

# From the Grove

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## Fall Featured Recipes Story on Page 26

### From the **Grove**

Volume 15, Number 3

#### President

Ken Melban

[kmelban@avocado.org](mailto:kmelban@avocado.org)

#### Editor

Tim Linden

Champ Publishing

925.216.0973

[tim.linden@gmail.com](mailto:tim.linden@gmail.com)

#### Ad Sales

Tom Fielding

626.437.4619

[tomfielding1@mac.com](mailto:tomfielding1@mac.com)

#### Design/Layout

Heather Gray

User Friendly, Ink.

[userfriendlyink@gmail.com](mailto:userfriendlyink@gmail.com)

#### April Aymami

Director of Industry Affairs

and Operations

[aaymami@avocado.org](mailto:aaymami@avocado.org)



[www.californiaavocadogrowers.com](http://www.californiaavocadogrowers.com)

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By Ken Melban  
President



Ken Melban

## USDA Returning Inspectors to Mexico; USMCA Renegotiations Begin in 2026

**M**ore than a year of negotiations between the California Avocado Commission and the U.S. Department of Agriculture recently resulted in USDA agreeing to return its inspectors to Mexican avocado groves. This reinstates the USDA and CAC negotiated Operational Work Plan, initially agreed to in 1997, that was abruptly and unilaterally changed by USDA in 2024 because of cartel security issues.

Within a few weeks of USDA pulling its inspectors from groves, stem and seed weevil began showing up in packing houses located in Mexico. Detections went from zero to 150 in a couple of months. This immediately elevated CAC's concerns regarding a pest invasion, as did USDA's rather hollow assurance that detections prove the system is working.

California avocado growers already have borne the costly financial burden of other invasive pests from Mexico to the tune of at least \$14 million per year in production costs. CAC's message to USDA has been clear and consistent: an invasion of stem and seed weevil would be many times more in cost and devastating to the future of the California avocado industry.

Fortunately, the solution to the threat is not that complicated. First, Mexico must be held accountable to more aggressively deal with its pest and security problems or lose the privilege of exporting their avocados to the United States. Second, USDA must engage as it agreed to decades ago and ensure Mexico fulfills its responsibilities.

The details concerning USDA inspectors returning to groves are being finalized and the Commission will share these with growers as soon as they are available.

The Commission is also examining another opportunity to advocate on behalf of its growers by engaging in the United States-Mexico-Canada Agreement (USMCA) renegotiations beginning in 2026. In preparation for this, the United States Trade Representative (USTR) has invited written comments through November 3, 2025, and will schedule public testimony for a later date.

With the mindset of leaving no stone unturned in defense of the California avocado industry, the Commission Board of Directors unanimously adopted the following proposal at its meeting on October 9, 2025.

**MOTION:** The Commission shall submit formal comments and testify in response to the Office of the United States Trade Representative (USTR) [Docket Nos. USTR-2025-0004 and USTR- 2025-0005] Request for Public Comments and Notice of Public Hearing Relating to the Operation of the Agreement Between the United States of America, the United Mexican States, and Canada, reflecting the following:

*1. The need to assure phytosanitary security by reinstating the original United State Department of Agriculture (USDA) pest inspection program approach applicable to avocados to be exported from Mexico to the United States by requiring that USDA employed inspectors shall inspect avocado groves in Mexico and packinghouses prior to shipment to the United States; and*

*2. Requiring immediate cessation of the importation of avocados from Mexico into the United States when actions in Mexico compromise the integrity of the pest inspection program (e.g. threatened safety of USDA inspectors; incomplete or inaccurate records; misrepresenting sources of avocados subject to inspection).*



At the same Board meeting there was extensive discussion of U.S. avocado market conditions indicating that consumption has generally plateaued over the last few years while global production continues to increase. I shared with the Board the shift in perspective I have heard from the grower community in recent months with many growers calling for control measures on offshore supplies during the California avocado season. Further, it was noted that efforts to build a U.S. market for avocados during the past 30 years has led to robust demand in American markets. However, with U.S. consumption flat and global supply increasing, California and the imports end up in a race to the bottom

on price, as we witnessed this year.

With that in mind, the Board took the following action:

***Authorize representatives of CAC to submit comments and input to pending USMCA negotiations supporting proposed Sections 232 tariffs, and/or seasonal Tariff Rate Quotas (TRQs) to control volume of imported fresh avocados.***

The Board's authorization for CAC to submit comments in support of a seasonal tariff rate as part of the USMCA negotiations in alignment with recent remarks by USDA Secretary Brooke Rollins. She said in part that "We have got to produce food for our own selves. The President has talked

significantly about the importance of onshoring our manufacturing. We also have to onshore our food. We have got to get back to the point where we can feed ourselves...in a way that's healthy using locally produced food. We have got to reshore our food."

The Commission will provide additional information as comments are developed and meetings with the Trump Administration and Members of Congress occur.

Please email me at [kmelban@avocado.org](mailto:kmelban@avocado.org) if you have any questions or comments. 🥑



By Jason Cole  
Chairman of the Board



Jason Cole

## Standing Together Is How We Succeed

In my dozen years as a California Avocado Commission Board member, I have spoken with countless growers about their production practices (both what works and what does not), the ebb and flow of global avocado supplies, the pressure of rising production costs, the increasing unpredictability of the weather, keeping up with regulatory changes — the varied minutiae of what keeps us up at night. During those conversations, I addressed them as both a California avocado grower and a Board member — as their peer and their advocate.

I learned countless lessons from the growers I have spoken with, and I truly hope they gained a little something by having a conversation with me. And if I were to boil down a dozen years of conversations into one takeaway, for me there is no lesson more important than this: every single grower faces challenges unique to their grove and their personal circumstances, but it is only if we act *together* — as an industry — that we can advance our cause, our profitability and our productivity.

One single voice isn't going to turn the tide — but our voices united under the umbrella of the Commission's fierce advocacy *can*. Granted, the change may come slower than you or I like — but advocating on our behalf is a complicated process that often involves



legislative members, persons on local boards and industry decision makers who must also answer to their constituents. Change requires conversation and it requires an entity — the Commission — who is willing to fight on our behalf every single day. The issues we are facing — whether it's reestablishing USDA inspections in Mexico, identifying the next invasive pest/disease threat, or securing fair agricultural water pricing — are complex. As growers, we don't have the time, experience or knowledge to untangle this level of complexity. *But CAC does.*

This industry is on the cusp of even greater potential and at the same time we are facing unprecedented pressures. Understandably, many growers

are nervous. But I say this to you as both a grower and a soon-to-be former CAC Board member — now, more than ever, we need CAC to fight on our behalf.

Just as importantly, we need more grower voices at the table to respectfully share ideas and to help define what CAC should focus on. So, advocate for our industry by joining the conversation. Speak with the directors in your district. Attend grower meetings. Share your ideas. Listen to the voices of others. And — just as importantly — grow the highest quality fruit you can. Your tireless work in the grove is what truly differentiates our fruit from the rest of the world — don't ever underestimate how important that is. 🥑



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By Terry Splane  
Vice President of Marketing



Terry Splane

## How Can We Measure Marketing Success?

The California Avocado Commission gives very careful consideration to every dollar it invests in promoting California avocados, choosing judiciously to ensure that we generate not simply brand awareness, but brand equity, trade and consumer demand that contributes to the economic viability of California avocado growers. Bottom line — what matters most to growers is economic returns, and the Commission's role is to help create conditions that optimize those returns. What makes that mission challenging are the complex factors that contribute to profitability: sourcing, production, distribution, sales and marketing, as well as competitive pressures.

