

# THE ADVISER

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California Association of  
Pest Control Advisers

October 2023  
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**MISSION & PURPOSE:** California Association of Pest Control Advisers (CAPCA) is a non-profit voluntary mutual benefit association that represents 75% of the 4,000 California EPA licensed pest control advisers. CAPCA's purpose is to serve as the leader in the evolution of the pest management industry through the communication of reliable information. CAPCA is dedicated to the professional development and enhancement of our members' education and stewardship which includes legislative, regulatory, continuing education and public outreach activities.

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# Editor's Notes

## Your membership dollars at work

The CAPCA team has been hard at work this year responding to and preparing ourselves and the industry for evolving changes coming in 2024 and beyond. In this issue we are highlighting a number of those items in action, starting with the Sustainable Pest Management (SPM) Roadmap comment letter that CAPCA submitted this spring on behalf of you, the membership (page 20). This includes engaging in discussions and working to identify proactive ways to highlight the IPM work of PCAs surrounding SPM recommendations. We look forward to making exciting announcements on upcoming opportunities this fall!

As the SPM Roadmap will shape legislation and regulatory updates in the years to come, there are some immediate changes coming on January 1, 2024. The revised regulations on Certification and Training (C&T) for Pesticide Handlers in response to updated Federal regulations were released in July. We are proud to state the work our Association did regarding the last-minute inclusion of CE hours for Exhibitor Presentations and Panel Discussions. This came in response to our July 19, 2022, comments to DPR on C&T Changes. CAPCA continues to engage with DPR to clarify enforcement and discuss impacts to license holders. We continue to put the finishing touches on our newest technology, which will serve to support you in the transition (page 46 - *CE Hours Reported: DPR CE Tracking You Can Trust*).

As CAPCA continues to support the evolution of the PCA and pest management industry, we will have to maintain corporate governance and California compliant business practices. A special Bylaws Committee convened this year to work with legal counsel to ensure we continue to meet these markers. You can read more about the committee process and key items that are part of the restated and amended version of the bylaws on page 40. The recommended bylaws will be presented to the membership for adoption at the CAPCA Annual Business Meeting on October 16th in Reno.

As we look to 2024 renewals and new regulations to conform to for compliance, I hope you feel the impact of CAPCA on your license, your continuing education, and your professionalism.



Ruthann Anderson, Editor  
ruthann@capca.com



**Ruthann Anderson**

CEO & EDITOR

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# Leadership

## 49th Annual CAPCA Conference



Paul W. Crout, CAPCA Chairman

As we roll into fall, one of my favorite parts of being a CAPCA member is fast approaching: the Annual CAPCA Conference & Agri-Expo. As an attendee,

volunteer, Conference Chairman, and now CAPCA Chairman, the CAPCA Conference represents the culmination of a year's worth of hard work and dedication by CAPCA Staff and the volunteers on the Conference Committee. This year will be the 49th edition of the premier networking and educational event for crop protection professionals in California. Conference will feature a wide array of interesting and timely content:

1. Continuing Education (CE – 15.0 DPR Hours)
2. Great opportunities to network and visit the Exhibit Hall
3. The popular Student Networking Event
4. A very important CAPCA Membership meeting with voting to amend & update our association bylaws

The conference theme this year is focused on technology and the opportunities it can provide to our industry and agriculture in general. We have asked exhibitors and speakers alike to showcase how they incorporate technology into IPM programs, scouting, reporting, and much more.

The agenda features two very important panel discussions. Please be sure to come and listen to these engaging conversations that can have a meaningful impact on your career. The first, on Sunday, is our



Technology Roundtable featuring subject matter experts discussing innovations in recordkeeping, food safety, and pest and disease detection. You also won't want to miss Tuesday's moderated panel discussing the Sustainable Pest Management Roadmap & Leveraging the Expertise of PCAs, featuring DPR Director Julie Henderson, CDFA Undersecretary Christy Birdsong, and moderated by Taylor Roschen, Governmental Advocate at Kahn, Soares & Conway. *These panels will be the last time the panel format is allowed for more than 30 minutes of CE credit due to new regulations impacting CE in 2024 based on Certification and Training for Pesticide Handlers.* We also will hear from Rachel G. Lattimore on the EPA's ESA Workplan, Drew Wolters about The Imperative Need for Bio-Solutions and Novel Technology in Conventional Systems, and Doug Thiel regarding Harnessing Aerodynamics through Technology in Aerial Application.

Conference will also feature a return (by popular demand) of live label updates. This year, the label

update program will be presented on Sunday afternoon and Tuesday morning in the Exhibit Hall. This will give attendees a chance to hear from key suppliers and visit with exhibitors. Speaking of exhibitors, we are back to a full, pre-COVID exhibit hall in Reno! This year's exhibit hall will feature some new and familiar companies (you can view the full exhibitor list in the Conference section). We also have several technology exhibitors, including John Deere, WiseConn, Insero, and Teleos Ag Solutions.

As mentioned earlier, there will be 15.0 hours of DPR CE (3.0 hours of Laws & Regulations, 12.0 hours of Other) for the whole event, so you won't want to miss a single session. Another CE-related item of note is the return of the QR Code for check in/out. CAPCA has been working diligently to streamline the process of using the QR Codes on the badges. A new process was used during this past Spring Summit with great feedback from attendees on the system's ease of use. Checking in and out of seminars will be easier than ever and you won't have to fill out and return multiple scantrons!

Additionally, please plan on attending the Annual Member Business meeting, Monday morning at 7:30 a.m. We will be holding a very important bylaws vote that will bring the association into compliance with new California rules and update the bylaws to reflect changes that have occurred since they were last updated 15+ years ago. As a CAPCA member, you can attend the business meeting to cast your vote without registering for conference. To sign up to attend the business meeting only, scan this QR code:



I look forward to seeing everyone in Reno for the 49th Annual Conference & Agri-Expo. The CAPCA team is also hard at work laying the foundation for a huge milestone, CAPCA's 50th Anniversary Conference in Disneyland next year! Stay tuned for updates as we have several special events planned to commemorate 50 years of professionalism and dedication to our industry. ■

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# Annual CAPCA Conference & Agri-Expo



*Show Us Your Ag Tech*

OCTOBER 15-17, 2023 | GRAND SIERRA RESORT | RENO, NV

15.0 (3.0 Laws, 12.0 Other) DPR Hours Total Available



## GRAND SIERRA RESORT

2500 E 2nd Street, Reno, NV 89595

CAPCA has secured incredible room rates at the Grand Sierra Resort! Registration grants you access to the CAPCA Room Block. Upon registration confirmation, you will receive an email with the link to book your hotel room.

Register today at [events.capca.com](https://events.capca.com)!

**FULL ATTENDEE REGISTRATION** | Member: \$515 / Non-Member: \$595

### All Licensees (including exhibitors and industry professionals needing CE credit)

- CE Programming including pre-event Nitrogen Management Update on Sunday morning.
- Access to all Conference dining and reception events.
- Conference Swag Bag
- Discount for CAPCA Members
- Onsite registration is \$595, and depending on capacity, may not be available.

**PROFESSIONAL ATTENDEE REGISTRATION** | \$550

### Industry professionals including exhibitors without a License

- Access to all Conference dining and reception events.
- Registration is not eligible for Continuing Education credit.
- Registration does not include the online Label Update program.
- Early or CAPCA Member discounts do not apply.
- Onsite registration is \$595, and depending on capacity, may not be available.



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Annual CAPCA  
Conference &  
Agri-Expo



# Sponsors





# Exhibitors

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| Afrikelp-USA                         | FMC                                 | Plant Food Systems                 |
| Ag Spray Equipment                   | Gowan USA                           | Polymer Ag                         |
| AgBiome                              | GroPro                              | Probelt                            |
| AgNet Media/AgNet West Radio Network | Grow West                           | Profarm                            |
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| Axill Solutions                      | John Deere                          | Spectrum Technologies              |
| Baicor                               | Kemin   Crop Technologies           | SQM Specialty Plant Nutrition N.A. |
| Balchem / Albion                     | KeyPlex                             | Stoller                            |
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| Bioberica, S.A.U.                    | Koppert                             | Syngenta                           |
| BioSafe Systems                      | Lallemand                           | Teleos Ag Solutions                |
| BioWorks                             | Magna-Bon II                        | TELUS Agriculture                  |
| Bird Guard                           | Malcolm Media                       | Tiger-Sul Products                 |
| Blue Mountain Minerals               | Mazzei Injector Company             | Titan Biotech                      |
| Bluewhite                            | Metos USA                           | Trécé                              |
| Brandt                               | MGK                                 | True Organic Products              |
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| California Safe Soil                 | Momentive                           | UPL                                |
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| Eco2Mix                              | OroAgri/Rovensa Next                | Yara North America                 |
|                                      | Pacific Biocontrol Corporation      |                                    |

# 2023 Conference CE Program

## SUNDAY, OCTOBER 15

4.0 DPR (0.5 LAWS, 3.5 OTHER) | 5.5 CCA |  
3.0 ID | 4.0 NV (4.0 GEN.) | TBA: AZ, OR, WA, ISA, GCSAA

### 9:30 - 11:30 AM

FREP Nitrogen & Irrigation Management Update  
2023 (1.5 Hours CCA Credit ONLY)

### 12:15 - 12:50 PM

Label Updates from Corteva, Nichino, & AgBiome

### 1:00 - 3:30 PM

Technology Roundtable – *Innovation in Recordkeeping,  
Food Safety and Pest & Disease Detection*, with  
panelists:

Zach Worden

Justin Kerr

Greg Guyette

Josh Minor

### 3:30 - 4:00 PM

*Development & Application of an In-Field Optical  
Biosensor for Early Detection of Plant Diseases*, by Dr.  
Perry Edwards

### 4:00 - 6:00 PM

Exhibitor Presentations

### 6:00 - 9:00 PM

Welcome Reception

SCAN FOR CE HOURS UPDATES



## MONDAY, OCTOBER 16

7.0 DPR (2.0 LAWS, 5.0 OTHER) | 7.5 CCA | 5.0 ID  
7.0 NV (1.5 LAWS, 5.5 GEN.) | TBA: AZ, OR, WA, ISA, GCSAA

### 7:30 - 7:40 AM

Welcome & CAPCA Annual Business Meeting

### 7:40 - 8:00 AM

*Licensing & Hours Housekeeping*, Jim McClenahan

### 8:00 - 8:45 AM

*CACASA & BeeWhere Update*, by Ruben Arroyo

### 8:45 - 9:15 AM

*Navigating California's Regulatory Landscape with  
Innovative Technology*, by Erik Nijskens

### 9:15 - 9:45 AM

*EPA's ESA Workplan*, by Rachel G. Lattimore

### 9:45 - 10:00 AM

BREAK

### 10:00 - 10:30 AM

*The Imperative Need for Bio-Solutions & Novel  
Technology in Conventional Systems*, by Drew  
Wolters

### 10:30 - 11:00 AM

*Harnessing Aerodynamics through Technology in  
Aerial Application*, by Doug Thiel

### 11:00 - 11:45 AM

*Neonic Regulation Update and CDPR Licensing  
Update*, by Josh Ogawa

**11:45 AM - 1:40 PM**

Membership Luncheon

**1:40 - 2:10 PM***Innovation & Technology in Almonds*, by Dr. Lauren Fann**2:10 - 2:40 PM***Pest Management, Water Quality, & the Future of Rice*, by Tim Johnson**2:40 - 3:10 PM***Managing Pests & Diseases in Pistachios: Current Technology & Works in Progress*, by Dr. Bob Klein**3:10 - 3:35 PM***Managing Insecticide Resistance in Spotted Wing Drosophila Using Integrated Approach*, by Dr. Jhalendra Rijal**3:35 - 4:00 PM***Mitigating Drift Issues with High Value Crops*, by Paul Squires**4:00 - 5:30 PM**

