



IN THIS ISSUE, YOU'LL FIND:

[Update Concerning San Diego County Water Authority Shutdown](#)
[Avocado Production Course for New Growers in San Diego County](#)
[Laurel Wilt Disease Overview — Impact in Florida and Threat to California](#)

[Blue Gum Mulch Myths Dispelled](#)

[New Labeling Requirements for Glyphosate](#)

[Organic Grower Summit Registration Now Open](#)

[Cost Share Application for Organic Certification Refunds Available](#)

[California Avocado Grower Videos Showcase Craftsmanship Behind the Fruit](#)

[The Commission Showcases the Value and Versatility of Fresh California Avocados at PMA Foodservice Conference & Expo](#)

[Market Trends](#)

[Crop Statistics](#)

[Weather Outlook](#)

Calendar

For a listing of industry events and dates for the coming year, please visit:

<http://www.californiaavocadogrowers.com/commission/industry-calendar>

CAC Production Research Committee Meeting

September 5

September 5

Time: 10:00 a.m. – 1:00 p.m.

Location: CAC Office, 12 Mauchly, Suite L, Irvine, CA

13th Annual Avocado and Margarita Festival

The 13th Annual Avocado and Margarita festival will feature live music, family-friendly activities and a wide range of California avocado dishes, including *Grilled Avocados Stuffed with BBQ Tri-Tip or Albacore*, *Fudgy Pudgy Avocado Pops*, *Smoked Avocados* and *Avocado Cheese Tortellini*, as well as a number of specialty margaritas. Tickets available online. [More information here.](#)

September 7

September 7

Time: 10:00 a.m. – 7:00 p.m.

Location: Waterfront in Morro Bay, Morro Bay, CA

CAC Gem Seminar and Tour

Dr. Jonathan Dixon, former California Avocado Commission Research Program Director and current Chief Technical officer for Seeka, a New Zealand-based produce company, will deliver two seminars discussing his company's experience with the Gem avocado and share his knowledge of the cultivar. [More information here.](#)

September 10-11

September 10

Time: 8:00 a.m.

Location: Pine Tree Ranch, 19455 E Telegraph Rd, Santa Paula, CA

September 11

Time: 11:00 a.m.

Location: Pala Mesa Resort, 2001 Old Hwy 395, Fallbrook, CA

Update Concerning San Diego County Water Authority Shutdown

In order to perform emergency aqueduct work, the San Diego County Water Authority will shutdown water supplies for about 10 days. The work is currently scheduled to begin around September 7 and will affect Fallbrook Public Utility District, Rainbow Municipal Water District and a portion of Valley Center Municipal Water District.

Local water agencies are developing strategies to minimize the impacts of this repair work and have created online resource pages for customers.

The [Fallbrook Public Utility District](#) shutdown is scheduled to begin September 9. A [map](#) of affected areas is available online.

The [Rainbow Municipal Water District](#) is asking customers to “curtail outdoor irrigation to the maximum extent possible” beginning September 7. A [map](#) noting limited use and restricted use areas is available online.

The [Valley Center Municipal Water District](#) notes the shutdown is tentatively scheduled to begin September 8. The online [map](#) indicates in which areas customers should refrain from all outdoor water use.

Questions concerning the shutdown should be directed to local water districts.

Avocado Production Course for New Growers in San Diego County

The University of California Cooperative Extension (UCCE) is offering a six-week Avocado Production Course for New Growers. The two-hour classroom sessions will take place each Tuesday from 1:00 p.m. – 3:00 p.m. beginning October 1 and ending on November 12 (no class on October 15), and will be held at the San Diego County Farm Bureau located at 420 South Broadway, Escondido, CA, 92025. Two field trips also will be included as part of the course; the dates and locations for those trips will be announced at a later date.

Dr. Gary Bender, UCCE Farm Advisor Emeritus, and Sonia Rios, UCCE Farm Advisor, will be the instructors. The course will cover the following topics:

- Botany
- Flowering
- Avocado varieties and rootstocks
- Harvest dates
- Irrigation systems and scheduling
- Salinity management
- Fertilization
- Organic production
- Economics

- Insect and mite control
- Disease and weed management
- Canopy management
- Tree spacing
- Frost management

The registration fee is \$155 and includes the following publications: Avocado Production in California (books 1 and 2) and the ANR publication Propagating Avocados.