For branded companies, measuring profitability is simplified because they control all the aforementioned factors, except competitive pressures, and can look at the sum of their activities to determine how each contributed to said profitability. On the other hand, commodity boards like the Commission do not control most aspects of the profitability equation. CAC represents the interests of diverse growers who each face unique challenges and rely on specific operational processes that best suit their grove's profile. And those factors that determine *individual*



grower profitability are outside the purview of the Commission.

So, how can the Commission define and measure marketing success? From a purely marketing perspective, CAC's goal is to market strategically to bolster brand perception, build demand and encourage consumers to willingly pay a premium for California avocados.

To measure success, the Commission tracks meaningful metrics across multiple dimensions. CAC's annual tracking study measures consumer awareness, preference and attitudes toward California avocados — providing a historical view of data that helps define and refine the upcoming season's messaging and direction. To measure the effectiveness and reach

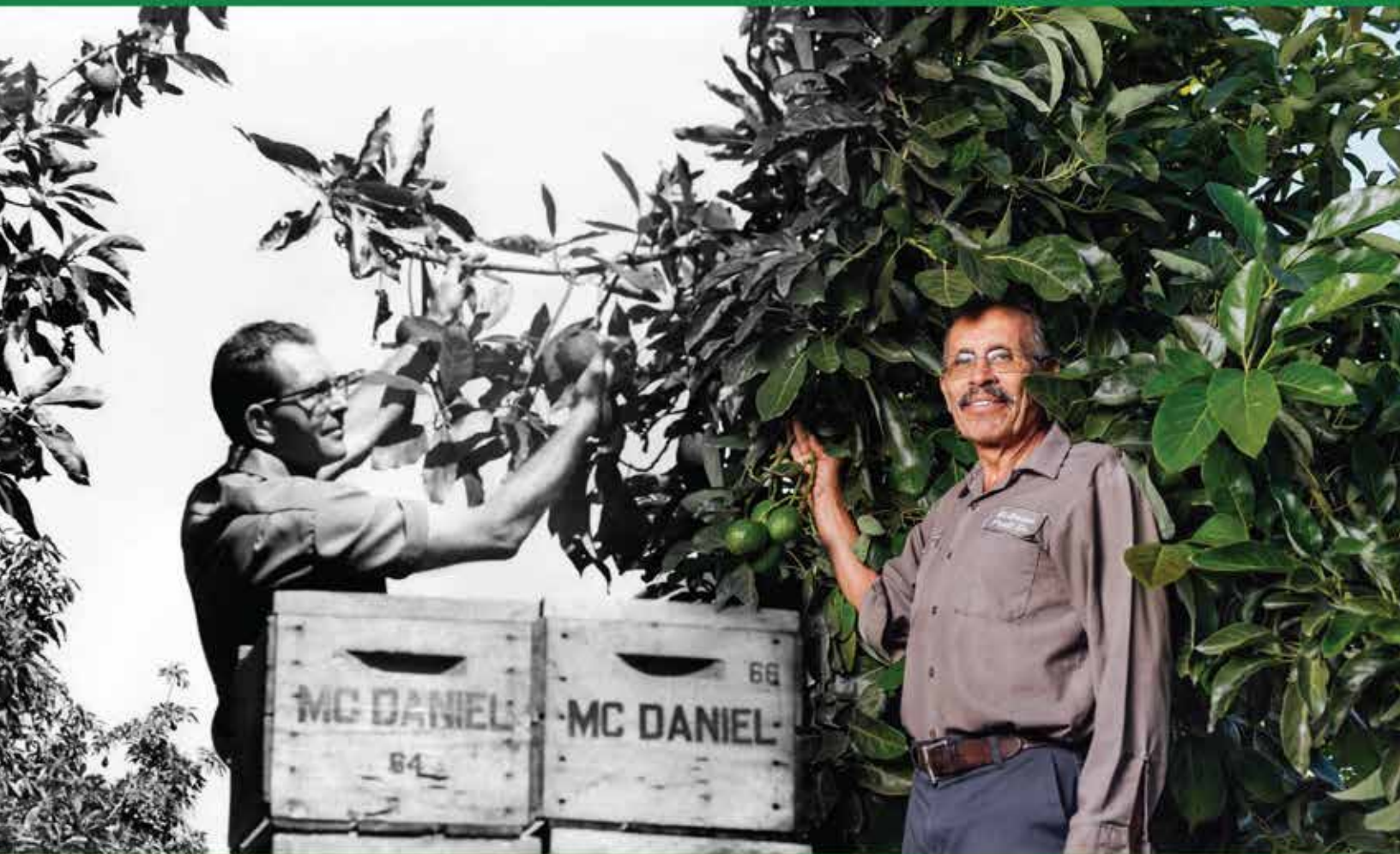
of marketing, the Commission tracks media and public relations metrics including impressions and engagement — and compares the results of specific tactics to industry benchmarks and year-over-year data to determine improvements and opportunities.

The Commission also relies on information provided by third-party data providers and feedback from retail and foodservice partners. Data includes sales lift during promotions, menu penetration, shipment trends and distribution gains. Although PLU scanner data doesn't capture origin of avocados because they are a bulk produce item, the data remains useful to examine considering when and where California avocados are merchandised. Feedback from partners also is valuable as trade customers eager to merchandise California avocados in season appreciate the value of the customized marketing and working with the Commission.

The Commission also leverages third-party expertise including Curious Plot's Board of Advisors, the FOB differential report and ROI studies, like that conducted by the University of California at Davis, that measure how marketing investment translates into grower value.

To best serve California avocado growers, the Commission has prioritized transparency with regular reports





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delivered at Board meetings, annual and district meetings, through the Annual Report and timely GreenSheet and *From the Grove* articles. What these reports and articles demonstrate is that to deliver the most value to growers, the Commission's marketing strategies and programs cannot remain static. Relying on the myriad data we have at hand, we constantly refine our tactics based on what works, what needs improvement and — just as importantly — what we need to walk away from. In today's world of digital marketing and data availability, some of those decisions can be made as the season progresses, allowing CAC to make real-time adjustments to optimize marketing investment. This season, we doubled down on Connected TV and YouTube short videos when they proved to be particularly effective. And we quickly paused some social media activity when

the conversation on CAC's channels began to turn negative due to socio-political concerns.

Ultimately, marketing success is determined by growers asking themselves, "Did CAC's marketing activity help increase demand, positively influence pricing and support my operation?" Measuring California avocado marketing success isn't simply an exercise in accountability — it's a means of sharpening strategies and ensuring long-term industry viability. As a commodity board, CAC represents a wide swath of diverse growers and diverse operations — each facing unique challenges and reaping unique rewards. But investment in collective marketing — with the goal of optimizing profitability for all growers — pays dividends when measured thoughtfully and consistently. 🥑



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# Consumer Marketing Performance Exceeds Expectations

## Increased Marketing Budget Pays Off with Robust Results Compared to Industry Benchmarks and Year-Over-Year Metrics



*The Bristol Farms influencer campaign in May generated nearly 100 Instagram stories and 15 high-quality videos.*

In the second year of partnership between the California Avocado Commission and Curious Plot, its advertising agency, the industry's consumer advertising campaign has delivered comprehensive results that exceed industry benchmarks and year-over-year metrics for the 2025 season. The campaign included an evolution on the previous year's creative, which highlighted California avocado growers and key messaging including locally grown, sustainably farmed and ethically sourced. New this year to the creative was the addition of lifestyle elements, like recipes, how-tos and entertaining inspiration to capture consumer interest. Incremental budget in 2025 allowed for expanded tactics to include more Connected TV (CTV)\* coverage, a presence on additional social media channels (Reddit)\*\* and

extended efforts to reach audiences in Arizona, Oregon and Washington.