Exhibitor Presentations

**5:30 - 9:00 PM**

Monday Bowling Mixer

**TUESDAY, OCTOBER 17****4.0 DPR (0.5 LAWS, 3.5 OTHER) | 4.5 CCA |****2.0 ID | 4.0 NV (4.0 GEN.)** | TBA: AZ, OR, WA, ISA, GCSAA**7:30 - 8:00 AM***Label Updates* from UPL, SAN Agrow, & TELUS Agriculture**8:00 - 9:10 AM**

Exhibitor Presentations

**9:10 - 9:15 AM**

ROOM TRANSITION/BREAK

**9:15 - 10:00 AM***Managing Ants Sustainably: On-farm Baiting Strategies for Protein & Sugar-feeding Ants*, by David Haviland**10:00 - 10:30 AM***Managing Herbicide Resistant Chickweed in Small Grains*, by Nicholas Clark**10:30 - 11:00 AM***Beet Curly Top Virus Control Program*, by Kendra Tapia**11:00 AM - 12:00 PM**Moderated Discussion – *The SPM Roadmap: Leveraging the Expertise of the PCA***12:00 - 12:10 PM**

Conference Summary &amp; Closing Questions

**SCHEDULE IS SUBJECT TO CHANGE**

# STUDENT NETWORK EVENT

*Facilitating Conversation, Investing in the Future*



**OCTOBER 15, 2023 | GRAND SIERRA RESORT | RENO, NV**

Scan for more information:

11:45 a.m. - 4:30 p.m.



## STUDENTS:

1-Day Student Network Event (Sunday Only): \$100

Companion Pass for Conference Program (including Student Networking Event): \$395

## COMPANY RECRUITER REGISTRATION:

For information, contact [support@capca.com](mailto:support@capca.com)

**Our program this year includes a Retailers Panel, Manufacturers Panel, and an In-House & Independent PCA Panel. We are excited to share the industry with the future of the industry.**



## THANK YOU TO OUR 2023 STUDENT NETWORK EVENT SPONSORS!

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# 2023 SWS Scholarship Winner

CAPCA, in partnership with the Stanley W. Strew Trust, takes immense pride in administering an annual scholarship program aimed at supporting students interested in the pest management industry. This incredible opportunity is open to all students, whether they are enrolled in a community college or a four-year university, especially those who plan to pursue studies in agricultural or horticultural fields in the upcoming fall semester, and giving preference to those who are embarking on their junior and senior years. Additionally, we encourage students to apply every year they remain eligible, regardless of whether they've previously received the scholarship.

CAPCA is thrilled to announce the recipient of this year's \$3,000 scholarship: Colin Koubeck.

## **Colin Koubeck** **2023 Scholarship Recipient**

Originally from the East Coast, Colin is currently a senior at California Polytechnic State University, San Luis Obispo. He's pursuing a degree in Agricultural and Environmental Plant Sciences, with a specific focus on Plant Protection Science. Colin aspires to establish himself as an independent PCA specializing in Central Coast crops and, eventually, build his own research and consulting firm for efficacy trials. Since arriving on the Central Coast and embarking on his academic journey at Cal Poly, Colin has been deeply engaged in clubs, research initiatives, and work experiences.

His journey thus far includes serving as a regenerative ag intern for City Farm SLO, working as a pathology lab assistant in a summer program at the University of Maryland, contributing as a research assistant at Cal Poly, being a student assistant at the Cal Poly Strawberry Center, and interning in berry production at Betteravia Farms. Beyond these endeavors, he generously volunteers his time with First Fruits Farm, a San Luis Obispo non-profit that grows and donates fresh produce to food banks. Colin also actively participates in the California State FFA Judging Finals, where he lends a hand with judging the vegetable contest.

Colin attributes his achievements to his insatiable curiosity, his willingness to learn, and his unbridled passion for being out in the field. One of his favorite pastimes involves strolling through fields, diligently inspecting for intriguing insects or unusual leaf lesions. There's no doubt that Colin's dedication will continue to drive his educational and career success, making him a valuable asset to the pest management industry.

We received a heartfelt note of gratitude from Colin this July, shortly after he was informed of his scholarship award:

*To the Board of Trustees: Thank you so much for selecting me as the 2023 Stanley W. Strew scholarship recipient! I am extremely grateful to receive this prestigious scholarship and the money will go to good use in helping me further my education and knowledge of pest management. I can attend all 3 days of the SNE and look forward to the conference, I had a great time at the one last year. Again, thank you so much for selecting me!*

*Sincerely, Colin Koubeck*





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# CAPCA CONFERENCE

## Special Events Schedule

10/14/23	Chapter Awards Reception (Invite Only)
10/14/23	Golf (off-site)
10/15/23	Exhibitor Presentations 4:00-6:00pm
10/15/23	Welcome Reception
10/16/23	Membership Luncheon
10/16/23	Exhibitor Presentations 4:00-5:30pm
10/16/23	Monday Bowling Mixer
10/17/23	Exhibitor Presentations 8:00-9:10am



### 9-HOLE GOLF TOURNAMENT

Lakeridge Golf Course, Reno, NV

October 14, 2023, 8 a.m. - 11 a.m.

\$125 per player

Join CAPCA for a 9-hole golf tournament, 64 golfers max, teams up to 4, and fun prizes! Sign up by 9/15; spots will fill up quickly!

Register Here:





# FOUNDATIONAL MITE CONTROL STRATEGY WITH THREE KEY PILLARS

**Envidor® CA** has emerged as a foundational pest control solution, backed by its three pillars: **unique mode of action**, **long residual effect**, and **soft to beneficial insects**. California growers use Envidor CA as an important tool for their mite control program.

One of the most significant advantages of Envidor CA is its **unique mode of action**. The active ingredient in Envidor CA affects cellular membranes in mites. This unique mechanism prevents pests from developing resistance, making it a sustainable and long-term solution for controlling mites. Not only is it a foundational long-term solution, Envidor CA is also fully IPM suitable because it has **little to no impact on key beneficials** like sixspotted thrips and predatory mites.

Envidor CA boasts an impressive **long residual effect**, ensuring prolonged tree nut protection. The unique mode of action allows Envidor CA to remain active on the plants for an extended period. This long-lasting efficacy not only reduces the frequency of treatments required but also provides consistent and reliable protection throughout the growing season. Spirodiclofen, the active in Envidor CA, is an IRAC Group 23 acaricide that inhibits lipid biosynthesis in a wide spectrum of mites to mite species, including Two spotted spider mites, Pacific Spider mites, European red mites, broad mites and many others. It is active against all life stages of mites, including eggs, nymphs, and female adults. Spirodiclofen has active registrations in many horticulture to permanent crops such as tree nuts, citrus, apples, avocados, grapes, pears, and other fruit and plantation crops.

As a residual product, Envidor CA is an effective fit for your early sprays. This is because of the effectiveness against all the mite stages except for adult males. That is a key feature that helps make Envidor CA the foundational tool for California growers.

A cornerstone of Gowan's Muddy Boots philosophy is to support growers and distribution partners in meeting the challenges of controlling destructive weeds, insects, or pathogens infesting crops.

In addition to Envidor, Gowan USA supplies other effective California miticide program products of **Onager Optek®**, **Magister® SC**, **Nexter® SC** and **Savey®**. These products are supported by seasoned local Gowan USA professionals, as well as a company that invests in international tolerances that support the export of labeled crops and California agriculture as a whole.

Gowan Group is a global, family-owned agriculture solutions business headquartered in Yuma, AZ, USA. Gowan specializes in developing, marketing, and manufacturing global agriculture inputs such as crop protection products, seeds, and fertilizers. Across the world, the Gowan Tribe strives to understand the needs of local markets and provide solutions to critical pest problems. Using sound science and the coordination of regulatory, marketing, and sales expertise, Gowan then brings products to market that are essential for growers. Which is why we encourage you to build your mite control foundation with Envidor CA starting next year.

## THE THREE PILLARS OF



[gowanco.com](http://gowanco.com)



# Advocacy



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SACRAMENTO, CA 95825  
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WWW.CAPCA.COM

March 13, 2023

Director Julie Henderson  
California Department of Pesticide Regulation  
1001 I Street  
Sacramento, CA 95814

Re: Sustainable Pest Management Roadmap

Dear Director Henderson,

The California Association of Pest Control Advisers (CAPCA) appreciates the opportunity to respond to the report, *Accelerating Sustainable Pest Management: A Roadmap for California (Roadmap)*, formulated by this administration through the California Department of Pesticide Regulation (CDPR) and the California Department of Food and Agriculture (CDFA) in conjunction with the Sustainable Pest Management Workgroup.

Nearly 4,000 Pest Control Advisers (PCA) are currently licensed by the CDPR – *nearly 3,000 of which are members of CAPCA.*

We want to start by acknowledging that CDPR and CDFA are each, individually, one-half of the solutions to meeting the goals of sustainable pest management (SPM). Therefore, the pathway articulated in the Roadmap will require cooperative agreements (that have been long requested, but never finalized) between the two parties to build strong SPM-centered educational programs and/or a functional category of continuing education (CE) for Pest Control Advisers (PCAs).

CAPCA has been advocating for the re-incorporation of Integrated Pest Management (IPM) within the PCA license for over 20 years. Moving the license out of CDFA in the 1990's fractured the structure of a license whose practice ranged broadly from nutrient to soil and water management to disease and pest detection and treatment. Over the years, this disconnect has become even more apparent. As CDFA and CDPR have rightfully maintained strong jurisdictional lines around their own programs, the licenses have lacked a reasonable opportunity for reconciling this range of expertise within the license. Nevertheless, the Roadmap identifies a collaborative pathway forward. We are hopeful that the next iteration of IPM – Sustainable Pest Management (SPM)—will lay the groundwork for PCAs to return to the roots of their license—including professional recognition as being the experts in IPM, SPM and expanding CE options, accordingly. *We believe that the department has an opportunity to define SPM even more clearly through structured programs like CE. Furthermore, clarification on how long held IPM practices integrate with SPM and where philosophies evolve and diverge.*

SPM CE for PCAs has the potential to transform this long-sought discussion and provide the framework to ensure PCAs remain educated and engaged with evolving technology, techniques and opportunities and bring this expertise to growers as their **trusted and professional adviser**. We believe that the PCA is the right vehicle, as a technical service provider, to support the adoption of SPM in the field. CDPR and CDFA quickly adjusting the scope of CE for PCAs will hasten that transition as PCAs are afforded the ability to become more educated within the



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framework of their license (it is critical for SPM to receive CDPR CE hours to legitimize this adoption).

