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Calendar

For a listing of industry events and dates for the coming year, please visit:
http://www.californiaavocadogrowers.com/commission/industry-calendar

UC Ag Experts Talk: Avocado Thrips Webinar
Dr. Mark Hoddle will discuss avocado thrips biology, biological and chemical controls, temperature effects, thrips damage, monitoring, and resistance issues. Registration required. More information here.

January 22
January 22
Time: 3:00 p.m.
Location: Online webinar

CAC Board Meeting
February 27

February 27
Time: TBA
Location: CAC Office, 12 Mauchly, Ste L, Irvine, CA

Spray Safe Meeting — Ventura County
Members of the California avocado industry who are interested in learning more about preventing pesticide exposure are encouraged to attend. The seminar will cover pesticide safety, application technology and regulatory issues.

March 24

March 24
Time: 10:00 a.m. – 6:00 p.m.
Location: Ventura County Fairgrounds, 10 West Harbor Boulevard, Ventura, CA

Using Water Sensitive Cards to Assess Pesticide Spray Coverage

It can be difficult to determine the effectiveness of pesticide and herbicide spray coverage, but water sensitive cards can be used to determine droplet size and coverage. The water sensitive cards, which cost about $1 each, have two sides — a coated side that stains blue when exposed to liquid droplets and a water repellent side. The cards can be placed in trees and then the drop pattern can be visually assessed to determine how effectively the sprays are being applied.
Dr. Ben Faber notes, in a recent blog post, that the cards can be used as follows:

- Aerial applications — staple the cards to leaves at various heights and depths within the tree
- Orchard sprayers — staple the cards to leaves in the upper, center and lower portions of the tree
- Backpack/handheld sprayers — evaluate herbicide applications by placing the cards across one width to assess spray volume and speed

A few tips for using the water sensitive cards:

- The paper easily picks up moisture on your fingers, so always handle the cards by the edges or use tweezers or rubber/waterproof gloves to handle the cards (otherwise your fingerprints will be visible and interfere with your results).
- Be certain to note the location of where you are placing the card (on the water-resistant back of the card), prior to placing it on the tree. This will help you easily track where each card was placed.
- After running the spray test, allow the cards to dry before collecting them and assessing the spray pattern.
- Don’t allow the cards to sit exposed to the air for extended periods of time as they will turn blue from atmospheric humidity. Instead, store the cards in the sealed package they come in. Be certain the cards are completely dry before storing and stacking them.

When assessing the cards visually, you can easily see the following:

- Over-dosing — no defined droplets, heavily covered paper, running liquid appearance
- Under-dosing — minimal, sporadic specks
- Off-target — droplets appear on papers that are placed outside the application area

A matrix can be used to assess spray coverage:

- [U.S. unit matrix](#)
- [Metric unit matrix](#)

Smartphone apps can be used to evaluate the droplets/cm². Simply open the app, take a photo of the card, and the app will provide you with data. [SnapCard app](#) is one of several available.

General recommendations for coverage are:

- Insecticides — 20-30 droplets/cm²
- Pre-emergent herbicides — 20-30 droplets/cm²
- Contact foliar herbicides — 30-40 droplets/cm²
- Fungicides — 50-70 droplets/cm²
Courses Available for Mandatory Education Component of Ventura County Irrigated Lands
Conditional Waiver

In 2016, the Los Angeles Regional Water Quality Control Board adopted the Conditional Waiver of Waste Discharge Requirements — a five-year irrigated lands regulatory program that applies to all agricultural operations within Ventura County. The waiver requires owners of irrigated lands to measure and control discharges from their property.

The 2016 waiver includes rigorous requirements that involve reporting, analysis, data collection, tracking and mandatory best management practices surveys. The waiver allows landowners to work independently, or collectively as a “discharger group,” to comply with its provisions. To assist landowners with compliance, and alleviate costs, the Ventura County Agricultural Irrigated Lands Group (VCAILG) was formed. Compliance costs are shared by members of VCAILG and membership in VCAILG is voluntary.