The strategic use of the total marketing investment drove strong overall campaign results, designed to increase awareness of and preference for California avocados, encourage demand and ultimately yield strong grower returns. The following are some program highlights from 2025 marketing efforts.

**Digital Impressions from Online Advertising:** 217 million impressions, compared to 93 million impressions for the 2024 campaign. While the budget this season is 70% higher than 2024, impressions more than doubled from last year, showing the impact of prioritizing these channels.





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campaigns.

*Connected TV ads remained a strong tactic during the 2025 peak season and ran in hyper-local geotargeted areas.*



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*Social content: California Avocado Cucumber Jar Salad was a top performer — 3.2 million views on TikTok alone through August!*





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**Website Visits:** More than 1.3 million visits to CaliforniaAvocado.com in total. Website visits have increased month over month, with August alone seeing 290,000 sessions, and 85% of those being new users.

**Connected TV Impressions:** Retailer CTV campaigns have garnered 13 million impressions as of the end of August. CAC's average view rate is 99%, exceeding the 95% industry benchmark.

**Local Spokespersons Media Segment Impressions:** Close to a 5 million reach. A new tactic this year focused on partnering with various spokespeople to secure regional TV broadcast segments in target markets, including San Diego, Fresno, Sacramento, the Bay Area, Phoenix and Portland. This tactic generated awareness and reinforced campaign messaging for California avocados in key local markets during peak season. Highlights can be viewed at <http://bit.ly/4m01rLG>.

#### **In-Person Influencer Activations at Retail**

To raise consumer awareness of the California avocado season and help shoppers find them at retail, the Commission partnered with key retailers — including Bristol Farms, PCC Community Markets and Albertsons/Vons/Pavilions — and strategically selected influencers. These influencers attended in-store events, capturing content around avocado displays and creating “Come Shop with Me”-style posts. Each piece featured a store visit, a look at the California avocado display and a custom recipe showcasing California avocados in a fresh, engaging way.

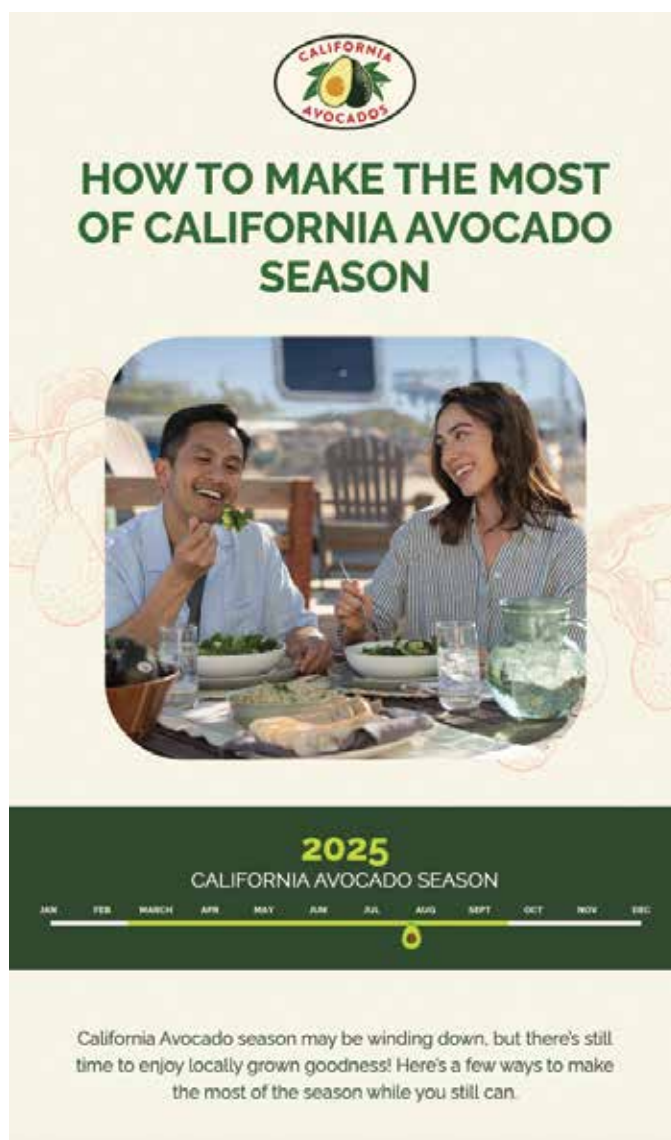
This approach generated more than 200 unique social media posts and drove more than 2 million impressions across California avocado channels. The Bristol Farms campaign alone delivered more than 1 million impressions in May — doubling the goal of 500,000.





**Social Media Clicks/Engagements:** More than 2 million engagements, compared to 740,000 engagements last year. The Commission's investment in on-trend, social-first content creation has paid off, with users more apt to comment, like, share and save content than they were in the previous year. The California avocado TikTok channel saw the *California Avocado Cucumber Jar Salad* recipe go viral with more than 3 million views, earning its way to being one of the highest-performing pieces of branded content on the channel.

**New Email Subscribers:** 1,553 new subscribers. The month of July saw a particularly large increase in new subscribers (630), largely attributed to lead generation ads<sup>\*\*\*</sup>. Additionally, the open rate has remained steady around industry benchmarks at 20%. 🥑



*Email subscribers have grown throughout peak season, and the open rate remains at the industry benchmark of 20%.*

<sup>\*</sup>Connected TV (CTV) is a TV that has an internet connection, allowing users to stream digital content. Examples include Roku and Apple TV.

<sup>\*\*</sup>Reddit is a community-driven social media platform where users organize communities to discuss any kind of topic.

<sup>\*\*\*</sup>Lead generation ads are digital ads designed to collect contact information from potential consumers. In this case, the ads ask for a consumer's email address to add them to the email subscriber list.

Performance Metrics in this article are calculated May – August 2025.

# The Cost of Managing Invasive Pests

By Tim Spann, PhD  
Spann Ag Research & Consulting

California is fortunate to have relatively few pests that affect avocados and we have no seed or fruit feeding pests. However, the major pests that we do have — persea mite and avocado thrips — are both invasive species originally from Mexico. Persea mite (*Oligonychus perseae*) was first found attacking avocados in San Diego County in 1990 and by 1996 had spread north to San Luis Obispo County. Avocado thrips (*Scirtothrips perseae*) was first detected in Ventura County in July 1996 and in less than a year had spread south through San Diego County.

Of these two pests, avocado thrips are the most economically damaging because of the fruit peel scarring the insects can cause when left uncontrolled. But high populations of persea mite can cause premature leaf drop resulting in fruit sunburn damage. Fortunately, both pests are generally well-controlled with one well-timed pesticide application annually, but not without a significant cost to the industry.