**However, this document contains a lot of assumptions about PCA activities and suggests changes, at times, around antiquated concepts of the current industry.** When having discussions that impact licensees, we believe that CDPR should include a broader cross-section of *active* PCAs in the discussions. We are disappointed that the SPM Workgroup did not consider bringing more practitioner PCA voices into the discussion as they focused on a number of significant changes to the license. Before taking additional steps forward, we believe that the workgroup should hear from those PCAs actively writing recommendations and working in organic, conventional and sustainable systems. The breadth of roles the licensee can hold should be taken into consideration, which requires, for example, adding seats at the table for independent, retail, and manufacturing disciplines. We believe that a diversity of voices will help CDPR to understand not only the vast applications of the license, but the means of influence towards SPM that PCAs already possess. The PCA industry is not a panacea—with challenges and opportunities properly articulated by a small subset of non-active PCAs. To note, some items overlooked in the Roadmap include:

- We recommend you phase in an update to the IPM portions of the exam to incorporate SPM. PCAs already take an IPM exam as part of their minimum knowledge requirements for the license. This solution would allow the program to continue without the substantial changes of an additional category until it is available and warranted.
- We recommend you consider a one-time CDFA certification for PCAs to demonstrate competency in areas such as soil health, nutrient management, etc. to reconcile the two agencies' functions through the license. This would be in lieu of a whole new licensing category which may trigger the backlash of retirements and the loss of institutional knowledge in the field. *This would relaunch the minimum educational requirements and allow a pathway forward to build on this education with SPM CE focused on plant and soil health programs, nutrition and irrigation management as part of pesticide mitigation efforts in the field.*
- As SPM is an evolution of IPM, we recommend you creatively re-think the PCA acronym to better reflect the SPM role you would like licensees to play – to, for example, Plant Care Adviser. A small action like this could signal a shift to make publicly and redefine the role of the PCA as much more than pest and pesticide focused which has been the interpretation for nearly the last 30 years since CDPR took over the license.
- We recommend a different direction for the new category H of a Technical Service provider. A Technical Service provider category would reconcile CDFA certifications and other relevant certifications under one umbrella within the license. This streamlines and safeguards against redundancies for PCAs who have taken on additional certifications to demonstrate their expertise in SPM values through existing certifications in soil, nutrients and water. This would in the longer term develop a pathway to move maintenance of this expertise under the expertise of the license.
- We recommend that instead of creating a redundant CE review function, CDPR should reach a collaborative agreement with CDFA and stakeholders to review SPM CE courses for consistency and oversight. The subject matter experts on the other half of SPM are under CDFA and CDFA FREP.



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- We recommend requesting licensees to track specific SPM activities that are currently undertaken in the field prior to a pesticide application as a case study for understanding the role and actions of a PCA. *The current model of basing the PCAs activities around recommendations written or Pesticide Use Reports is disingenuous.* The problem with our current data set is that CDPR only has a minute portion of the data (i.e. the final decision data of a pesticide use report). CDPR and CDFA do not have data to understand the range of non-chemical options evaluated and potentially used prior to site specific decision that incorporates a chemical approach.

If this seasons unanticipated precipitation has taught us anything, it is that no amount of pre-planning can automate the work of the season. The whiplash of changing temperatures and extra water resources this year will force the same vigilance in the field as last season's drought. ***PCAs must walk their fields to make real time decisions about plant health, including pest and disease pressures. Economic thresholds, among other things, drive decisions in the field. And we are concerned, that the Roadmap oversimplifies the decision-making process of PCAs.*** Moreover, the grower is ultimately the decision maker, weighing their adversity to risk and expenses.

We believe that PCAs work in good faith advising their growers and safeguarding their communities and the environment, not only because their license dictates it, but because it is essential to their professional reputations and in service of their communities. ***If the department wants to pursue a harder line on ethics, we believe that incorporating articulated ethics, like the ones CAPCA members adhere to - into the required CE subject matter would be an appropriate next step.***

At the broadest sense, CDPR needs to take steps to better understand what it refers to as "PCA incentives" before implementing change to this paradigm. We believe that this lack of understanding has resulted in the Administration's idealization of independent PCA servicing small growers. But this is not the case in reality and we're encouraged to engage with the Administration on this issue.

**As one of your four licensing stakeholders, we invite further dialogue to ensure that a transition to "safer, more sustainable pest management" builds upon the professionalism of the licensees, the Department, and industry. We recognize that the safe use of pesticides in California starts with professionally licensed stakeholders, educated appropriately to ensure both compliance and innovation as we move into an SPM-laden future. CAPCA has a long history of raising this bar of professionalism and want to be included in the solutions that come from these new requirements.**

Thank you in advance for your consideration of the above comments,



Ruthann Anderson, CAPCA President/CEO

cc: Karen Ross, Secretary, California Department of Food and Agriculture  
Christine Birdsong, Undersecretary, California Department of Food and Agriculture





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# CAPCA Restores Exhibit Hall, Panel Discussions, & Q&A to Proposed C&T Regulations

During the 45-day public comment period, the Department of Pesticide Regulation (DPR) received numerous comments regarding the proposed regulations pertaining to Certification & Training (C&T). CAPCA participated during this time through a formal letter. In that letter, our Association pointed out several industry concerns. DPR responded to our comments and those from other concerned groups at the end of July. You can read the full responses to comments by following the QR code below.

One of the concerns we raised was that there is much professional value in panel discussions, Q&A opportunities, and vendor displays, specifically citing that people learn through a variety of learning styles. We are proud to announce that DPR agreed that these specific varied learning styles are effective and, therefore, amended the regulation to include panel discussions, Q&A opportunities, and vendor displays. There are new,

specific guidelines that sponsors and presenters will need to follow regarding these educational styles: *“The proposed regulations will be amended to allow up to 30 minutes of combined credit for panel discussion, Q&A, and vendor/poster displays per application, as long as the course contains a minimum of 4 hours of additional approvable CE content. This would then add an additional 30 minutes of approved CE to a course.”*

If you have further questions as to how C&T will affect your license or have a specific example to share on the impact that you or your business will face, please reach out to our Technology and Innovation Director, Patrick Dosier, at [patrick@capca.com](mailto:patrick@capca.com). If you want to read more comments and responses, please follow the QR code. The responses pertaining to CAPCA comments begin on page 12.



# The post-harvest period.

Vineyards and orchards face numerous challenges throughout the season, affecting plants' yield and long-term health.

Trees and vines are often weakest post-harvest as they recover from various stresses, such as heat waves and drought. They require a proper store of nutrients and carbohydrates to overwinter and fuel new growth in spring. So, how can growers ensure their crops have enough energy to start strong next season?

With Acadian Plant Health (APH) biostimulants.

Bioactive compounds in Acadian® have multiple benefits working to increase plant productivity, which helps plants stock carbohydrates, retain water through abiotic stress, and facilitate root growth.

## Role of carbohydrate reserves

Energy reserves in roots change dramatically throughout the year. Poor accumulation of energy reserves post-harvest can greatly affect a crop's performance next season. Perennial specialty crops rely on stored carbohydrates during the season, from bud burst to flowering. Energy and nutrient reserves are vital to start the season with reproductive growth and fruit development before substantial canopy development can supply the energy trees require.

## Winning with water

Trees and vines require adequate water to maximize the storage of carbohydrates and nutrient uptake. Post-harvest water deficits can reduce plant respiration, root growth, and carbohydrate storage. Reduced root growth decreases the amount of water and nutrients plants uptake. Post-harvest water stress can impact next season's bloom development and fruit set. Acadian promotes the production of proline, a natural stress protector with beneficial effects during seasonal water shortages. Proline allows plants to maintain growth by protecting plant proteins and cell membrane integrity and preventing water loss.

## APH biostimulants have multiple bioactive compounds that help...



Increase nutrient and carbohydrate reserves and enhance fall root flush



Support plant recovery during environmental stress conditions



Boost soil health by increasing microbial abundance and activity



Promote proline (an amino acid) which protects plant proteins and cell membrane integrity during stress



Avoid early defoliation, supporting next spring's shoot growth, bud and canopy development, and flowering

## More buds at peak potential.



Control



Acadian®

Late-season applications of Acadian result in faster recovery from the season's stresses and increased bud development.

## APH extracts have complex carbohydrates and bioactives working to protect plants.



**Polysaccharides**  
Triggers antioxidant production



**Oligosaccharides**  
Stimulates plant defense mechanisms

**These carbohydrates (and bioactives like alginates, betaines, and mannitol) have many benefits, including increasing nutrient availability and root growth.**

## Start next season now

A strong start to next season requires effective post-harvest management. Applying Acadian post-harvest helps prime orchards and vineyards by renewing carbohydrate and nutrient reserves. As perennials rely on this nutrient storage when breaking dormancy, APH products help encourage regrowth for a fruitful spring.

**Get set for a successful spring with Acadian post-harvest applications.**

Always read and follow label directions. Acadian Plant Health™ is a division of Acadian Seaplants Limited. Acadian® is a registered trademark of Acadian Plant Health.

## Licensing and Certification Regulatory Update

The California Department of Pesticide Regulation's (DPR) amended Certification and Training regulations (C&T) are effective on January 1, 2024. These C&T regulatory changes are required to ensure that California's commercial and private pesticide applicators ("certified applicators") meet the increased federal competency standards. These changes affect the certification of certified applicators, development and submittal of continuing education (CE) courses required for pesticide applicator license or certificate renewal, and supervision of non-certified applicators.

### Commercial Applicator Updates

#### *Changes to Qualified Applicator License and Certificate (QAL/QAC) Categories*

– The following QAL/QAC subcategories will be eliminated and ineligible for renewal beginning January 1, 2024: Wood Preservation (Subcategory L), Antifouling Paints (Subcategory M), Sewer Line Root Control (Subcategory N), Field Fumigation (Subcategory O), and Microbial Pest Control (Subcategory P). Two new certification categories are available for Soil Fumigation (Category L) and Non-Soil Fumigation (Category M). We are encouraging getting certified in these two new categories sooner rather than later. Please see DPR's Certification and Training Update webpage for up-to-date information on the new competencies, ordering study guides, and applications.

**New Category L, Soil Fumigation** – All commercial applicators currently conducting soil fumigation activities under the Field Fumigation Subcategory must obtain the new Soil Fumigation (Category L) to remain in compliance with the revised standards. The Soil Fumigation (Category L) examination must be taken and passed by January 1, 2024, in order to be in compliance on the effective date of the regulations. The examination is currently available at DPR's computer-based testing centers. Please see DPR's Certification and Training Update webpage for the link to purchasing the eBook version of the updated study guide.

The Soil Fumigation category is required for individuals who perform pest control using a pesticide labeled as a fumigant to control soil pests in sites including fields, forests, golf courses, greenhouses, and individual tree or vine hole sites.

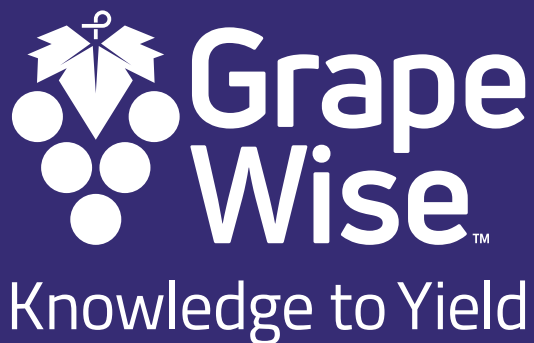
**New Category M, Non-Soil Fumigation** – All commercial applicators currently conducting non-soil fumigation activities must obtain the new Non-Soil Fumigation (Category M) to remain in compliance with the revised standards. The Non-Soil Fumigation (Category M) examination must be taken and passed by January 1, 2024, to comply on the effective date of the regulations. The examination is currently available at DPR's computer-based testing centers. Study materials for the new Non-Soil Fumigation category are available for purchase from the University of California Agricultural and Natural Resources (UCANR) store.

