, Sylmar, 91342

#### Topic: Annual Tony Stewart Tree Symposium and Fruit Event

Sylmar High School Agricultural Department head Steve List invites us to a potluck lunch and tour of their amazing facility. The growing areas were built up from an empty lot by students over many years, and are now a magnificent, multi-zoned field of dreams, with areas for fruit trees, hot houses, chickens, desert plants and more. There will be information on fruit tree growing, garden tours, and delicious food. The Symposium is named in memory of our wonderful CRFG-LA chapter chairman, Tony Stewart, who passed away unexpectedly in 2019. Please bring a dish to share that will feed at least 6 people.

# FIELD TRIP-Gene Dinovo & Christine WarrenDate:Saturday, April 22, 10:00 amLocation:TBA

We will be touring the lovely gardens of a private residence. For members only, please! Please bring a snack to share (finger foods, not meals).

#### Save the date! CALENDAR FOR LA CHAPTER 2023

March25	Sylmar High/2nd Annual Tony Stewart
	Fruit Event
April 22	Field Trip - Gene Dinovo
May 27	Field Trip – Reza Shabestri
June 24	Sepulveda Gardens – Annual Plant Sale
July 22	Field Trip - George Campos
August 26	Speaker – David Karp
September 23	Speaker - Los Angeles County
-	Beekeepers
October 28	Speaker - Mark Steele
November 18	To be announced
December 16	Holidav Partv

## LOOKING BACK

By Deborah Oisboid

#### January 28 – Annual Scion Exchange

It was great to be back at the Sepulveda Garden Center again. More than 90 people attended, possibly our biggest attendance since 2018!

The event started late, as people arrived and brought their scions to be placed around the U-shaped set of tables, marked with fruit labels for easy location: Apple and Apricot, Cherry, Elderberry, Fig and Grape, Medlar, Mulberry, Persimmon, Quince, and many, many groupings of stone fruit: Nectarine and Peach and Pluot and Plum.

We tried something new this time: color tags. White, orange, yellow, green, and blue tags were handed out to each attendee: LA Chapter Board members, Chapter members who brought scions, Chapter members who did not bring scions, non-members who brought scions, and non-members who did not bring scions.

Bruce Blavin's grafting presentation was very thorough. He showed us multiple types of grafting, such as Vee/Cleft, Slice, and Whip-and-Tongue. The point of grafting is to line the thin green layer between bark and heartwood: the Cambium layer is what moves energy and allows the branch to grow. The different styles of cut either bring more cambium into contact, or help support the scion as it merges with the rootstock.



Bruce answered many questions. He suggested checking to make sure there are no buds at the graft joint itself. Also, use an oversized washer when cutting the rootstock slice, to prevent cutting into

your hand supporting it! Yes, it's ok to graft a scion which has swollen buds. If a scion has leaves already, cut them back, but you can leave a little bit to provide energy - a particularly useful trick for Avocado scions. Bruce advised us that a tree will choose itself over a graft. Once the graft begins to grow, pinch off any native growth below it, so the energy continues to feed the graft.

Bruce showed us his favorite grafting tape. It is not the commonly used Parafilm (or Parafilm M). It is a self-bonding tape which seals without adhesive. Self bonding Silicone Super Tape can be purchased at Home Depot. Someone in the crowd had used it before and suggested pressing the tape together with your fingers to warm it up and encourage the tape to stick to itself.

After the fabulous grafting demonstration, each "color" group had a turn to select a few of their favorite scions. Once everyone had had their first turn, the attendees could go back for more cuttings. Board member Kathleen maintained order by announcing which color was choosing scions, and the crowd stayed beautifully calm and cool.

And Collected.



We also had a small auction: six apple seedlings for rootstock use were donated by Charles Malki (of IV Organics). And Kathy Vieth had some excellent quality gardening tools such as pruners and cutters. Alik Shulman had brought some mole repellent devices, plus instructions on how to grow dragonfruit.

Finally, there was the usual, incredible, amazing

potluck snack table loaded with wonderfully exotic dishes such as fava bean dip with chile oil and pita bread, tabbouleh, gnocchi, chicken salad, fresh fruits, a chocolate strawberry pound cake, and plenty of scrumptious desserts, including Charles' Portney's famous homemade fresh fruit sorbets.

A fabulous start to 2023 with CRFG! Hoping everyone found what they were looking for and that their new plant babies thrive for them.

#### February 25 – Plant Hormones by Ernesto Saldovar

Our February meeting was online. Ernesto Sandoval presentation to the West Los Angeles chapter of CRFG was so popular we had to invite him to speak to us as well. Since he lives near Sacramento, a Zoom meeting was arranged.

The nicest part of an online meeting is everyone can be cozy at home, and the freezing winter weather we had that weekend certainly made it a nice option.

Before we started, Aura asked the question we were all thinking. She had grafted stone fruits the previous weekend and was worried the freezing weather might kill them. Edgar suggested putting a loose plastic sack over the grafts to protect and add a little humidity and warmth. He says it's not a lot, but it helps. He always uses plastic covers, especially in cold weather.

On the other end of the weather spectrum, Bill Brandt was telling early attendees how he obtained a vanilla bean plant and will be growing it in a greenhouse. Ernesto Sandoval confirmed that UC Davis successfully grows vanilla bean vines. They need high humidity and warm temperatures (70 - 90F). They also do well in a little shade as opposed to in direct sunlight in a greenhouse. Then the presentation began!