## Annual Acreage Treated for Invasive Thrips and Mites

Abamectin is the most used pesticide for the control of avocado thrips and persea mite on California avocados. According to pesticide use report data from the California Department of Pesticide Regulation (DPR), nearly 20,000 acres of avocados were treated on average annually with abamectin in California during each of the four most recent years for which data are available (Table 1). Other pesticides that could be used for treating avocado thrips and persea mite, but are not exclusively used for those pests, are also listed in Table 1. All combined, these products are used to treat, on average, just more than 25,000 acres of avocados annually. However, it cannot be determined from the publicly available DPR data whether all those acres are unique or if some represent multiple applications to the same acreage.

**Table 1. Annual acreage of California avocados treated with pesticides labeled for the control of avocado thrips and/or persea mites.**

Active ingredient	Common Trade Name	Organic	Target Pest	Acres Treated <sup>1</sup>				
				2023	2022	2021	2020	Average
Abamectin	Agri-Mek	No	Mites & thrips	20,744	19,876	18,608	19,691	19,729
Azadirachtin	Aza-Direct	Yes	Mites & thrips	0	30	0	183	53
Imidacloprid	Admire	No	Thrips	614	207	225	467	378
Spinetoram	Delegate	No	Thrips	3,193	1,490	3,551	1,354	2,397
Spinosad	Etrust	Yes	Thrips	2,363	1,411	1,688	1,013	1,619
Spirodiclofen	Envidor	No	Mites	385	2,560	703	861	1,127
Spirotetramat	Movento	No	Mites & thrips	58	102	70	199	107
Thiamethoxam	Actara	No	Thrips	16	58	14	22	28
Annual Total				27,373	25,737	24,862	23,792	25,441

<sup>1</sup>Data from 2020, 2021, 2022 and 2023 California Department of Pesticide Regulation Annual Statewide Pesticide Use Report Indexed by Commodity.



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**Table 2. Usage of pesticides primarily used to treat avocado thrips and perseá mite in the top five avocado producing counties in California in 2023.**

County	Portion of statewide avocado acreage <sup>1</sup>	Percent of total avocado usage <sup>2</sup>							
		Abamectin	Azadirachtin	Imidacloprid	Spinetoram	Spinosad	Spirodiclofen	Spirotetramat	Thiamethoxam
Ventura	40%	54	0	29	19	33	0	0	100
San Diego	26%	9	0	26	35	25	100	0	0
Santa Barbara	13%	20	0	0	2	19	0	100	0
Riverside	9%	< 1	0	29	< 1	1	0	0	0
San Luis Obispo	9%	16	0	16	41	14	0	0	0

<sup>1</sup>Data from the California Avocado Commission 2023 Statewide Avocado Acreage & Condition Analysis.

<sup>2</sup>Data from the California Department of Pesticide Regulation 2023 Annual Statewide Pesticide Use Report Indexed by Commodity for the respective counties listed.

### Costs to Manage Invasive Thrips and Mites

Costs for pesticide applications vary considerably across the industry, especially for ground spray applications. A survey of applicators and grove managers found that aerial applications range from about \$170 to \$250 per acre including abamectin, oil and spreader, with application costs being higher in the southern growing region. Ground applications are much more variable, with terrain and tree size being the major factors that affect costs. Labor and equipment costs for ground sprays range from \$90 for young trees on flat ground to as high as \$700 for large, old trees on hill sides.

The second most used materials, spinetoram (Delegate®) and spinosad (Entrust®), increase costs for aerial applications by about 50% and 100%, respectively, due to the significantly higher costs for these products.

Table 2 shows the percentage of the various pesticide products used to control avocado thrips and perseá mite in the top five avocado producing counties in 2023. These five counties accounted for 97% of California avocado production in 2023. Apart from spinetoram and spinosad, these five counties accounted for 100% of the avocado usage of the products listed. Three percent of the spinetoram usage and 8% of the spinosad usage was in other counties.

In 2023, 90% of the abamectin usage was in the northern growing area (Ventura, Santa Barbara and San Luis Obispo Counties; Table 2). This is estimated to be about 18,700 acres (90% of the total 20,744 acres that were treated with abamectin in 2023, Table 1). If we assume an average treatment cost of \$200 per acre, this equates to \$3.74 million. If we assume the remaining 2,050 acres treated in San Diego and Riverside Counties had an average application cost of \$250 per acre, this equates to \$512,500. Combined, abamectin treatments for the north and south in 2023 cost the industry an estimated \$4.25 million. This assumes that all these acres were treated aerially, which is most certainly not the case, so the true costs probably exceed \$5 million.

Doing similar calculations for spinetoram and spinosad, and assuming aerial applications only, we arrive at total application costs of about \$1 million for each of these products, which again is likely on the low end, since not all the treated acres were treated aerially.

All in, the top three pesticides used to control avocado thrips and perseá mite cost the California avocado industry at least \$6.25 million annually and likely as much as \$8 to \$9 million dollars when other minor use chemicals and ground applications are included.





*Peel scarring caused by avocado thrips.*



*An avocado leaf with persea mite damage.*

Beyond the costs of treating these pests, there are hidden costs such as pest monitoring and downgraded fruit due to peel scarring. Commercial Pest Control Advisor (PCA) services generally range from about \$3.50 to \$5.50 per acre per month. Some smaller growers may do their own scouting rather than hire a PCA, but the cost of their time must still be considered. If we assume only producing acres are scouted at an average cost of \$4.50 per acre per month, then scouting the 47,988 producing acres in 2023 cost the industry an additional \$2.5 million.

Trying to estimate the cost of downgraded fruit from peel scarring due to thrips damage or sunburn due to leaf loss from persea mite is nearly impossible. Packinghouses don't record the specific causes of #2 and cull fruit and the price differential between #1 and #2 fruit fluctuates throughout the season. However, if we assume that this cost is a very modest 1% of the crop value, then in 2023 this would have been \$2.37 million.

Altogether, it is no exaggeration to estimate that persea mite and avocado thrips cost the California avocado industry \$10 to \$20 million annually. Since their arrival in the 1990s, these two pests have probably cost the industry at least \$300 million — nearly the value of an entire season's crop.



Avocado leaves with avocado lace bug damage.

### **Continued Threat of Invasive Pests**

Unfortunately, perseia mite and avocado thrips are not the only invasive pests the California avocado industry has to worry about. A growing number of growers in San Diego and Santa Barbara Counties are having to manage avocado lace bug (ALB; *Pseudacysta perseae*). This invasive insect pest was first found in California on backyard avocado trees in Chula Vista and National City in southern San Diego County in 2004. DNA analysis found that this population of ALB matched populations in the state of Nayarit in Mexico.

For more than a decade, this pest didn't move out of southern San Diego County, but in 2017 it was discovered in commercial avocado groves in northern San Diego County and southern Riverside County. Although the damage caused by these new populations was similar to what was seen in southern San Diego County, these new populations were much more aggressive. Subsequent DNA analysis matched these more aggressive ALB populations to ALB populations in Florida, the Caribbean, French Guyana and the Yucatan peninsula in Mexico. Today, this more aggressive ALB is known to be present in San Diego, Riverside, Los Angeles and Santa Barbara Counties.