DPR's Certification and Training Update webpage:



Non-Soil fumigation category study materials (UCANR):





ADVERTORIAL

# THE CRITICAL IMPORTANCE OF SAMPLING

Understanding the physical and chemical properties of the soil and water in which vines grow is critical for effective management of inputs and the diagnosis of potential issues in your vineyard. Following a regular sampling schedule provides valuable data in season and an opportunity to observe trends year over year. With a Grape Wise™ plan tailored to your vineyard, Helena consultants will provide educational tools, agronomic information and expert recommendations throughout the growing season. Utilizing our AGRIntelligence® program, you will receive industry-leading precision offerings with our HyGround®, AquaLenz® and Extractor® sampling reports.

Soil sampling is a key first step in grape production, whether you are developing a new vineyard, replanting a block or developing a yearly fertility budget/program. Helena typically recommends sampling the soil every two to three years to establish new baselines for soil nutrient and salinity values. Choosing the correct sampling location will also help give the most accurate picture possible. With Helena's HyGround soil mapping system, we can identify changes in the soil profile and create soil management zones for smart sampling, rather than taking random samples in the field. Once samples are pulled and georeferenced, results are uploaded into our agronomy platform, AI360®, and stored for easy access throughout the season. Our agronomists take the soil sample results and use them to build prescriptive programs throughout the season for your vineyard.

Water is the largest input in most grape operations. It ties all aspects of crop production together by playing a key role in nutrient management, irrigation efficiency, salinity management and pesticide efficacy. Helena's AquaLenz water sample reports address all these issues in a simple, easy-to-understand report. Water reports can be very complex, and interpretation is often difficult. AquaLenz simplifies this process by highlighting the problem areas (salinity, nitrogen, bicarbonates, pH, etc.) and recommending solutions. Helena recommends growers take a

water sample every season, especially if they are using ground water sources, because water chemistry can change from year to year.

Tissue sampling is the final key component in grape production. Soil and water samples tell us what's in "the bank". Tissue samples tell us what the plant is actually able to withdraw.

“SOIL & WATER SAMPLES TELL US WHAT'S IN 'THE BANK'. TISSUE SAMPLES TELL US WHAT THE PLANT IS ACTUALLY ABLE TO WITHDRAW.”

Measuring the nutrient values in grape tissue allows us to evaluate the effectiveness of your fertility programs and identify areas for improvement. Helena recommends a minimum of two tissue samples be taken over the course of the season. The first should be taken pre-bloom from the leaf, opposite the basal cluster. The second should be taken when the berries are BB size, from the first mature leaf on the shoot. Taking whole leaves (petiole + blade) is encouraged, but there are also petiole-only tests and blade-only tests. Helena's Extractor tissue reporting system is similar to our AquaLenz reports. Extractor takes tissue sample data and presents it in an easy-to-understand report to highlight deficiencies and recommend solutions. These reports are stored in our AI360 system for future use and comparison.

To learn more about the importance of sampling in grape production and develop a Grape Wise program, contact your local Helena Representative.



Learn more at [HelenaAgri.com](https://www.HelenaAgri.com).    

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The Non-Soil Fumigation category is required for individuals who perform pest control using a pesticide labeled as a fumigant to fumigate enclosed areas including tarpaulin coverage structures and commodities, vaults, chambers, greenhouses, vans, box cars, ships, planes, and vehicles which contain: agricultural commodities for post-harvest fumigation or non-food non-feed materials including but not limited to: pallets, dunnage, furniture, burlap bags, planting medium (including potting soil and potting mix), and wine barrels and corks. Commercial applicators will also need this if they fumigate pest burrows in sites including, but not limited to fields, rights-of-way, ditches, landscaping, and equipment yards. This category is also required if individuals fumigate sewer lines, in-service utility poles, or other fumigations not covered by the new Category L Soil Fumigation. This category does not include structural pest control required to be licensed under Chapter 14 of Division 3 of the Business and Professions Code.

**Application and Renewal Forms** – Updated forms for commercial applicators are now available on DPR’s Certification and Training Update webpage.

**Minimum Age** – Applicants for a commercial applicator license or certificate must be 18 years or older prior to admission to an examination. Age and identity are also verified at the time of examination by DPR’s computer-based testing administrator.

### **Private Applicator Updates**

**Private Applicator Certificate (PAC)** – The revised C&T regulations expand the competency standards for private applicators. Because of this expansion, all PAC examinations previously administered under the old regulations do not meet the revised requirements. As a result, beginning January 1, 2024, PAC holders must take and pass the revised initial PAC examination, prior to the expiration of their certificate. In October 2022, DPR released to all the County Agricultural Commissioner (CAC) Offices the revised initial PAC examination that meets the new competency standards.

**Fumigant Use** – Beginning January 1, 2024, individuals with PACs who use or supervise the use of fumigants must hold the appropriate certification(s) consistent with the regulations and their fumigant use activities.

PACs wanting to use fumigants labeled for the control of burrowing vertebrate pests will need to obtain the Burrowing Vertebrate Pest Fumigation (BVF) certificate. The BVF certificate must be obtained prior to using or supervising the use of restricted materials labeled to control burrowing vertebrate pests on property owned, leased, or rented by a private applicator or their employer. In general, these are products that contain aluminum or magnesium phosphide which are labeled for that use. Only private applicators who have taken and passed the revised initial PAC examination (version released on October 1, 2022) are eligible to take the BVF certificate examination. In July 2023, DPR provided the BVF certificate examination to the CACs to proctor.

Private applicators who intend to use any other type of pesticide labeled as a fumigant must first obtain a Qualified Applicator Certificate or License (QAC or QAL) in the appropriate fumigant use category(ies). For example, if an individual intends to use or supervise the use of a pesticide at an on-farm post-harvest commodity fumigation using aluminum phosphide or sulfuryl fluoride, they need to obtain a QAC or QAL with Category M (Non-Soil Fumigation).

### **Non-Certified Applicator Updates**

**Minimum Age** – Anyone under 18 years is prohibited from handling a pesticide identified as a restricted material. This update is in addition to the current restriction which prohibits anyone under 18 years old from mixing or loading a pesticide that requires air supplied respiratory protection, a closed system, or full body chemical resistant protective clothing.

**Supervision of Non-Certified Applicator by Commercial Applicator** – Additional responsibilities for commercial applicators that supervise non-certified applicators include: practical knowledge of the applicable requirements on pesticide labels, verify and maintain non-certified applicator training records, and provide site-specific instructions to non-certified applicators.

**Updated Handler Training Requirements** – Additional handler training topics include: how to identify information on product labeling applicable to safe pesticide use such as label-required PPE and precautionary statements about human health hazards,

Diseases such as ESCA are imminent threat to grapevines, especially immediately after pruning is completed. While growers have a number of options to “cover” the wound, a highly effective biofungicide is available featuring a proven combination of two species of beneficial *Trichoderma* fungi that are active against the pathogens across a wide range of environmental conditions.

ESCA is a grapevine wood disease that affects vine yield and longevity, particularly troublesome in vineyards with a history of grapevine pruning disease. The main causal agents are the deuteromycetes fungi *Phaemoniella chlamydospora* and *Phaeoacremonium* spp, and the basidiomycete *Fomitiporia mediterranea*. The pathogens most relevant to California growers include *Eutypa lata*, *Neofusicoccum parvum* and *Phaeoacremonium minimum*. Recent studies show excellent control of these three using a new viticultural tool.

“The advantage to our product Bio-Tam® 2.0 is that the two species of *Trichoderma* fungi colonize the pruning wounds and form a shield that prevents pathogenic fungi from spreading within the plant,” according to Duane Canfield, marketing manager for SePRO Ag, based in Carmel, IN.

## TREATMENT OF GRAPEVINES

Pruning of grapevines should be conducted after the peak of low temperatures has passed. A single, directed application of

Bio-Tam® 2.0 is used at a rate of 1/lb/acre diluted in 25 to 50 gallons of water. A dye in the tank-mix will help ensure thorough coverage of all susceptible tissue, including cordons, spurs and all cut surfaces. Application should be made within 24 hours of pruning, and a respray is needed if rain occurs within six hours of treatment.

The combination of two active species works in a broader temperature range, *T. gamsii* starts working at 44.6°F and *T. asperellum* at 53.6°F, allowing for a wide application window across varying environmental conditions. These strains were selected for high activity against fungi responsible for pruning diseases.

A second application of Bio-Tam® 2.0 is recommended when:

- Pruning high risk vineyards:
  - Vineyards with a history of grapevine pruning disease
  - New vines replanted over a highly infested area
  - Where high disease pressure from the surrounding area is present

- Rainfall or high humidity persist resulting in environmental conditions favorable to disease development.

Double pruning is another common activity, and it is recommended to wait until the second pruning pass if environmental conditions do not favor disease development into tissue beyond where the final pruning cuts will occur. Under this scenario, apply Bio-Tam® 2.0 within 24 hours of the second pruning cuts.

## SAFETY PROFILE

“Safety is key for this biofungicide,” Canfield said. “These fungi strains are safe for the vines, organic or conventional, but also safe for workers with a four-hour REI. This is key to ensure continued pruning operations.”

Additionally, Bio-Tam® 2.0 meets NOP standards, is OMRI-Listed, has a zero-day PHI and offers no limitations on exports.

Excerpts\* from UC Davis | Studies 2019-2020

	Location/yr	Bio-Tam	Conventional Industry Standard	Control (Innoculated)
Mean % infection of <i>Eutypa lata</i>	Davis/'19	7.69%	92.31%	100.00%
	Elk Grove/'20	5.00%	10.00%	75.00%
	Kern Co./'20	0	5.00%	25.00%
Mean % infection of <i>N. parvum</i>	Davis/'19	70.51%	64.10%	100.00%
	Elk Grove/'20	0.00%	10.00%	75.00%
	Kern Co./'20	10.00%	10.00%	45.00%
	Yolo Co./'20	0.00%	0.00%	40.00%
Mean % infection of <i>P. minimum</i>	Yolo Co./'20	5.00%	20.00%	70.00%

\*For complete summaries and research details visit [https://ucanr.edu/sites/eskalenlab/Fruit\\_Crop\\_Fungicide\\_Trials/](https://ucanr.edu/sites/eskalenlab/Fruit_Crop_Fungicide_Trials/)

## A UNIQUE PRODUCT

“With grapevine pruning so important, Bio-Tam® 2.0 has been marketed primarily as a biofungicide to address those economically devastating diseases,” according to Duane Canfield, marketing manager for SePRO Ag.

“But globally including in the U.S., Bio-Tam® 2.0 is widely used to control soil-borne diseases in vegetable, fruit, row, and ornamental crops, as

well as to protect cuttings and bare-root transplants.”

Bio-Tam® 2.0 aggressively colonizes the soil rhizosphere and outcompetes pathogens for nutrients and space, surrounding soil to form a living barrier that is antagonistic to disease infection from major disease-causing fungi including *Pythium*, *Phytophthora* and *Rhizoctonia*. Inoculating early enables the crop to establish quickly, weather in season abiotic

stresses and increase yields. This disease protection actively grows along with the crop.

The unique blend of two highly active *Trichoderma* strains provides consistent performance across a wider range of environmental conditions (soil temperature, soil pH, organic matter) when compared with single species formulations.



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anyone under 18 years is prohibited from handling a pesticide identified as a restricted material, how to identify on the label if a product is a federal restricted use pesticide or California restricted material, and that such products may only be used by certified applicators or those under their supervision.