[Online registration is now open.](#)

Laurel Wilt Disease Overview — Impact in Florida and Threat to California

In 2002, packing material infested with the redbay ambrosia beetle led to the introduction and spread of Laurel Wilt Disease (LWD) from Georgia, to Alabama, Arkansas, Florida, Louisiana, Mississippi, North Carolina, South Carolina and Texas. The disease, which is caused by the *Raffaelea lauricola* (RL) fungus, is transmitted by the redbay ambrosia beetle — a pest that is rapidly spreading across the southern U.S. The pest is easily spread by the transfer of infected wood to other areas. Thus far, no economically viable chemical control measures have been identified.

Recently, a group of Florida researchers shared their LWD research with California avocado growers in a series of seminars in Fallbrook, Ventura and San Luis Obispo. Following are highlights from their presentations. Links to all of the presentations can be found at the end of this article.

Impact on Florida Avocado Industry

- LWD has been detected across all of Florida and in every avocado production area
- Of the 125 square miles of the avocado industry, about 1,200 acres (120,000 commercial avocado trees) were lost to LWD for an overall economic impact of \$100 million
- Estimated \$42 million in tree loss value and approximately \$4 million loss in avocado sales

LWD Epidemiology

- LWD is very virulent and it only takes one beetle to inoculate and kill a tree because the average beetle carries more than 6,000 spores
- Spores are carried within the beetle's mycangia ("pockets")
- RL fungus invades the tree's xylem, making the xylem nonfunctional and thus foliage dies due to a lack of water
- All avocado cultivars are susceptible to RL, but the rate of decline varies across cultivars based on the size of xylem vessels (the higher the sap flow rate, the greater susceptibility to LWD)
- West Indian cultivars are the most susceptible
- Non-grafted, clonal 'Toro Canyon', 'Dusa' and 'Duke-7' are susceptible, but disease progression is relatively slow
- LWD progresses faster in larger trees
- Disease also spreads to other trees via root grafts and results in multiple dead trees within a row

- Several species of ambrosia beetles now carry *R. lauricola* and can transmit it to avocado trees

LWD Symptoms

- Earliest symptom is green wilted leaves in portions of the canopy
- Leaves quickly become brown and remain attached to the stem
- Stem and leaves die back until the tree eventually dies (death is within weeks)
- Trunks/limbs may have small holes with sawdust tubes
- Unhealthy sapwood color with blue/black streaks
- Boring galleries

LWD Monitoring and Management

- If no management steps are taken, 100 trees can be lost within six months
- Ambrosia beetles attack stressed trees, therefore it's important to carefully monitor the health of trees
- Ambrosia beetles prefer dense plantings, overcrowded and overlapping branches, thus make the crop environment less suitable to the beetles by topworking and pruning trees and removing dead branches with the purpose of increasing the amount and hours of sunlight
- Look for early symptoms of LWD (green leaf wilt in portions of the canopy) and immediately remove any infected/infested trees
- All infected tree materials (limbs, stump, roots) must be removed and destroyed (chip, shred or burn)
- To protect trees around a removed, infected tree apply tree-directed spray of a registered pesticide and adjuvant on trees in a one-acre area adjacent to the affected tree
- Trees adjacent to an infected tree also can be hatracked or stumped — AB are less attracted to trees with small wood diameters and high light regimes

The following presentations are available online.

- [Impact of LWD on Avocado Production in South Florida](#)
- [Laurel Wilt Epidemiology and Management](#)
- [Laurel Wilt Susceptibility of Avocado Scions and Rootstocks in Relation to Physiology and Stem Anatomy](#)
- [Laurel Wilt Vectors: Biology and Management](#)
- [Laurel Wilt: Economic Impact and Economics of Control Strategies FL & CA](#)
- [Current Control Strategies, Recommendations and Issues on the Management of Avocado Laurel Wilt in Florida](#)

Blue Gum Mulch Myths Dispelled

The use of blue gum eucalyptus as a mulch material has long been viewed as problematic because of its reputation as having lethal effects on other plants. However, a new master's thesis entitled, [Evaluating the myth of allelopathy in California blue gum plantations](#), by Kristen Nelson indicates that blue gum is not toxic to California native species. [Dr. Ben](#)

[Faber](#) notes this research may help allay fears about using blue gum mulch and that the woody material could be beneficial when used correctly as a mulch.