Although invasive pests are a costly problem for the California avocado industry, we have been fortunate that the invasive pests we have been faced with to date are foliar pests that can cause cosmetic damage to fruit. However, fruit feeding pests exist and pose a serious threat now more than ever.



### ***Threats from Avocado Seed Weevils and Moths***

As most California avocado growers are likely aware, in mid-to-late 2024, U.S. Department of Agriculture inspectors were withdrawn from Mexican avocado groves. This change ended a nearly 30-year-old policy of USDA employed inspectors conducting grove inspections in Mexico to certify groves were following agreed upon phytosanitary policies that protect California avocado growers from invasive pests. Over time, USDA employed inspectors' presence in Mexican packinghouses also was scaled back.

These policy changes directly led to potentially invasive pest detections in Mexican avocado packinghouses beginning in late October 2024 and continuing into 2025 on at least four separate occasions. In November 2024, USDA Administrator Michael Watson acknowledged the correlation between the policy changes and pest detections, stating, "The number of recent interceptions is notable given the infrequency of such interceptions over the history of the program."

The pests of greatest concern are seed weevils and moths, which lay eggs on or inside fruit. Their larvae bore through the fruit flesh and seed making the fruit completely unusable. If pests of this nature were to become established in California they would, at best, greatly increase the need for multiple pesticide applications per season dramatically increasing production costs. At worst, the California avocado industry could be destroyed. 🐛



*An avocado fruit with a female avocado seed weevil drilling into the fruit. Photo courtesy of Dr. Mark Hoddle.*

# Retail California Avocado Promotions Reach New Heights

## More programs, new tactics and broader reach

**T**he California Avocado Commission's customized retail marketing program continued to make strides in 2025. Highly targetable support tactics such as Connected TV, social media and digital ads (see Advertising article p. 12), as well as traditional retail marketing programs including displays, signage and feature ads, encouraged awareness of the California avocado season and helped consumers find where to buy the fruit. These promotions featuring responsibly grown California avocados took place in California, other western markets and in select locations in the Midwest and East. Participating retailers included Albertsons/Vons, Bristol Farms, Gelson's, King Soopers/City Market, Independent Grocers' Alliance, Mi Tierra, Mollie Stone's, New Seasons Market, Nugget Markets, PCC, Raley's, Ralphs, Safeway, Sam's Club, Sprouts Farmers Market, Stater Bros., Super King, Target, The Fresh Market, Walmart and more. 🥑



*Independent Grocers' Alliance*



*Sam's Club*





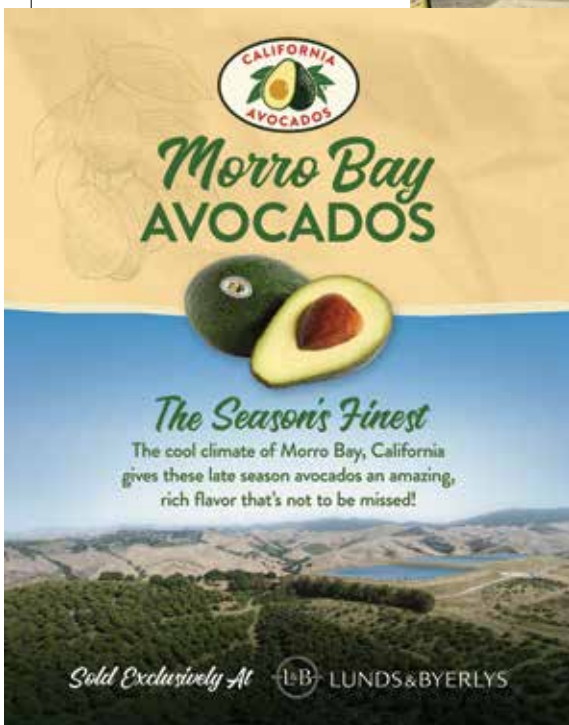
The Fresh Market



Ralphs



Vons



Lunds & Byerlys



Target

# Fall Featured Recipes:

## Recipe Videos Are Valuable Marketing Tools

It's time for football game watching and holiday entertaining, which means it is a great time for salsa and dip recipes. The two California avocado recipes that follow, *Avocado, Mango and Hatch Chile Salsa* and *California Avocado Spinach Artichoke Dip*, showcase how to use the fruit in dips that go beyond typical guacamole. They also are among several California Avocado Commission-developed and -owned recipes whose use was expanded this season via videos made by talented content creators. Used in a variety of programs including customized support for retail customers, the recipe videos include key brand messages such as "California avocados are locally grown and responsibly farmed." To watch these recipe videos, scan the QR codes. 🥑



*Avocado, Mango and Hatch Chile Salsa*

### ***Avocado, Mango and Hatch Chile Salsa***

Mango and avocado pair beautifully together in a variety of dishes. This *Avocado, Mango and Hatch Chile Salsa* recipe has only six ingredients and is quick and easy to prepare. It is delicious with chips and can be used to top chicken, grilled meats or fish.

**Serves:** 4

**Time:** 15 minutes

#### ***Ingredients:***

- 1 ripe mango, peeled and cut in small cubes
- 1 roasted Hatch or Anaheim chile, peeled, seeded and diced, or more to taste
- 1 ripe, Fresh California Avocado, seeded, peeled and cut in small cubes
- 1 Tbsp. minced chives, green onion or red onion
- 2 tsp. fresh lemon juice
- 1/8 tsp. sea salt, or to taste

#### ***Instructions:***

Gently fold all ingredients together and serve.







*California Avocado Spinach Artichoke Dip*

## **California Avocado Spinach Artichoke Dip**

Spinach and artichoke dip is an indulgent favorite. This version replaces some traditional ingredients with fresh California avocados, resulting in a lighter dip that is creamy and delicious.

**Serves:** 8

**Time:** 10 minutes

### **Ingredients:**

- 10 oz. frozen spinach, cooked and cooled\*
- 6 oz. frozen artichoke hearts, cooked and cooled
- 8 oz. cream cheese, softened
- 2 ripe, Fresh California Avocados, seeded, peeled and mashed
- 1 clove garlic, minced
- 1 Tbsp. Parmesan cheese
- 1/2 tsp. sea salt, or to taste

*\*May use 16 oz. fresh spinach, cooked, instead*



### **Instructions:**

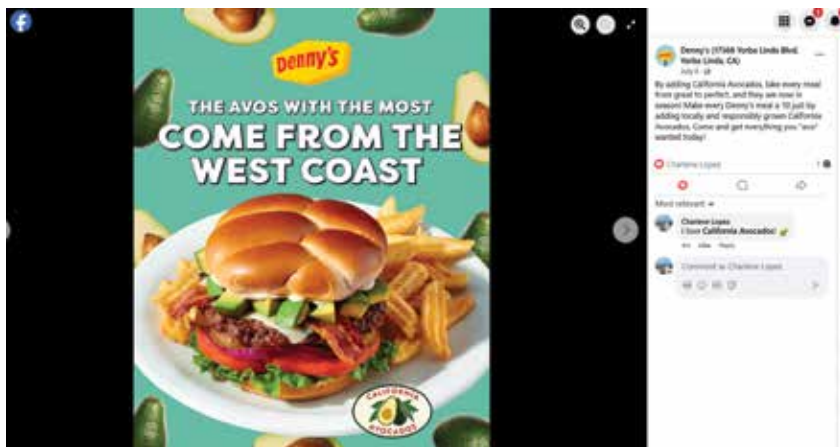
1. Chop the cooked and cooled spinach and artichoke hearts; squeeze out excess moisture and set in a strainer or colander to drain. (Don't skip this step or the dip can be watery.)
2. Mix cream cheese and avocado together until well-combined and creamy. Stir in the garlic, Parmesan cheese and salt.
3. Press any remaining liquid out of the spinach and artichoke mix, then fold into the dip blend. Taste and adjust seasonings as needed.
4. Serve immediately or place a cover directly on the dip surface and refrigerate for up to 2 hours.