### Stay Informed!

To be notified of information pertaining to the regulatory changes, sign-up for DPR's "Licensing & Certification (Individuals & Businesses)" and "Continuing Education" electronic mailing lists. Visit DPR's Certification and Training Update webpage for additional resources. Questions may be directed to LicenseMail@cdpr.ca.gov. ■

DPR's electronic  
mailing lists:



## Electronic Mailing List Subscriptions from California Department of Pesticide Regulation

Anyone with e-mail capability can sign up for free, automatic delivery of one or more email topics, including news releases, regulatory notices, program updates, upcoming events, and more. **Scan the QR code above to sign up.**

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  - Pesticide Safety - Train the Trainer Program





# MOCKSI®

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With increasing guidance from almond processors to limit double kernels, trust the nut retaining, AND yield increasing power of MOCKSI PLANT GROWTH REGULATOR!

Rather than increasing the length of bloom, which increases the probability of double kernel nuts; MOCKSI acts on the tree to promote increased Auxin production which leads to improved attachment of the hull to the stem, thereby lessening drop leading to increased yields at a MUCH lower cost than the alternative!

## Kim-C1, LLC

Contact **Ben Letizia** at **559-284-1392**  
or **ben@kimc1.com** for more information

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# Featured Article

## Certification & Training Changes from an Agricultural Commissioner's Perspective

By: Jimmy Hook, Kings County Agricultural Commissioner-Sealer

By now you are all aware of the massive overhaul the Department of Pesticide Regulation (DPR) is making to the Certification and Training regulations contained in Title 3, California Code of Regulations (CCR) Division 6. The changes are being made to align with federal regulations in Title 40, Code of Federal Regulations (40 CFR) Part 171. While there are many changes coming there has been a lot of effort to help ensure these changes are understood and rolled out in a manner that does not result in impacts to the ability to conduct the important work these certifications allow.

There have been many questions surrounding the Private Applicator Certification (PAC) portion of these changes and DPR has released two enforcement letters (ENF 23-03 and ENF 23-06) to help provide answers. One of the most frequent questions involves the renewal by existing PAC holders. DPR's most recent guidance makes clear that PAC holders expiring December 31, 2023, can renew with continuing education (CE) hours as allowed by current regulation, 3 CCR section 6582(a)(1) allows for renewal by CE up to 120 days prior to expiration. PAC holders expiring December 31, 2024, and December 31, 2025, will not have a CE renewal option and will be required to take the new exam to renew. It is important to note that any renewals by CE for those expiring December 31, 2023, will also need to take the new exam upon expiration December 31, 2026, to maintain certification. One major change here is that regardless of meeting current requirements for certification DPR has determined that all PAC holders including those that renew by CE will no longer be certified as of January 1, 2024, to use materials labeled as fumigants for burrowing vertebrate pest control. If a PAC holder is planning to use these materials, they will need to take the new private applicator exam and an additional Burrowing Vertebrate Pest Fumigation (BVF) exam. Both tests are currently available at your local Agricultural Commissioner's office.

There are approximately 20,000 PAC holders statewide and although broken down into renewal categories by the first letter of the last name there will still be a **large number requiring testing** each year to phase in the new requirements as outlined below:

- 5444 individuals with last names beginning with 'R-Z' expire December 31, 2023.
- 7742 individuals with last names beginning with 'A-H' expire December 31, 2024.
- 6925 individuals with last names beginning with 'I-Q' expire December 31, 2025.

Please keep this in mind as you are renewing certification, permits, or advising others on such. Some counties may experience a backlog during high traffic times of the year, however all I have spoke with are taking steps to make accommodations. New PAC cards will be issued identifying those that have taken the new exam and have provisions for identifying the BVF certification. Renewals after the phase in will be similar to the past and can be done either via the passing of exams or through CE. For those with both the PAC and BVF certifications the exam option will require the passing of both exams to maintain certification.

There are also other changes coming into play, the minimum age and fumigant use stand out as the most impactful. Any soil pest or commodity fumigations will require a Qualified Applicator License (QAL) or Qualified Applicator Certificate (QAC) with the appropriate category. The minimum age required will be 18 years old, anyone under 18 years old cannot handle a pesticide identified as a restricted material.

For updates on how your County is handling the changes including any special testing events or expected delays please reach out to your local Agricultural Commissioner's Office. ■



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## 2024 Brings Political Opportunity



By: Matthew Bristow, Advocacy Committee Co-Chair

As we approach another Presidential election year, our nation, likely more than ever, will be focused on how their voice and vote impact their way of life. As citizens, we often question what we can do to create effective change. If you live in California, like our membership does, and work in agriculture, you should know that being engaged and involved in your association is an opportunity to create that change.

I have the privilege of serving as the CAPCA Vice Chair and the Co-Chair of the Advocacy Committee. We frequently discuss the proposed legislation and regulation that will be or is currently impacting the PCA industry. While it is easy to be frustrated with where we are and lobby our ideas to the decision-makers, we often work behind the curve.

Political influence begins the day a candidate files paperwork to run for office. That is the day that they are willing to hear your thoughts, struggles, and ideas. CAPCA membership is unique, as California's only agricultural association with members in every legislative district. CAPCA has excellent lobbyists with Kahn, Soares, & Conway LLP; they work extremely hard to communicate the PCA story and messaging. They also work on policy issues as they present themselves at the legislative and regulatory levels. However, it is essential that we, as members, engage politically.

To start, CAPCA is a member of the Alliance of Farmers and Ranchers. This group of associations works year-round to support political candidates, regardless of party affiliation, who are science-backed and agriculture-friendly. This group builds and maintains relationships in vital legislative districts that could influence tomorrow's policy.

The Alliance builds off strategy and political knowledge. However, as members, we too have a critical part to play. We encourage CAPCA members to participate in local and state politics in 2024. Please get to know the candidates and build relationships while they campaign. This form of active engagement will allow us the opportunity to influence and tell our story well before a policy decision that could negatively impact our industry.

This idea may seem daunting and CAPCA understands that it may be challenging to find a starting point. Therefore, we are creating a new program that will launch in the Spring of 2024, right before the primary election. The Chapter Advocacy Leadership (CAL) Program is currently being designed to support CAPCA members as they build relationships with their local and state political officials. Members do not have to understand policy, current events, or even political dynamics; you must share your story.

Most people forget that their elected officials represent them and come from the same community. You can relate more effectively once you find commonality and share a bit of yourself. Most elected officials want to meet you and connect with their constituents. This is an opportunity that should not be passed by.



The CAL Program will start in Spring of 2024; however, you can get a head start, and CAPCA is here to help. The best place to start is finding out who your state representatives are. Utilize the QR code to enter your address and find your state senator and assembly member. To find your local representatives, please visit your city or county website. Most years, many of these members host holiday outreach and volunteer events for the community. This is a great way to serve your community and get to know your member and their staff.



[findyourrep.legislature.ca.gov](https://findyourrep.legislature.ca.gov)

As citizens, we hold much more influence and opportunity than we typically believe. Our voices and votes matter. Given the right strategy and tools, PCAs across the state can enlighten our government officials on their work and its importance to the community, state, nation, and world. 2024 is an important election year for our country; help us by being an active member of the PCA advocacy community.



To learn more about the CAL Program, please email CAPCA Communications Director, Alexis Silveira, at [alexis@capca.com](mailto:alexis@capca.com).

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**Brandon Koch**  
PCA | theWonderful company.

# Membership

## CAPCA Membership – Ready to Renew



Crystelle Turlo, Chief Operations Director

From October to February, the CAPCA state office typically receives more member dues payments than any other time of the year. In January, it is not uncommon for our office to

receive over 100 membership renewals a day.

This year we are expecting more renewals to be completed digitally. However, we have also heard from members who prefer the paper application. Therefore, we have included the 2024 Member Dues Application on the next page for your convenience.

If you need assistance with the CAPCA website while renewing, logging in, or making a purchase, please contact [support@capca.com](mailto:support@capca.com). For membership support or information, you can reach out to Briana Love at (916) 928-1625 ext. 1.

Friendly reminders about renewing your 2024 CAPCA Membership:

- Active PCAs need to purchase an Active Membership.
- The CAPCA office is closed on the weekends and membership renewals are not managed during that time. Use [support@capca.com](mailto:support@capca.com) for assistance and we will return your email as soon as possible the next business day.
- When contacting the CAPCA office, please be patient and leave a voicemail, or email [support@capca.com](mailto:support@capca.com).

We strive to provide excellent customer service to our members during this busy time and appreciate your support of CAPCA. ■

---

## Follow CAPCA on Social Media!

**CAPCA** is working hard to build out a robust social media presence to connect with members, and to bring them additional industry-focused content.



Facebook - *@California Association of Pest Control Advisers (CAPCA)*



Instagram - *@capca\_plant\_health*



X (formerly Twitter) - *@CAPCA3*



LinkedIn - *@California Association of Pest Control Advisers (CAPCA)*



**Please enclose check payable to: CAPCA (A \$25 FEE WILL BE CHARGED FOR RETURNED CHECKS)**

License Number: \_\_\_\_\_ Email: \_\_\_\_\_

Name: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

Mailing Address: \_\_\_\_\_ Work Phone: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_ Employer: \_\_\_\_\_

Additional Chapters you wish to join: \_\_\_\_\_ CCA #: \_\_\_\_\_

<b>ACTIVE MEMBERSHIP</b>	<b>ASSOCIATE MEMBERSHIP</b>	<b>STUDENT MEMBERSHIP</b>
Licensed PCAs must join as Active Members	Non-PCAs - printout not provided	Must provide proof of full-time student status. May not hold a DPR license.
<input type="checkbox"/> 2023 = \$160.00	<input type="checkbox"/> 2022 = \$45.00	<input type="checkbox"/> 2023 = (no fee)
<input type="checkbox"/> 2024 = \$160.00	<input type="checkbox"/> 2023 = \$45.00	
<input type="checkbox"/> 2022 = \$210.00		

- I WOULD LIKE TO OPT OUT OF ALL EMAIL COMMUNICATIONS. I understand that by opting out of email, I will NOT receive any information from CAPCA regarding CAPCA business or any information outside of CAPCA, such as emails from CAPCA Sustaining Members or industry stakeholders. This includes updates and notices about continuing education, programs and benefit opportunities. (Please be aware that CAPCA primarily utilizes email to communicate with members.)
- I DO NOT WANT MY MAILING ADDRESS UTILIZED OUTSIDE OF CAPCA PURPOSES.
- I DO NOT WANT \$7.00 OF MY DUES TO GO TO CAPCA PAC\*\* (Political Action Committee).

**Update your email communication preferences through the CAPCA website**  
<https://capca.com/manage-my-communications/>  
*You can now define which crop team, chapter and event notifications you want to receive.*

Which of the following categories are important to your work as a PCA (check all that apply):

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Aquatics              | <input type="checkbox"/> Forage/Silage    | <input type="checkbox"/> T/O, Landscape  |
| <input type="checkbox"/> Berries               | <input type="checkbox"/> Golf/Sports Turf | <input type="checkbox"/> Tree Nuts       |
| <input type="checkbox"/> Citrus & Subtropicals | <input type="checkbox"/> Grains           | <input type="checkbox"/> Vegetables      |
| <input type="checkbox"/> Cotton                | <input type="checkbox"/> Grapes           | <input type="checkbox"/> Vegetation Mgmt |
| <input type="checkbox"/> Deciduous Fruits      | <input type="checkbox"/> Rice             | <input type="checkbox"/> Organics        |
|  |   | <input type="checkbox"/> Hemp            |

**Want access to your membership benefits quicker? Pay your dues online at [capca.com/membership](https://capca.com/membership).**

Federal Tax ID #94-2277533

Your dues payment is not deductible as a charitable contribution for federal and state tax purposes. However, a portion of your payment may be deducted as an ordinary and necessary business expense. Please advise your tax consultant if you qualify for an ordinary and necessary business expense tax deduction. If you qualify for an ordinary and necessary business expense tax deduction, you may deduct up to \$143/\$35 for dues of \$160/\$45 respectively. If you chose not to earmark \$7.00 of your dues as a contribution to CAPCA PAC and you qualify for an ordinary and necessary business expense tax deduction, you may deduct up to \$150/\$42 for dues of \$160/\$45.