Using mulch in a grove can help enhance plant growth by:

- Reducing soil compaction
- Helping control weeds, pests and diseases (thus reducing the need for pesticides and fertilizers)
- Providing nutrients
- Offering habitats to beneficial insects

There are several [myths](#) concerning the use of wood chips as mulch. Wood chips will:

- Not draw nitrogen from the soil
- Not transmit pathogens to healthy roots
- Not change the pH of the soil
- Not encourage tunnel building by rodents

New Labeling Requirements for Glyphosate

In July 2017, California listed glyphosate as a substance under Proposition 65 based on the classification, by the International Agency for Research on Cancer (IARC), of the pesticide as “probably carcinogenic to humans.” On August 7, the U.S. Environmental Protection Agency (EPA) determined that the Proposition 65 warning language concerning glyphosate constitutes a “false and misleading claim” based on independent evaluations completed by the EPA. The EPA determined that glyphosate is “not likely to be carcinogenic to humans.” As such, the EPA will no longer approve pesticide labeling that lists the Proposition 65 warning due to the presence of glyphosate. The warning statement must be removed from all product labels where the only basis for the warning is due to the presence of glyphosate.

Organic Grower Summit Registration Now Open

From December 4 – 5, organic growers, producers and processors will gather at the third annual [Organic Grower Summit](#) held at the Monterey Conference Center located at 1 Portola Place, Monterey, CA. The summit includes educational sessions, keynote presentations, a trade show floor and networking events.

Wednesday [events](#) include:

- Educational Intensive: Strategies to Reduce Risk Through Organic Soil Health Practices
- Educational Intensive: Ag Disruptors
- Opening reception
- CCOF foundation dinner

Thursday [educational sessions](#) include:

- What’s Next in Organic Plant Health
- Organic Farming in the Age of FSMA

- Organic Sales Data Dive
- Keynote sessions (TBA)

Registration for the summit is available [online](#).

Cost Share Application for Organic Certification Refunds Available

Organic California avocado growers take note — the deadline to complete the [National Organic Certification Cost Share Program](#) application is October 31, 2019. Through this program, eligible organic operations can be reimbursed up to 75 percent of their organic certification costs (not to exceed \$750 per certification). In addition, eligible growers can receive a refund of their California State Organic Program registration fees. The program is available to U.S. operations that received organic certification between October 1, 2018 – September 30, 2019.

The application documents are available [online](#). Completed applications should be sent to:

California Department of Food and Agriculture
Organic Cost Share Program
ATTN: Sharon Parsons
1220 N Street
Sacramento, CA 95814

For more information, contact costshare@ccof.org.

California Avocado Grower Videos Showcase Craftsmanship Behind the Fruit

This season the California Avocado Commission (CAC) released a series of new California avocado grower videos showcasing the care and craftsmanship that goes into producing each California avocado. The videos were designed to engage CAC's "premium Californian" and avocado super user audiences thereby building brand awareness and affinity while spurring growth in purchase intent.

Leading up to the 2019 season, the Commission released a playlist on its YouTube channel featuring new videos that provided a glimpse of the growing process and demonstrated that good avocados come to those who wait. To build anticipation for the California avocado season, CAC promoted a pre-season pre-roll video featuring the fresh fruit swaying gently in the breezes of a California avocado grove and noting the premium fruit was "almost in season". The "[California Avocado Season: Let's Wait Together](#)" video garnered 464,000 views.

In season, CAC shared two additional pre-roll videos — "[California Avocado Season: Now in the Palm of Your Hand](#)" and "[California Avocado Season: Guacamole Season](#)" — that together secured more than 1.2 million views. On YouTube the grower videos received nearly 1.7 million non-paid and paid views.