**Serving Suggestion:** If desired, stir in a pinch or two of white pepper or red pepper flakes to add a little heat. Serve with crisp vegetables or chips for dipping.

*\*Large avocados are recommended for these recipes. A large avocado averages about 8 ounces. If using smaller or larger size avocados adjust the quantity accordingly.*

# 2025 California Avocado Foodservice Program Participation Up by More Than 30%

In 2025, California avocados were featured on many restaurant menus in the West. The California Avocado Commission partnered with 15 targeted restaurant chains to support California avocados on the menu by focusing on specific menu items, a 31% net increase in participating chains compared to 2024. These promotions included mentions on website menu pages, online ordering callouts, in-restaurant posters, social media posts, email newsletters sent to loyal customers, special offers and more. Restaurant chains that participated included Buckhorn Grill, Buddha Bowl, Del Taco, Denny's, Erik's DeliCafe, Farmer Brothers Pizza, Flame Broiler, Jimboy's Tacos, Ladle & Leaf, Mendocino Farms, Mixt, NORMS, Robek's, Super Duper and Wahoo's Fish Tacos. All the chains' programs included links to the CaliforniaAvocado.com store locator page, making it easy for consumers to find the locally grown fruit. Additionally, the CAC foodservice team set up activations and educational ideation sessions with a variety of California colleges and universities as well as business campuses, helping to build brand awareness with young adults. Here are some highlights:



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Since 1871, it was discovered that the coastal California environment provides everything avocados need to grow in the most idyllic and sustainable way. About 3,000 farmers pour their passion and dedication into every crop, ensuring every California Avocado season is worth the wait. For many of these local farmers, growing avocados is a legacy passed down through generations, ingrained in their identity and deeply rooted in the soil of California. So for them, it's more than just a livelihood, it's a way of life. Every single avocado takes about 14-18 months to grow, which means, for more than a year, California Avocado farmers carefully and patiently grow each avocado day in and day out. When you cut into one of these precious fruits, you're unveiling the result of all the best parts of California coming together in one small, green package.

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Text "TACOS" to 82267  
TO ACCESS FREE VIP BENEFITS!  
GET \$2 OFF YOUR NEXT \$5 ORDER\*

**DEL YEAH!**

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## STREET TACOS

Chicken or Carne Asada  
with Onion, Cilantro  
& homemade Avocado Salsa  
made with California  
grown avocados

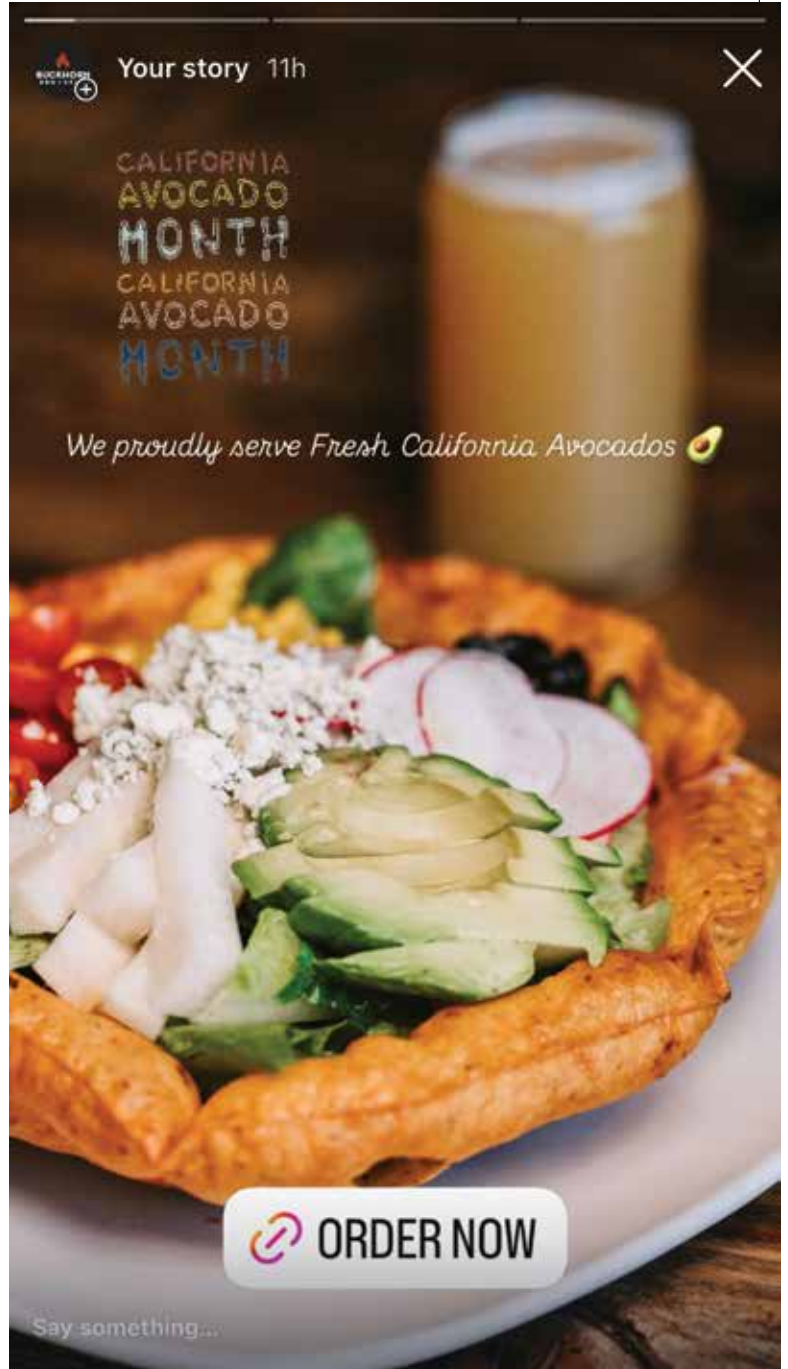


**\$3.00**  
Each Taco

**\$13.45**  
3 Tacos with Rice  
& Beans\*

**\$16.55**  
3 Tacos, Rice, Beans\*,  
small chips & regular drink

\*Extra charge for Brown Rice



Buckhorn Grill

Wahoo's Fish Tacos

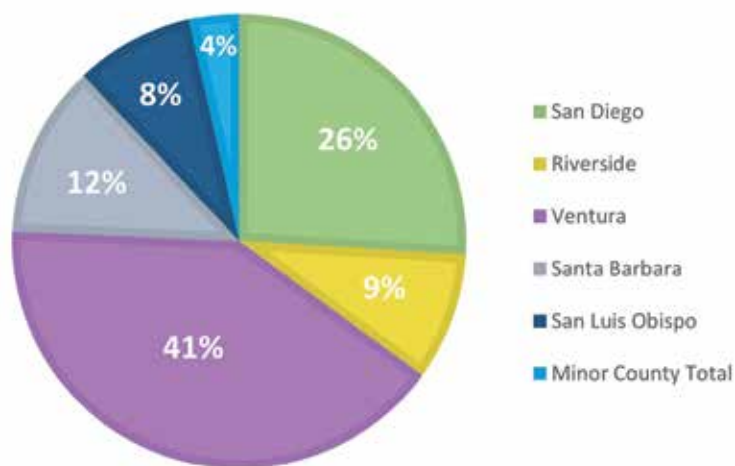
## 2025 California Avocado Acreage Report Now Available

The California Avocado Commission partners with Land IQ annually to produce a Statewide Avocado Acreage and Condition Analysis report utilizing digital satellite imagery, aerial photography and analytical tools to survey California avocado groves. This data helps the Commission make informed budgeting and marketing decisions and provides industry members with spatial data concerning crop type, location, condition and density.