\*\*The CAPCA PAC Contribution is a voluntary non-tax deductible contribution.

For CAPCA Use Only
Check# _____
Amount _____



## Bylaw Change Review Notice

Over the last year, CAPCA has prioritized a Bylaws review to ensure our bylaws (last reviewed in 2006) are compliant with California law, allow flexibility to current organizational needs, and provide clarity on past issues. This endeavor Chaired by Mike Huffman (Woodland Chapter) sought to clarify and address issues that have been of concern to CAPCA membership and leadership, including the Board of Directors and chapters. Below is a brief summary of the changes that were made to the current draft of the bylaws.

### Items the Committee sought to address:

- In order for the CAPCA Board to meet and make decisions on behalf of the organization, we need a quorum of representation. Unfortunately, we've had elected directors unable to attend their first meeting(s) of the year due to scheduling conflicts or delayed elections, the transition of new State Board Directors to count in the quorum at the point they *first attend* a Board meeting, *not* at the point of election allows us flexibility to continue to operate effectively in their absence (p. 13)
- Chapters over the years, as a volunteer-led arm of the organization, have expanded and retracted based on local membership engagement. The past few years have moved some chapters to a "dormant status" that we did not have defined in the Bylaws with the flexibility to dissolve, combine or re-instate as needed. There is new, but limited flexibility in the bylaws for these actions by the Chapters to not negatively impact the overall governance of CAPCA (p. 23)
- Due to California laws on non-profit corporations as a 501(c)(6), this special committee took action to develop Chapter Bylaws and a Chapter Affiliation Agreement that Chapters must adopt to align the State Office and Chapters consistently. *Any chapters that do not complete these new Chapter Bylaws or Chapter Affiliation Agreement will have the above noted option and flexibility over time to consider dissolving, combining or being re-instated.*

- Given the Association guidelines of being led by Active Members (PCA license holders), the committee sought to clarify how to transition retiring Pest Control Advisers (PCAs) who are seated to the Board of Directors or Chapter leadership. In the amended bylaws, anyone who is elected while their license is *active* may remain in their seated position through their term even if their license has expired while they are currently serving. (p. 24)
- As CAPCA has evolved our programs over the years, our standing committees have re-prioritized; the bylaws change updated the list of Standing Committees to better reflect the current board committees (p.19)

**Membership will have the right to vote on the proposed bylaws at the Annual CAPCA Conference & Agri-Expo in Reno, NV on October 16, 2023.** If you are not planning on attending the full Conference but would like to attend the business meeting to cast your vote as an Active member, you can register for the meeting by scanning this code:

### REGISTER



To review the complete bylaws, please visit [CAPCA.com](http://CAPCA.com). If you would like a copy of the bylaws with highlighted edits, please email [alexis@capca.com](mailto:alexis@capca.com). We look forward to seeing CAPCA members on Monday, October 16, 2023, in Reno, NV. ■

### BYLAWS





DECEMBER 5-7, 2023

SAFE CREDIT UNION  
CONVENTION CENTER

DOWNTOWN  
SACRAMENTO

The Almond Conference brings together growers and other industry stakeholders to serve as the **premier** gathering for networking, education and research in the almond industry. The conference promotes collaboration by fostering a sense of community among all those who are committed to the success of California's almond industry.

Don't miss out — learn more and register at [Almonds.com/Conference](https://Almonds.com/Conference)

2023

THE ALMOND CONFERENCE

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GROWERS // HANDLERS //  
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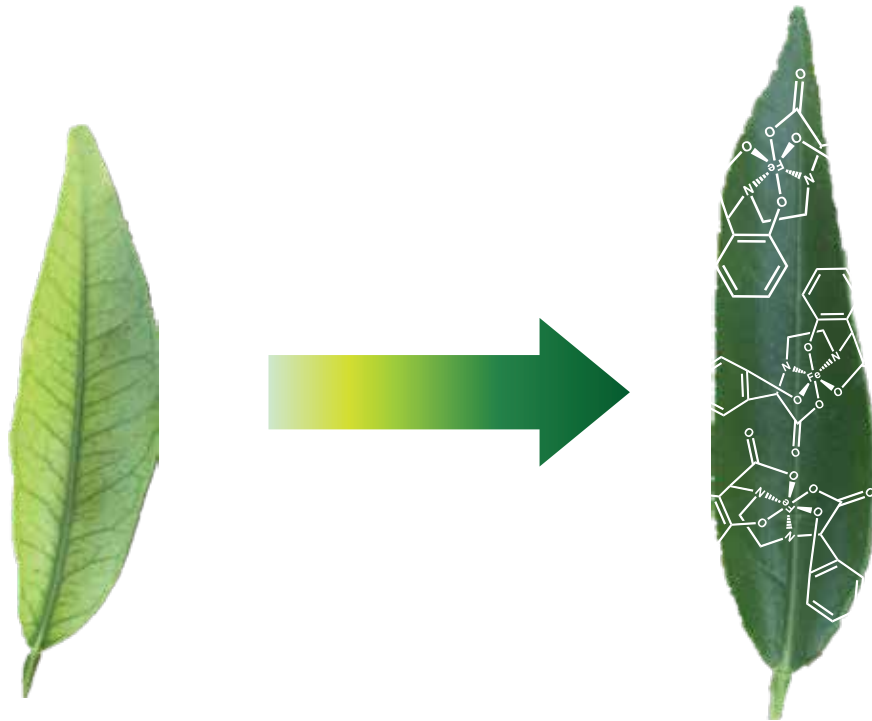
VISIT [ALMONDS.COM/CONFERENCE](https://ALMONDS.COM/CONFERENCE)  
TO REGISTER, AND STAY UP-TO-DATE  
ON THE LATEST INFORMATION.

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It consists of two product lines: HEXA-TEAM, an NPK range, and HEXA-TECH, a micronutrient line, both powered by **HEXA™ Technology**. These products contain six plant active ingredients and certified Organic Matter (OM), benefiting the soil by enhancing its structure, nutrient availability, water retention, and fostering an environment for thriving soil biology and their numerous associated advantages.

**HEXA™ Technology** optimizes NPK with plant extracts, providing an energy boost that restructuring processes supporting cropland and reducing yield losses due to stress. It also positively impacts crop quality attributes like sugar content, weight, and size.

**HEXA-TEAM** is formulated with highly available forms of nutrients, maximizing crop utilization while minimizing environmental and soil losses. This is achieved through a two-fold approach:

1. Using concentrated and readily available nutrient forms.
2. Increasing OM in the rhizosphere and invigorating biology to stimulate soil and maintain nutrients for immediate and future use.

**HEXA-TECH** is a line of soil-applied micronutrients featuring natural plant extract chelation, powered by **HEXA™**. It represents the most effective, biodegradable, and sustainable natural-based chelate available. The plant extracts and amino acids act as carriers for micronutrients, ensuring rapid uptake and adding a biostimulant growth action, leading to stronger crops.

Trials conducted in soils (pH 8.2-8.8) compared HEXA-TECH Cu, Zn, and Mn to traditional EDTA. HEXA-TECH demonstrated higher efficiency and easier absorption than EDTA micronutrients, making it a superior choice for growers.

## HEXA-TECH vs EDTA Micronutrients

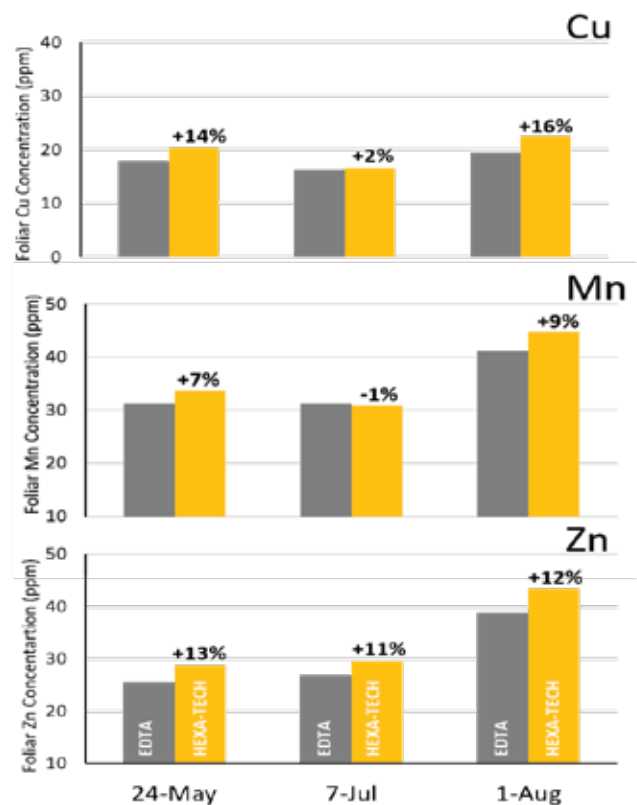


Figure 1. Micronutrient foliar concentrations of Cu, Mn, and Zn for GS-EDTA (gray) and HEXA-TECH (yellow).

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# Continuing Education



## Online CE Page Updates:

### INDUSTRY 101 PART 1\* & PART 2\*

\$90 (Sale! \$67.<sup>50</sup> until Oct. 31, 2023)

4.5 DPR (4.0 Laws | 0.5 Other)

Presentations from the 2023 CAPCA Spring Summit in Temecula, CA including:

- **PART 1** – Spray Safe 101 | How to be Prepared to Defend a Violation | CAC/Enforcement Discussion Panel – Be Educated, Be Proactive
- **PART 2** – PPE and Health Effects for Workers | Updates on Soil Fumigant Application Requirement | Why is Weed Management So Difficult?

### 2023 SPRING SUMMIT RECAP\*

\$110

5.5 DPR (1.5 Laws | 4.0 Other)

Continuing education presentations from the 2023 CAPCA Spring Summit in Temecula, CA, featuring presentations by:

Ruben Arroyo  
Paul Crout  
Delia Cioc  
Dr. Frank Byrne  
Krystal Jenkins  
William Baker  
Dr. Nicola Irvin  
Craig Laursen  
Joelene Tamm  
Robert Masson

*\*Once purchased, courses are available to complete through 12/31/2023.*





## Application Timing Research Shows Pistachio Yield Increase

Dormex®, a unique plant growth regulator helps initiate the natural bud break process, especially when sufficient chill is lacking. With a single application, leaf buds and bloom buds open together, more uniformly, and earlier. Dormex® is registered across a variety of crops. This article focuses on field scale research by Dr. Masood Kherzri demonstrating the significance of proper rate and application timing of Dormex® which can result in higher yields in pistachios.

### OPTIMIZE THE POLLINATION WINDOW

The timing of pollination means everything for yields. Dormex® can help bring orchards and vineyards into synchronous bloom with just one application. In pistachios Dormex® can help synchronize male and female flower buds. This in turn helps the crop achieve optimal pollination.