Ernesto's lifelong interest in botany started when he was pushing lawnmowers for his dad in the 1980s. He would ask "Why do you prune a tree that way? Why this? Why that?" His father would say, "That's just the way you do it."

Eventually Ernesto went to UC Davis and began learning the answers to his questions.

His presentation to us was about plant hormones. He focused on two major and two minor chemicals. The two major hormones are Auxin and Cytokinin. The two minor hormones are Gibberellic Acid and Ethylene Gas. To explain what the hormones do, he had to start with plant growth patterns.

The tip of a plant is called the Shoot Apical Meristem. It is a primary location for growth.

Along the stem are Nodes, also known as Side Meristems. They are also a location for new plant growth.

Roots have Meristems all along their length.

We learned our guest lecturer has a sense of humor. He asked us what is the happiest part of a plant? His answer: the MERRY stem!



A Meristem is a group of cells which can be "turned on" to grow. Having Meristems everywhere allows a plant to regenerate from damage.

The hormone Auxin is produced at the upper Meristems of a plant and travels downward with gravity, through the Ploem layer. (Phloem is a food transport tissue, at the inner layer of bark.)

Cytokinin hormone is produced at the root tips. Roots take in fertilizer, producing lots more roots, which produces lots more Cytokinin. This hormone moves opposite gravity, up the stem towards shoots and leaves. Cytokinin movement is within water transport tissue (Xylem).

Pruning encourages growth. Auxins prohibit axillary (side) bud growth and promote tip growth. Cytokinins promote side growth. If you trim off the tip of a branch, it removes a source of Auxin and allows Cytokinin to kick into high gear, which promotes node and bud growth.

Cytokinin also promotes "water sprouts," those rapidly growing stems usually found around the root crown. It is responsible for most of a plant's vegetative growth (not flowers). So how do you promote flowers over vegetative growth? Slow down the Cytokinin, possibly adding Auxin to counteract it.

The two other hormones we learned about were Gibberellin and Ethylene.



Gibberellin, or Gibberellic Acid, is produced throughout the plant. This hormone is sensitive to light and breaks down in direct sunlight. When not in direct sunlight, it promotes growth through cell elongation (stretching). In the shade, cell elongation stretches out the branches and brings the leaves back into sunlight. Gibberellins play along with Cytokinin in reducing flower bud production. (Fewer buds grow in the shade.)

Gibberellin also promotes seed germination. Did you know the food flavoring called "Liquid Smoke" actuates Gibberellin? You can use it to help stimulate the germination of seeds.

There are products such as Banzai and Sumagic which are Gibberellic Acid inhibitors. They are used to keep plants short. Poinsettias are a good example. Purchased in the store, these plants are nice and compact, but after a few years (especially if you plant them outside) they will grow a LOT!

Gibberellin is used on fruit trees and citrus, to promote (or delay) ripening of fruit. Table grapes are often sprayed with Gibberellic acid to encourage fruit growth and increase the size of the grapes. They use it as a foliar spray to make seedless grapes expand and become large and plump.

Have you noticed that fruit with seeds are larger than seedless fruit? Seeds produce Gibberellin, which helps the fruit expand. An application of this hormone on seedless grapes helps the fruit get fat and plump.

At this point, our guest lecturer took a poke at himself. "Ernesto," he said, "you've blown a lot of hot air. So let's end with a gas." Ethylene Gas.

They say one bad apple ruins the lot. This happens to be true. Apples produce Ethylene Gas, which promotes ripening, cell maturation and death. When one apple ripens it pushes the others to ripen also. The gas promotes all the cells around it to mature and die. So having one overripe fruit stimulates the others and they all ripen at once.

Another example. Move a plant to a different environment and the leaves turn yellow and fall off. This is not a random thing. A leaf's job is to produce sugar and feed the plant. Stressed leaves will start sucking sugar from the rest of the plant. What hormone moves with sugar? Auxin. When you get a buildup of Auxin, that triggers Ethylene production and causes the leaf to "ripen" and fall off.

In summary, Auxins and Cytokinins balance the plant growth, and Giberellins and Ethylene control roots and maturation.

Ernesto also answered a LOT of questions about stress, hormones, growth, roots, and fruit production, and how soil pH makes nutrients more available. He also let us know his presentations are posted online for everyone to read at their leisure.

To learn more about plant hormones, check out <u>http://www.phytohormones.info</u>

And for his presentations go to https://greenhouse.ucdavis.edu/conservatory/Resources.html

Many, many thanks to Ernesto for teaching us so much. We enjoyed his lecture and hope to have him back again soon!

## WANT ADS

#### OFFER: Recipe for homemade rooting hormone

Candace Ruminapp offers this recipe by Martha Stewart, to cook up some rooting hormone out of willow branches.Start with a pot that you are NEVER going to use again for food. Remove leaves and chop up branches into 1 - 2" pieces. Simmer over low heat for 12 hours. Strain out cuttings. The willow water is ready to use! Soak cuttings in the resulting water for 24 hours before planting. Additional information can be found at

https://www.attainable-sustainable.net/rooting-hormone/