### Highlights are as follows:

- For 2025, there were 55,484 planted acres, representing an increase of nearly 1,800 acres from 2024.
- Producing avocado acreage increased by over 1,500 acres to 50,830 acres.
- A total of 3,513 new/young acres were noted in 2025 with Ventura County reporting the largest increase of over 1,900 acres.
- The main avocado growing counties remain Ventura (41%), San Diego (26%), Santa Barbara (12%), Riverside (9%) and San Luis Obispo (8%) representing a total of 53,500 acres.

2025 AVOCADO ACREAGE BY COUNTY



Age	Acreage	Percentage of Planted Acres
Planting - 4 years	5,766	10.4%
5 - 8 years	7,500	13.5%
9 - 15 years	12,236	22.1%
16 - 20 years	5,313	9.6%
21 years +	24,669	44.5%

The majority of acres (56%) are 20 years or younger, with 36% of the California planted acreage between 5-15 years old.

The entire report is available on the California avocado grower website at: [CaliforniaAvocadoGrowers.com/industry/acreage-inventory-summaries](https://CaliforniaAvocadoGrowers.com/industry/acreage-inventory-summaries). 🍷



# Pesticide Resistance Issues Facing California Avocado

## How resistance develops

Pesticide resistance occurs when a pest population evolves the ability to survive exposure to a chemical that once provided effective control. After a chemical treatment, a few naturally resistant individuals survive. When they reproduce, they pass on those traits to their offspring. Over time, repeated use of the same product or mode of action allows resistant individuals to dominate the population.

Pesticide resistance can develop in insects, plants and any other biological organism that are controlled for with pesticides. Insects like thrips are especially prone to resistance because of their biology. They reproduce quickly, can produce multiple generations per year and can reproduce asexually (without a partner), passing resistance traits directly to their offspring without the gene dilution that occurs during mating. Resistance in insects also can occur through multiple mechanisms—including changes to the insect enzymes that detox chemicals, changes in the insect's outer cuticle that reduce chemical penetration or changes to insect behavior that allow pests to avoid contact with sprays.

In plants, resistance occurs because the plant population grows



quickly, has efficient seed dispersal or has high genetic diversity. Many plants have the ability to handle natural toxins or enemies and have genetically coded defense mechanisms that can be co-opted to process and break down man-made pesticides. This creates opportunities for evolution to favor resistant plant individuals. Plants will respond to repeated exposure to the same herbicide, and heavy reliance of glyphosate in orchards exacerbates selection pressure, allowing resistant plants to spread.

## At-risk chemistries

In California avocado production, two widely used chemistries face particular risk of resistance: abamectin for avocado thrips and glyphosate for fleabane. Since its registration in 2005, abamectin (Agri-Mek®) has been a cornerstone of control for avocado thrips (*Scirtothrips perseae*) because it is effective and relatively safe for beneficial insects. However, avocado thrips can have multiple generations per year in coastal groves, and abamectin's long persistence in leaves means

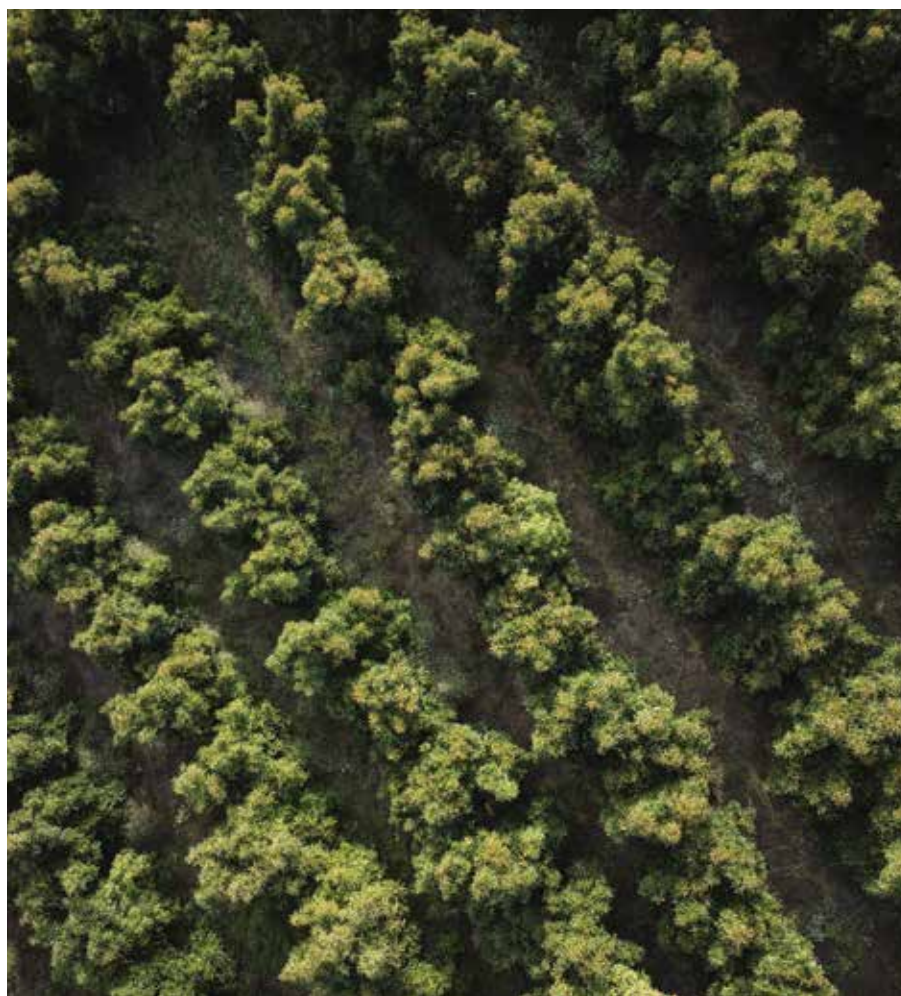
multiple thrips generations may be exposed to the same chemical residue. Compounding this risk, abamectin is sometimes applied later in the season for persea mite control, further increasing selection pressure.

On the weed management side, fleabane and horseweed (*Conyza spp.*) present a parallel challenge. These weeds produce thousands of seeds per plant, disperse efficiently by wind and can germinate throughout the year. They run rampant in rainy years and can be a big problem in young orchards (in older orchards, ground shading and self-mulching can limit them). California growers have historically relied heavily on glyphosate as a primary control tool, so populations of glyphosate-resistant fleabane have already been documented in orchards and other cropping systems across the state. Once resistant plants establish, they can rapidly spread within and between groves, leaving few effective post-emergent options.