To expand the reach of the grower videos during the season, the Commission also shared and promoted the new grower videos on its [Facebook](#), [Twitter](#) and [Instagram](#) channels. Each of the videos showcased the people responsible for growing California avocado fans' favorite fruit and the care and craftsmanship of the process. To date, the new grower content has yielded a total of 387,000 video views, 6,000 engagements and 609,000 social impressions.

During California Avocado Month in June, the grower videos were featured in CAC's monthly email newsletter. The newsletter included key messages about the California growing process, showcased the availability of the fruit and included a direct link to the CAC website's grower landing page. The June email newsletter, which is distributed to more than 220,000 consumers, had an average open rate of 31 percent — well above the food and beverage industry average of 15 percent (according to CampaignMonitor).



California Avocado Season: Now in the Palm of Your Hand

Unlisted

477,107 views

0 likes 0 comments SHARE SAVE ...

Promoted pre-roll ad units on YouTube drove California avocado brand awareness and generated excitement for the 2019 season.

The Commission Showcases the Value and Versatility of Fresh California Avocados at PMA Foodservice Conference & Expo

From July 26 – 27, approximately 1,800 foodservice operators, distributors, packers and handlers attended the 2019 Produce Marketing Association (PMA) Foodservice Conference & Expo held in Monterey, CA. Members of the California Avocado Commission (CAC) foodservice team networked with chain produce purchasing personnel at the event, participated in brainstorming sessions and exhibited at the Expo.

On Sunday, the Commission showcased the value and versatility of fresh California avocados at the Expo with demonstrations of two avocado menu concepts: California Avocado Turkey Lavosh Wrap and Caramelized California Avocado Salad with Bacon Confit and Citrus Vinaigrette. During the Expo, CAC foodservice team members met with potential target chain contacts and current foodservice chain partners to discuss next season's crop, CAC's marketing support and menu ideation concepts. By meeting one-on-one with key foodservice contacts, the CAC team builds the potential to increase demand and expand penetration of fresh California avocados on targeted foodservice chain menus. This year the Commission secured eight new contacts at the event.

Alexei Rudolf, CAC foodservice team member, participated in PMA's second annual ThinkTANK session. This discussion session gathered diverse industry members with varying roles and backgrounds together to share their perspectives and insights concerning the biggest challenges facing the produce industry and how members of the industry can work together to solve them. Common themes from the group's discussions included:

- Combatting food waste
- Consistency and availability of product
- Focusing on flavor and quality over appearance and shelf life
- Climate change concerns
- Logistics and labor

PMA has compiled highlights from the ThinkTANK session, including possible next steps, and shared them with the industry.



Corporate Chef/Director of Culinary Operations Shane Schailby and Vice President of Purchasing Lilah Rippet of First Watch visited CAC's booth to discuss the growth of the chain and future opportunities.

California Market Trends

To view all market trend graphs, including "Weekly Volume Summary," "Weekly Avocado Prices" and "U.S. Avocado Supply," please visit: <http://www.californiaavocadogrowers.com/industry/market-statistics>.

California Avocado Society Weekly Newslines* Avocado Prices – August 28, 2019

	Conventional #1	Organic #1
California Hass	(Field Price Per Lb)	(Field Price Per Lb)
#32's	\$2.00 - \$2.06	\$2.10 - \$2.16
36's	\$2.00 - \$2.06	\$2.10 - \$2.16
40's	\$1.75 - \$1.90	\$2.00 - \$2.16
48's	\$1.75 - \$1.90	\$2.00 - \$2.34
60's	\$1.40 - \$1.54	\$2.00 - \$2.30
70's	\$1.05 - \$1.12	\$1.75 - \$2.26
84's	\$0.80 - \$0.94	\$0.90 - \$1.06

*To subscribe to the Weekly Newslines, please contact the California Avocado Society at (949) 940-8869 or www.CaliforniaAvocadoSociety.org.