As part of the Conditional Waiver compliance, operators must attend a two-hour water quality education session each year. To assist operators in locating an applicable training session, VCAILG has launched an Education page that lists new classes as they become available. Growers in the Ventura County region are encouraged to visit this page to find water quality educational sessions nearby.

New California Avocado Recipes Suit Many Dietary Lifestyles

California avocado recipes are a powerful means of engaging consumers, retailers and health professionals and broadening their usage of the fruit. By sharing recipes that introduce new usage ideas and incorporate a wide variety of dietary lifestyles, the California Avocado Commission (CAC) encourages brand awareness among consumer and retail audiences each season.

From January through August 2019, the Commission released 80 fresh new California avocado recipes ranging from healthy entrees to popsicle desserts. Recipe styles ranged from stuffed avocados, to pasta, flatbread, salads, toast and pudding. The recipes also suited a diverse range of dietary needs, including dietitian approved, diabetic friendly, keto friendly, low sodium, low carb, vegetarian, vegan and plant-forward dishes.

The recipes were shared widely across CAC’s digital channels. To reach audiences beyond CAC’s consumer website and social media channels, 76 of the recipes were distributed by the Commission’s blogger and influencer partners on their blogs and social platforms. To date, all of the new recipes have been viewed and the Commission’s social media tracking data indicate that consumers love the latest recipes and are eager for more.

Retailers also utilize the California avocado recipes to engage with their shoppers. The popularity of these recipes encourages retailers to display California avocados and helps increase interest and sales of the fruit.

A combination of diverse vegetables and whole grains, Wild Rice Pilaf with California Avocado is a nutritional powerhouse.
California Market Trends


California Avocado Society Weekly Newsline* Avocado Prices – December 11, 2019

<table>
<thead>
<tr>
<th>California Hass</th>
<th>Conventional #1 (Field Price Per Lb)</th>
<th>Organic #1 (Field Price Per Lb)</th>
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<tbody>
<tr>
<td>#32's</td>
<td></td>
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<tr>
<td>36's</td>
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<tr>
<td>40's</td>
<td></td>
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</tr>
<tr>
<td>48's</td>
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<td>Insufficient Volume to Quote</td>
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<tr>
<td>60's</td>
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<tr>
<td>70's</td>
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<tr>
<td>84's</td>
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</tbody>
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*To subscribe to the Weekly Newsline, please contact the California Avocado Society at (949) 940-8869 or www.CaliforniaAvocadoSociety.org.

California Avocado Commission Weekly Volume Summary (Pounds)

<table>
<thead>
<tr>
<th></th>
<th>Week Ending 12/08/2019</th>
<th>Season-to-Date (since 11/01/2019)</th>
<th>2019 Year to Date</th>
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<tbody>
<tr>
<td>Hass</td>
<td>0</td>
<td>0</td>
<td>198,552,471</td>
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<tr>
<td>Lamb</td>
<td>0</td>
<td>0</td>
<td>11,499,336</td>
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<tr>
<td>Other (Greens)</td>
<td>0</td>
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<tr>
<td>California Total</td>
<td>0</td>
<td>0</td>
<td>210,528,372</td>
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<tr>
<td>Florida</td>
<td>807,675</td>
<td>5,966,808</td>
<td>42,822,828</td>
</tr>
<tr>
<td>Chile</td>
<td>314,605</td>
<td>1,501,849</td>
<td>27,590,462</td>
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<tr>
<td>Mexico</td>
<td>55,347,644</td>
<td>279,765,121</td>
<td>2,014,828,183</td>
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<tr>
<td>Peru</td>
<td>0</td>
<td>184,344,980</td>
<td>38,780,000</td>
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<tr>
<td>Other (Imports)</td>
<td>1,130,000</td>
<td>4,970,000</td>
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<tr>
<td>Import Total</td>
<td>56,792,249</td>
<td>286,236,970</td>
<td>2,265,543,625</td>
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<tr>
<td>USA Total</td>
<td>57,599,924</td>
<td>292,233,778</td>
<td>2,518,894,825</td>
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Sources:
California = CAC (MRUC)
Florida = Florida Avocado Admin Committee
Chile = Comité de Pataș, Chile
Mexico = APEAM
Peru = Protass
Other Imports = USDA AMS website