### MINIMIZE ALTERNATE BEARING YEARS

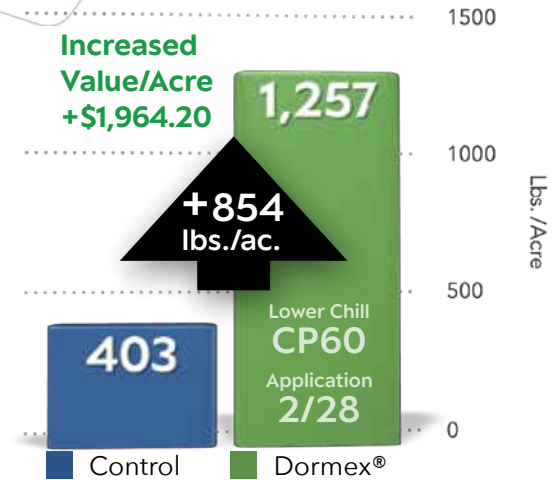
Dormex® can help even out alternate bearing years for certain crops or varieties. By opening more buds each and every year, more branches are produced. This makes more consistent yields possible, year after year, to help improve your grower's profitability.

### REALIZE THE DIFFERENCE AT HARVEST

Various application timings of Dormex® plant growth regulator were applied in the 2022 field scale trials. The trials demonstrated that Dormex® can improve yields. The best results were shown when farmers were patient - allowing maximum chill accumulation, but still applying Dormex® 30 days in advance of bud break as labeled.

### 2022 Yield Increase for SKDD Ranch\*

Kerman Pistachios (lbs./acre) at 610 ft. Elevation



When properly timed applications of Dormex® are made, yield increases like those in 2022 can generate substantial economic benefits to growers. For best results, Kherzri suggests growers should anticipate a spray window starting the middle of February through the first of March.

Earlier applications should be delayed as the trials showed an increase the separation between male and female bloom periods. Individual field recommendations must take into consideration plant variety, chill accumulation, elevation, weather forecasts, and the calendar when spraying Dormex®.

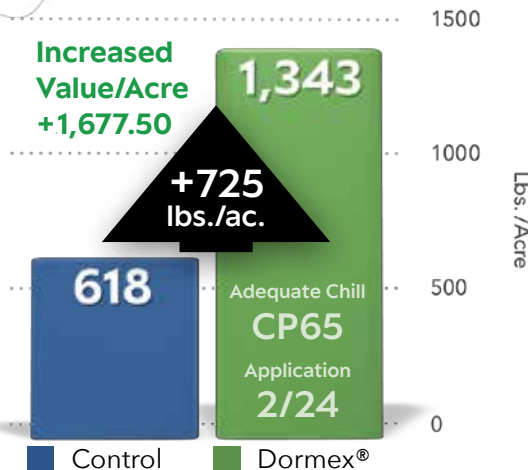
### START TREES OUT RIGHT

Dormex® should also be considered for managing non-bearing pistachios. Some of the benefits on young trees with vigorous rootstocks include: activating more secondary and tertiary buds without pruning; producing a well-branched, more uniform canopy; and reducing labor requirements for pruning. Time your applications on younger trees so that buds will emerge after the danger of frost has past. With no concern about pollination, growers can spray earlier in the Dormex® application window.

Contact John Meyer for more information about Dormex® for the broad range of crops including cherries, grapes, almonds, walnuts and more. Call [559.545.4701](tel:559.545.4701) or email [john.meyer@alzchem.com](mailto:john.meyer@alzchem.com)  
[DormexUSA.com](http://DormexUSA.com)

### 2022 Yield Increase for Romo Ranch\*

Kerman Pistachios (lbs./acre) at 590 ft. Elevation



\*This is the first year of a multi-year research study. We thank Masood Kherzri, Ph.D. of the Malakan Agricultural Research Institute (MARI) for his leadership in conducting these full block, multiple location trials. Recognizing the significance of the results, he worked to present this information as soon after harvest as possible. With the acknowledgement that this is one year of data, we share this data as it is consistent with: 1) the product label and data reported to gain label acceptance in the USA and 2) historic performance data on pistachios, as well as other similar crops around the world.

Dormex® has consistently proven to improve results versus allowing the crop to break bud without any intervention, especially in locations where chill accumulation is usually a challenge. All locations were chosen by the researcher and information supplied to us via his research summary report.



## CE Hours Reported: DPR CE Tracking You Can Trust

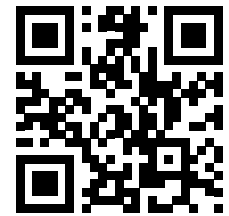
By Patrick Dosier

As CAPCA's Innovation and Technology Director, my primary responsibilities include - steering our innovation process, aligning it with the Board's vision, managing CAPCA's digital assets, building relationships with new AgTech Sustaining Members, and offering knowledge on IPM and agronomy. Today, I'd like to discuss a critical digital project we're working on.

Beginning January 1, 2024, more stringent regulations surrounding CE approvals, attendance tracking, and reporting will be in effect. These changes will impact all DPR license holders, including PCAs. Unfortunately, our existing scantron system doesn't align with these new requirements. CAPCA has developed a QR code system tailored for our events to address this. I want to acknowledge the efforts of team members past and present, including Ruthann Anderson, Carrie Khilthau, Crystelle Turlo, and Rachel Taft, who pioneered the use of QR codes at CE courses, even before the comprehensive guidelines from DPR were available. CAPCA isn't merely adapting - we're leading.

In light of the upcoming regulations and drawing from our previous QR code experiences, the CAPCA Board of Directors greenlit the development of new CE Hours Reported software. This tool will be available industry-wide. We will offer a free version for all CE sponsors and plan additional premium features for future releases. The software is designed to simplify processes for both sponsors and attendees.

Our initial focus is on CE sponsors because of their specific compliance requirements. CE Hours Reported will allow any sponsor to create courses easily, pre-fill DPR CE applications, determine event privacy, list public events on a shared calendar, manage attendee



[cereported.com](https://cereported.com)

check-ins/outs, verify attendance, and report to DPR in a timely manner. CAPCA Chapters will receive guidance on setting up their sponsor accounts.

For attendees, the process will be straightforward. After creating an account, users can manage licenses, find and sign up for events, and receive a unique QR code for event check-ins, akin to current airline check-in procedures.

### Why a New System?

You might wonder why we're introducing a new system when CAPCA already has a QR code setup. While effective for large events like the CAPCA Conference, the current system isn't as adaptable to varied event sizes. CE Hours Reported is designed to be flexible for both large and smaller events and will track all DPR licenses: PCA, QAL, QAC, pilots, and private applicators.

We are also building this software with an existing CAPCA-owned trademark which clearly articulates the purpose:

- Want your CE hours tracked for you?
- Want to host a CE course?
- Want an easy way to comply with DPR?

## PROJECT TIMELINE:

- **July 2023:** Design phase began. New DPR regulations published.
- **August 2023:** Software development began.
- **October 2023:** Beta testing phase begins. The ongoing release of upgrades continues.
- **October 2023 – March 2024:** Promotion and sponsor onboarding.
- **January 1, 2024:** New regulations take effect.

Our priority is ensuring CE Hours Reported is operational for in-person events by the January 2024 deadline. As we move forward, we plan to introduce features for online CE events, additional license/certification tracking, offline functionality, and other user-friendly enhancements. We are also considering developing paid premium features for our sponsors to sustain this program financially.

Find more info about DPR's new Certification & Training regulations by scanning this code, which points to: [https://www.cdpr.ca.gov/docs/license/cert\\_training.htm](https://www.cdpr.ca.gov/docs/license/cert_training.htm)



For CAPCA Members, it's essential to have access to official records during license renewal. We're committed to ensuring that every hour logged in CE Hours Reported will be retrievable for active CAPCA Members at renewal time. Our call to action for CAPCA Members is clear: If a CE event doesn't feature the CE Hours Reported logo, there's no guarantee that attendance is reliably tracked. We urge you to request sponsors to adopt CE Hours Reported. It benefits everyone involved.

Join the waitlist at [cereported.com](http://cereported.com) and spread the word! ■

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RENO, NV  
OCTOBER 15-17



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# Thank You 2023 Sustaining Members

## PLATINUM LEVEL



**ProFarm**

**BRANDT**®



Potassium Nitrate **experts**



## DIAMOND LEVEL



A HUBER COMPANY





# Do More With Less



Almond trial shows using less fertilizer compared to conventional treatments yields better results.

For the fourth year in a row, research trials proved PrG™ and Kalibrate® outproduced the grower standard in yield by an average of 152 lbs/A and produced an average of 2,940 lbs/A.

AgroLiquid’s crop nutrient research starts with the grower. Grower pressures are making nutrient management a critical component in agriculture today. The one constant is the desire to sustainably produce a quality crop. To get to the next level of production, growers must have the technology to succeed.

**Trial Details:** Each plot consists of five trees and was replicated six times across the orchard. Throughout the growing season, 50 gallons per acre (gal/A) of UAN-32 was applied as a constant in every plot.

**The Results:** Over the course of the four-year study, the average of the “Grower Standard” plot of 10-34-0 + potassium thiosulfate yielded an average of 2,788 lbs/A. On the full AgroLiquid program plot, using both PrG + Kalibrate yielded a four-year average of 2,940 lbs/A. This 152 lbs/A yield increase was achieved with 55.5 gal/A less applied fertilizer.

By investing in research, we remove the guesswork innately involved in producing a crop, and develop the ideal timing and delivery methods of the best crop nutrient products on the market. Armed with the knowledge and confidence achieved through this extensive research, our agronomists make scientifically based recommendations to sustainably optimize yield potential.



## Trial Conclusion:

- Four-year average **152 lbs/A yield more** than the grower standard
- AgroLiquid program netted **5.5% more profit** over the grower standard
- An additional **\$1,600 per acre** over the course of the four-year trial\*

\*Profit calculated using almond market prices current to each year of the trial.