California Avocado Commission Weekly Volume Summary (Pounds)

	Week Ending 8/25/2019	Season-to-Date (since 11/01/2018)	2019 Year to Date
Hass	3,013,593	193,484,861	193,098,483
Lamb	89,969	10,955,350	10,523,063
Other (Greens)	0	690,460	475,493
California Total	3,103,562	205,130,671	204,097,039
Florida	1,995,070	29,244,545	24,377,430
Chile	1,245,174	29,668,470	7,321,708
Mexico	40,321,785	1,699,150,393	1,342,796,629
Peru	3,792,617	176,583,084	176,583,084
Other (Imports)	260,000	39,200,000	29,490,000
Import Total	45,619,576	1,944,601,947	1,556,191,421
USA Total	50,718,208	2,178,977,163	1,784,665,890

Sources:

California = CAC (AMRIC)

Florida = Florida Avocado Admin Committee

Chile = Comite de Paltas, Chile

Mexico = APEAM

Peru = ProHass

Other Imports = USDA AMS website

Crop Statistics

Below are the California Crop Weekly Harvest Projections versus Actual Harvest/Shipments for 2019.. As the season comes to a close actual harvest volumes should continue to track the projected volumes, with the bulk of the fruit harvested in the next few weeks and resulting in a final crop volume around 210 million pounds.

2019 California Crop Weekly Harvest Projection
Weekly Crop Movement vs. Distribution Projections
All Varieties

Week Ending (CAC Week)	4-Year Historical Forecast	AMRIC Handler Forecast	Industry Adjusted		
	2019 Pre-Season Crop Estimate	May 2019 Update	AMRIC Harvest	AMRIC Shipments	Crop Size Indicator
1st QTR SubTotal	28,968,293	8,570,500	9,088,266	5,722,201	
Jun 2 - (31)	7,648,747	6,656,300	9,725,414	8,380,505	192,361,719
Jun 9 - (32)	6,794,936	8,693,500	10,753,155	11,084,147	193,398,228
Jun 16 - (33)	7,174,220	9,174,700	11,305,158	10,449,531	196,024,662
Jun 23 - (34)	7,439,590	9,502,600	12,949,517	11,875,141	199,072,642
Jun 30 - (35)	7,044,822	8,933,400	14,126,304	12,435,425	204,262,885
2nd QTR SubTotal	95,274,149	111,477,100	135,154,493	118,530,115	
Jul 7 - (36)	7,183,374	7,654,800	13,056,239	13,325,006	209,399,586
Jul 14 - (37)	6,864,306	7,283,300	13,196,924	12,125,979	214,721,313
Jul 21 - (38)	7,056,509	7,483,600	10,199,390	11,270,316	215,612,788
Jul 28 - (39)	5,684,434	6,043,600	7,775,647	10,462,878	213,454,376
Aug 4 - (40)	4,904,787	4,741,000	5,571,768	7,768,763	215,245,835
Aug 11 - (41)	4,180,595	4,040,700	4,332,022	6,479,019	214,398,380
Aug 18 - (42)	3,655,708	3,531,300	3,980,064	5,583,347	213,897,876
Aug 25 - (43)	2,905,312	2,805,900	3,103,562	4,740,909	213,454,376
Sep 1 - (44)	2,336,529	2,256,400	-	-	
Sep 8 - (45)	1,527,122	1,245,200	-	-	
Sep 15 - (46)	1,095,437	886,900	-	-	
Sep 22 - (47)	1,071,316	855,200	-	-	
Sep 29 - (48)	868,897	693,500	-	-	
3rd QTR SubTotal	49,334,327	49,521,400	61,215,616	71,756,218	
4th QTR SubTotal	1,423,231	431,000	-	-	
Season-to-Date	166,677,467	163,631,800	205,458,375	196,008,534	
% of Crop	95%	96%	121%	115%	
Crop Size	175,000,000	170,000,000	Left to Harvest	Left to Ship	
Crop Variance	38,780,908	41,826,575	(35,458,375)	(26,008,534)	

[Click Here to View the Complete 2019 Crop Projection](#)

Weather: 30-Day Outlook For California's Coastal & Valley Areas

(August 26 – September 16)

Summary- The monsoon continues active in western Mexico, S Rockies and Arizona/New Mexico. However, the action to produce thunderstorms (TSTMS) remains mostly east of California.