Crop Statistics

The 2018-19 California avocado season has wrapped up harvest at approximately 215 million pounds, 40 million pounds over pre-season estimates and just 3 million pounds shy of the May 2019 mid-season grower estimate. Very early 2019-20 California crop estimates have come in between 370-377 million pounds, however CAC’s official estimate will not be released until the final pre-season handler survey has been conducted in December 2019.
Weather: 30-Day Outlook For California’s Coastal & Valley Areas

(December 15 – January 15)

Summary- The long term *El Niño*-Southern Oscillation (ENSO) remains in a neutral phase through the winter (through Feb 2020), with little change expected with this neutral phase through winter and early spring (Jan-Mar 2020).

The MJO pattern is currently inactive. However, SSTAs will continue to assist trough development into the Great Basin and SierraNV. The storm track remains at the current activity level through Dec 16th. Fronts and troughs become more active, with more rain occurring during Dec 17-19th and 21-23rd.

Fronts with some rains and mountain snows come through N California and the Sierras on Dec 12-14th, 17-19, and 21-23rd.

After a wet Dec, Jan – Mar 2020 appear drier than normal. S California especially appears persistently dry during the months of normal heaviest rainfall (Jan and Feb). Near normal precipitation is suggested by CFSV2 for March in SOCAL, while N California is drier than normal for March.

In the Near Term – Dec 15-30... Salinas Valley-San Luis Obispo Co...The best chance for rains is indicated during Dec 17-19, and 21-23rd. Otherwise, dry conditions are indicated.

In the southern California avocado growing areas, from San Luis Obispo south, it will be predominantly dry during Dec 15-17th, with perhaps a frost in the coldest locales about the mornings of the 16-18th. There is a chance for a windy, showery system on the 19-20th, followed by frost on the morning of the 21st. Another rain occurs late from the 22-23rd, followed by frosts on mornings of the 24th and 25th. Cold nights but warmer days appear to develop from the 26-28th.

Summary – January 1-31, 2020... In Northern and Central California the next periods of troughing would be around Jan 2-6, mostly in N California to Monterey Co and into the central Sierras. Troughing appears to be less active during about Jan 14-22, then another chance for rains develops during Jan 25-30.

For Southern California, predominantly drier than normal conditions are indicated by CFSV2 for Jan. We note that CFSv2 does not suggest above normal temperature. With the predominant pattern of troughs over the N Rockies and Great Basin, and high pressure developing near the California coast intermittently, there may be an increased risk for frosts/freezes in the susceptible agricultural valleys during Jan.

Seasonal Outlook / *El Niño* Update...February 1 – March 31, 2020...Northern and Central California Overall pattern....Predominantly dry and warm for Feb then dry for most of Mar. The viticultural areas of Napa, Sonoma and Mendocino Co’s may see recurrent frosts/freezes in the valley areas. Because of recurrent troughing, there is risk of lack of inversions for some of the frost periods. Temperatures are above normal for Feb with above normal sunshine. Mar through May appear to remain warmer than normal, probably due to the continuation of warm sea surface temperature anomalies (SSTA) off the California coast. It appears to remain mostly drier than normal through the SierraNV during Jan – Apr with predominantly warm conditions. The combination of persistent warmth with persistent dryness does not argue for a good Sierra snowpack this season, although we started the season with some heavy snows into the Sierras during Dec.

Alan Fox...Fox Weather, LLC
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