## The importance of rotating active ingredients

The best way to delay resistance is to reduce selection pressure. This means avoiding back-to-back applications of pesticides with the same mode of action. The Insecticide Resistance Action Committee and Herbicide Resistance Action Committee classify products by mode of action code—rotating between these codes is a key strategy.

For avocado thrips, this might mean alternating abamectin with spinetoram or other alternatives, especially when selecting a product for fall persea mite applications. Releasing predatory mites also can be used for persea mite control, although it is expensive. For weeds, integrating pre-emergent herbicides like glufosinate (similar in name to glyphosate, but a different product) with mechanical



practices can lower the risk of resistant fleabane. Improving spray coverage and carefully timing applications to target the youngest life stages also help conserve the efficacy of any given product. Given that new chemistries can take years to become commercially available, rotation and integration are essential for ensuring the tools we rely on today will remain relevant.

## Monitoring pesticide resistance

Recognizing the urgency of this issue, the California Avocado Commission is funding new research to establish a pesticide resistance monitoring program for avocado thrips in Ventura County. Our project is led by UC Cooperative Extension in collaboration with UC Riverside and

will develop bioassay methods, establish monitoring sites across the county and measure baseline resistance levels to abamectin.

Our goal is to generate the first regional resistance data in more than a decade and share results directly with growers. This program will provide the foundation for future diagnostic services, allowing growers to determine whether control failures are due to resistance or other factors such as timing or coverage. If you'd like to be kept in the loop for more updates, email me at [hcohen@ucanr.edu](mailto:hcohen@ucanr.edu) to be added to the Topics in Subtropics Newsletter, a University of California extension publication that is published four times a year with research updates about subtropic crops. 🥑



## The 2025 Season Was a Matter of Timing

**W**hen to pick your crop and sell it has always been one of the most important decisions a California avocado grower can make, but the grower price fluctuations in the 2025 season illustrated that point as clearly as any year in recent memory.

The season started early with good markets, good movement and strong grower pricing. The second half of the marketing year – from early summer to the mid-October end of the California season – was not so advantageous for growers. As is typically the case, the culprit was the uneven supply and demand equation.

“There was a lot of fruit in the marketplace throughout the summer and into the fall,” said Peter Shore, vice president of product management for Calavo Growers Inc., speaking to *From the Grove* in late September. “There were four countries of origin – California, Peru, Colombia and Mexico – which each had good-sized crops. The market was at a low level and it is still there as California finishes up.”

He revealed that Calavo was still harvesting and packing California fruit and would continue through week 42 (Oct. 13-19). While imports from Peru were all but done, he noted that reports from Mexico about its 2025/26 crop indicated growers have a good volume

crop, very similar to 2024/25. Shore expects that Mexico will export significant volumes in the coming months that will tend to keep the FOB market at the low end of the spectrum. “It’s difficult to predict past February but I believe through February, Mexico will supply the (U.S.) market with a lot of fruit. They are estimating 2.5 billion pounds (to the U.S. market) for the year.”

Keith Barnard, who is senior vice president, global sourcing for Mission Produce, also weighed in on the current season via email: “The 2025 California season brought varying outcomes for growers across the state, due to differences in growing practices, geographic location, weather, and the alternate bearing nature of the crop,” he said. “Unfortunately, many growers were impacted by this year’s heat and wind events, which impacted this season’s overall production potential. That said, although the crop is projected to finish lighter than last year, per acre yields are in line with historical averages.”

Gary Clevenger, managing member of Freska Produce International, also agreed that for California growers the 2025 season was a tale of two different scenarios. “The front end of the season was good,” he said. “Quality was excellent and volume was up. And the best part was that returns to growers

were very good for most of the people who picked early.”

However, Clevenger noted that the entry into the U.S. market of big volumes from Peru in early summer drove the FOB prices down very quickly, which resulted in much lower field prices as well. He pointed out that although California fruit is marketed almost exclusively west of the Rockies while the avocados from Peru stay largely in the other half of the country, the entire market suffers the consequences of the oversupply. “The result was cheap fruit and the market is still very low.”

As October began, Clevenger said 40s from Mexico were selling for \$27 per carton at the U.S. border while anything smaller was in the low \$20s at best. “Usually, we see a bump in the market once Mexico’s shipments decline in the summer, but that did not happen this year. It was not a typical year,” he said, but bemoaned that the summer of 2026 could be similar if large volumes of fruit from Peru and Colombia again come into the U.S. market.

The Freska executive said the extended period of low FOB prices has not been accompanied with corresponding low prices at retail. “The market price has been ridiculously low, but retail prices have been fairly high so we haven’t gotten the (retail) movement we



would have expected.”

He added that retail prices usually do lag behind a falling FOB price, but indicated prices have been low enough for long enough to warrant lower in-store pricing.

## What’s on Deck for California in 2026

While this report was being written, the California Avocado Commission was amassing data from growers and handlers to put out its preseason estimate for California’s 2026 crop.

Clevenger expects a 10-15 percent increase in volume, which would mean a crop in the neighborhood of 350 million pounds. He reasoned that over the last few years California growers have continued to plant new groves and increase the total avocado acreage and this spring saw a good bloom, good fruit set and good weather. “We always have wind events in December to February that reduce the volume, but I would expect a crop larger than this year, which also lost some fruit to wind.”

Despite this past year’s challenges, Clevenger remains bullish on the California avocado industry. He said worldwide consumption continues to increase and while avocado supply

in any given period might not align with demand, thus causing the immediate price to drop, overall, the trend is good. “We see big swings that I can’t start to understand – there are economic reasons that are beyond me – but growing avocados is still a good business.”

Shore of Calavo also expressed optimism about the 2026 California crop. He pointed out the Calavo crop estimators were still in the groves estimating next season’s volume, but a crop between 350 and 400 million pounds for 2026 seemed reasonable. Because of Mexico’s expected export volume of 2.5 billion pounds, Shore was not anticipating a lot of California fruit would be marketed before March. “I think we will see some fruit in March, but April, May and June will probably be our peak months...but it does depend on supplies out of Mexico in the spring.”

Another factor that will play a significant role is the strength of the European market during the spring of 2026. Both Peru and Colombia have been developing that market and would like to divert a significant portion of their fruit to Europe. But if that market is weak, those producers tend to turn to the United States, which remains

the number one avocado market in the world.

Shore said there is no doubt there was “too much fruit” in the U.S. market during the summer and he hoped that scenario is not repeated in 2026. However, he expressed confidence that the U.S. market can consume more than 3 billion pounds, which is definitely on the near horizon, according to the Calavo executive. “We have always seen good consumption in the West and Texas and now the Northeast continues to grow and the Southeast is also a growth market for avocados. In fact, the per capita consumption in Florida exceeds California.”

Shore said Avocados From Mexico, the promotional group charged with increasing consumption of avocados from that country, have done a very good job and continue to push programs to grow the category. Florida and the rest of the Southeast have received a great deal of attention from AFM especially during the fall football season.

Of course, expanding the consumption of avocados in all parts of the country bode well for California growers, just as a rising tide elevates all boats. 🥑





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