Colder than normal sea surface temperatures will encourage most tropical cyclones to remain south of southern Baja, or weaken with minimal rains as they turn northwestward near the Baja coast, over colder water.

Some intermittent troughing will continue in the NE Pacific near or just west of central and N California. The central Pacific trough has been replaced by high pressure in the near term.

October 2019 appears to have a better chance than normal for cutoff lows into S California. With sea surface temperatures further west of SOCAL being warmer than normal, there is a chance for above normal rainfall in SOCAL and the S Deserts in October as moisture is entrained into the lows and their associated fronts.

Outlook maps (monthly time scale) for the months of November and December support below normal precipitation in November (for both NMME and CFSv2). December is below normal per NMME, and for CFSv2.

For western Mexico the Sierra Madre Occidental have above normal rainfall due to thunderstorms (TSTMS) in August. This trend appears to continue in September. Despite the increase of rainfall in W Mexico, the overall effect of high pressure aloft appears minimize TSTM activity and rainfall in SOCAL during the early fall in September. Arizona has the best chance to receive rains from monsoonal southerly flow. Some of this rain may reach into the SierraNV and SOCAL eastern deserts in early September.

In the Near Term – Aug. 30 – Sept. 14... Salinas Valley-San Luis Obispo Co...For the agricultural valleys: After a hot week, some cooling, some morning low clouds/fog are indicated for the period through Sept 3, with local breezy conditions in the coastal mountains. Some further cooling is possible Sept 6-9th with onshore flow. On the 10-13th it turns warmer with partly cloudy afternoons, and chance for a shower or TSTM in the central SierraNV.

In the southern California avocado growing areas, from San Luis Obispo south, some morning low clouds/fog are indicated for the period through Sept 3. TSTMS develop in the mountains and deserts, mainly from the San Bernardino range south to San Diego Co. It is cooler from the 6-8th with onshore flow and a deeper marine layer. As troughing develops with S-SE flow on the 9-14th, there is a chance for an increase in tropical moisture coming into SOCAL from the south. Although the sea surface temperature anomaly (SSTA) pattern will tend to weaken tropical cyclones that may drift into the Baja California region, residual moisture could still cause clouds and a few light showers over higher terrain during the period from the 9-14th.

Summary – September 15-30... The general synopsis for Northern, Central and Southern California is that upper low activity continues off the central coast and may drift south off the SOCAL coast. SE flow may bring more moist tropical airmasses, and TSTMS, for southern California. This may again provide tropical moisture inputs for thunderstorms (TSTMS) in SOCAL mountains and deserts, as well as the SierraNV. Monsoonal TSTM activity will be primarily forced by upper lows drifting near the coast of N and Central California, and occasionally to SOCAL, with the lows being the primary driver of the monsoonal flow during this early autumn period, while upper high pressure continues in the Colorado-New Mexico region.

Recurrent dry lightning events should be in the preparation plans for Fire Weather, especially in mountain areas of N, Central and S California.

Seasonal Outlook / El Niño Update... October 1 – December 31... Comments here apply to SOCAL as well as for N and Central California. We see that *El Niño* has persisted, for the most part, through the summer. We continue to see support for a return of possibly significant rains in January 2020, following a dry autumn period (Oct-Dec). However, with *El Niño* diminishing after January, we expect a return of dry conditions in the latter part of the rainy season (Feb-Mar 2020).

Watch for development of some cutoff lows, with risk of heavy convective rainfall in Oct, and late Dec and Jan 2020. With warmer than normal sea surface in the vicinity, there will tend to be more moisture available in general. This will tend to support a higher risk of rains this October, and in late Dec-Jan.

For SOCAL, the tropical cyclone season is being interrupted at times by the colder than normal sea surface along and off the coast of Baja. Cutoff lows developing off SOCAL in October may include some support for higher risk of local heavy rains in October for SOCAL. October continues the warmer than normal trend, even if there is a better chance for rains.

Alan Fox...Fox Weather, LLC

Copyright © 2019, Fox Weather, LLC, Used by permission.