### Conventional grower standard



10-34-0 applied four times during the season for a total of 45 gal/A  
 Potassium thiosulfate applied five times during the season for a total of 45 gal/A  
 EDTA Zinc (Zn) applied four times during the season for a total of 2 gal/A

### AgroLiquid plot



AgroLiquid’s PrG applied four times during the season for a total of 18 gal/A  
 AgroLiquid’s Kalibrate applied five times during the season for a total of 16.5 gal/A  
 EDTA Zinc (Zn) applied four times during the season for a total of 2 gal/A

## CHROME LEVEL



Probelte



NICHINO

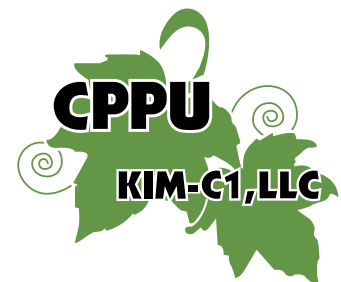


# Sustaining Members

## GOLD LEVEL



Knowledge grows



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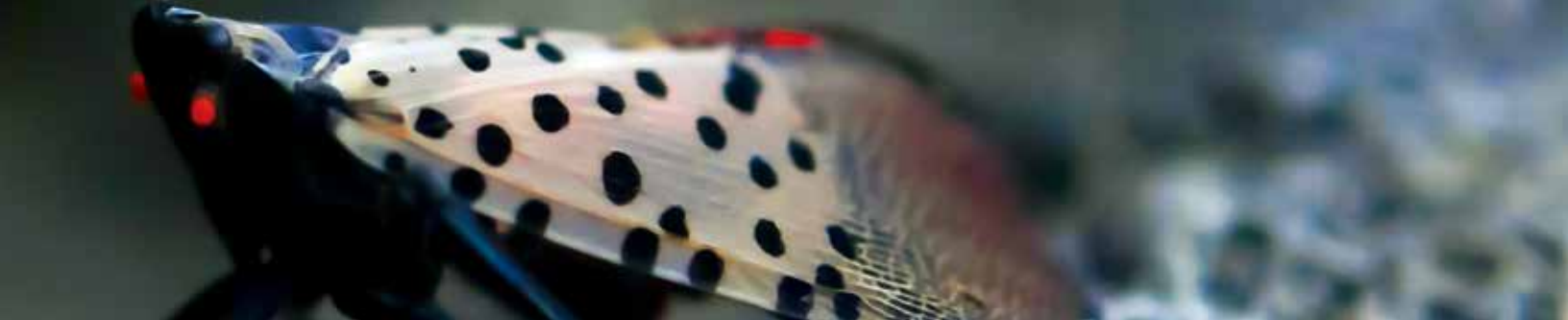
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# 2024 Sustaining Membership

PLATINUM	BEST VALUE	
\$25,000	DIAMOND	CHROME
	\$10,000	\$6,500
<p>Acknowledgement on the CAPCA Website and in Each Issue of Adviser Magazine - For the Year Once Membership is Confirmed</p> <p>2 Subscriptions to Adviser Magazine</p> <p>Unlimited Job Opportunities Posting in Adviser and Placement on Website</p> <p>3 One-page Ads in Adviser Magazine</p> <p>1** Adviser Magazine Advertorial*</p> <p>15% Discount on Adviser Ad Placement</p> <p>5 Complimentary Mailing Labels</p> <p>3 Comp Conference Registrations***</p> <p>\$300 Conference Booth Discount***</p> <p>1st Priority Placement for Conference Exhibit Booth***</p> <p>2 Spring Summit Complimentary Registrations***</p> <p>Belly Band on One Adviser Issue***</p> <p>2 Free Banners on CAPCA Website*** (2 Weeks on Website)</p> <p>\$100 Discount on Online Advertising</p> <p>\$500 Discount on Commercials on online CE Platform</p> <p>\$100 Discount on Email Marketing Ad placements Second Page Single Block Ad</p> <p><b>Value: \$30,520</b></p> <p><i>The value listed here does not reflect your negotiated benefits.</i></p>	<p>Acknowledgement on the CAPCA Website and in Each Issue of Adviser Magazine - For the Year Once Membership is Confirmed</p> <p>2 Subscriptions to Adviser Magazine</p> <p>Unlimited Job Opportunities Posting in Adviser and Placement on Website</p> <p>1 One-page Ad in Adviser Magazine</p> <p>1** Adviser Magazine Advertorial*</p> <p>15% Discount on Adviser Ad Placement</p> <p>3 Complimentary Mailing Labels</p> <p>2 Comp Conference Registrations***</p> <p>\$200 Conference Booth Discount***</p> <p>2nd Priority Placement for Conference Exhibit Booth***</p> <p>1 Spring Summit Complimentary Registration***</p> <p>1 Free Banners on CAPCA Website*** (2 Weeks on Website)</p> <p>\$75 Discount on Online Advertising</p> <p>\$500 Discount on Commercials on online CE Platform</p> <p>\$75 Discount on Email Marketing Ad placements Second Page Single Block Ad</p> <p><b>Value: \$21,750</b></p>	<p>Acknowledgement on the CAPCA Website and in Each Issue of Adviser Magazine - For the Year Once Membership is Confirmed</p> <p>1 Subscription to Adviser Magazine</p> <p>3 Job Opportunities Posting in Adviser and Placement on Website</p> <p>1 Half-page Ad in Adviser Magazine</p> <p>1** Adviser Magazine Advertorial*</p> <p>15% Discount on Adviser Ad Placement</p> <p>2 Complimentary Mailing Labels</p> <p>2 Comp Conference Registrations***</p> <p>\$100 Conference Booth Discount***</p> <p>3rd Priority Placement for Conference Exhibit Booth***</p> <p>1 Spring Summit Complimentary Registration***</p> <p>\$50 Discount on Online Advertising</p> <p>\$500 Discount on Commercials on online CE Platform</p> <p>\$50 Discount on Email Marketing Ad placements Second Page Single Block Ad</p> <p><b>Value: \$11,530</b></p>



GOLD	SILVER	BRONZE
\$3,500	\$2,200	\$750
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\* October comped ads are reserved for Diamond Sustaining Members and above, if you are interested in advertising in the October issue you will need to purchase an ad for the October issue.

\*\* October issue guaranteed if booked by March 31, 2024

\*\*\* CAPCA will provide Sustaining Member companies redeemable Conference registration codes for their employees. \$100 service fee will be applied to any refund requested for a registration purchased without use of the provided redeemable registration code. Complimentary Conference Registrations: Pending the availability of hosting in-person events in 2024. CAPCA reserves the right to limit benefits and/or adjust to online programming value due to unknown gathering and spacing restrictions.

**There is a limited window to sign up for 2024 Sustaining Membership: Sept. 11, 2023 to May 31, 2024. For Sustaining Membership sign-up, visit CAPCA.com.**

The rights, privileges, membership benefits and unused portion thereof of CAPCA Sustaining Members applies only to the Company purchasing membership and cannot be transferred or assigned to said Company's subsidiary(ies) or any other entity(ies) of which the Company has full or partial ownership. The rights, privileges, membership benefits and unused portion thereof of CAPCA Sustaining Members applies only to the calendar year.

(Jan. 1-Dec. 31) for which the Company purchases membership and cannot be transferred or rolled over to any subsequent calendar year.

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# CAPCA

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## Do you have a specific question?

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Support Questions	support@capca.com





# Welcome Katrina Silver as the new Office Manager & Bookkeeper



Welcome Katrina Silver, as the new CAPCA Office Manager and Bookkeeper. Katrina joined the team in June and brings a wealth of experience and a knack for wrangling numbers. Prior to joining us, she wore many hats – she was the Owner/Operator of her own small company, where she ran everything from product development to customer service to e-commerce. Katrina has also been a Quantitative Analyst at Esurance and Reporting Analyst at Sutter Health – turning raw data into actionable insights and churning out reports for everyone from the CMO to Managers. Katrina holds a Bachelor’s in Psychology from California State University, Sacramento and an Associate’s in Mathematics & Physical Science.

When away from work, she enjoys spending time with her family and friends, hosting get-togethers, and traveling when she can. On the weekend, you may find her at the dog park with her puppy, a mastiff-mix named Honey.

Join us in welcoming Katrina. We’re excited to have her on our team! ■

**FOSPHITE®**  
Systemic Fungicide for Year-Round Control

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**Proven Results to Control & Prevent: DOWNY MILDEW, PHYTOPHTHORA, & PYTHIUM. An EPA Approved Reduced Risk Pesticide. Registration No. 68573-2**

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## California gears up for new spending o

By: Brad Hooker, Agri-Pulse

The California state government is grappling with a multi-year deficit that has led to Democratic infighting over spending priorities. But that did not prevent the Department of Pesticide Regulation in issuing its goal of phasing out the use of certain controversial pesticides by 2050. The Newsom administration gained mild support from some agricultural groups for the plan, with the expectation the state will invest more resources into alternatives to those pesticides.

To that end, DPR recently announced about \$1 million in funding for implementing the administration's pesticide plan, dubbed the Sustainable Pest Management Roadmap. The grants focus on pest management in affordable housing and specialized training for urban

and agricultural pest management professionals. DPR Director Julie Henderson said the projects build on roadmap's call for outreach and education in both agricultural and urban settings.

The announcement followed two other rounds of small grant awards this year. DPR has opened up \$1.9 million to support integrated pest management projects that expand the tools, resources and practices available for increasing IPM adoption. In April DPR also awarded about \$3 million in IPM grants. Henderson said the projects play a central role in developing alternative approaches to conventional pest management.

The state is setting aside another \$1.4 million in ongoing funding to streamline DPR's registration and reevaluation process, identify alternatives to high-risk fumigants and lead strategic collaborations with stakeholders. DPR staff recently held a webinar to present workload changes underway to speed up the registration process for new products.

Henderson and DPR staff have participated in outreach events throughout the state's agricultural region, including a fumigation summit in July hosted by the Western Agricultural Processors Association and Cardinal Professional Products. The conference was held in response to escalating scrutiny in Sacramento over the use of products like Telone, or 1,3-D, near farmworker communities.

DPR has released the latest findings from its air monitoring network, which tracks emissions from volatile organic compounds released from fumigant applications. It found a 13-week 1,3-D spike in Shafter that began in 2020 and exceeded its conservative screening threshold by 46%. It also detected two spikes in chloropicrin in Oxford that topped the threshold by 24%. In 2022, however, no chemicals surpassed the screening level,



# on pesticide agenda

likely due to the extreme dryness preventing fungal outbreaks and an unprecedented level of fallowed acreage.

Farm groups are now bracing for the next regulatory changes coming to agriculture. In January DPR will begin implementing a controversial and complex new regulation to further limit the use of neonicotinoids in California. DPR recently paid a private consulting firm that is new to the pesticide arena to find options for revising the mill assessment to generate more revenue and address DPR's longstanding structural budget imbalance while also funding an emerging suite of new environmental justice programs in the department. Crowe LLP is recommending DPR increase the pesticide sales tax by more than 60%, and it also backing DPR's controversial proposal to replace the existing mill with a tiered approach that levies higher taxes on pesticides DPR deems hazardous. Both houses of the Legislature rejected that approach in 2021.

Henderson commended the report, saying it "highlights the urgent need to provide short- and long-term funding for the department to continue to improve protections for people and the environment."

Governor Gavin Newsom will release his initial budget proposal for the 2024-25 fiscal year in January. The independent Legislative Analyst's Office expects the budget situation to be even more difficult next year, since the current budget relies heavily on delayed funding and trigger mechanisms to reinstate funding if the economic situation improves.

Farm lobbyists are strongly pressing administration officials to avoid using the mill assessment to finance DPR's pesticide plan amid the deepening deficit. ■

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Slugs and snails simply can't resist Ferroxx AQ and Sluggo Maxx slug and snail baits. Their highly palatable Micropellets® deliver the **Iron phosphate formulation** to the maximum number of baiting points. And, our strong winter rains have delivered enough moisture making conditions favorable to large slug and snail populations this spring.

Their broad labels cover a wide variety of agricultural and turf/ornamental crops. They're effective in ground and aerial applications and can be used around pets and wildlife. An unlimited number of treatments are allowed each year, with no retreatment interval.

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SLUG AND SNAIL BAIT

- Superior activity in wet and cool weather
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- High % active ingredient—the most powerful slug and snail bait for organic agriculture
- Water resistant
- OMRI Listed®



# Communications

## Regaining our Perspective



By: Alexis Silveira, Communications Director

Why does CAPCA matter? When I started with CAPCA, I was met by a highly competent set of individuals who were all excellent at their niche area of the

Association. The staff was impressive - whether events, membership, continuing education, or technology. While all those items are critical to the association and our industry, it is not our "Why." So here it is: ***There is no other association in the agricultural industry whose sole focus is the long-term viability of the PCA license or profession.*** No other association was designed to care only about the PCA industry. Although many may touch on or address specific issues, they are also balancing a wide variety of membership audiences and weighing the best decision for the majority, not necessarily the right decision for everyone. As CAPCA, with one membership base comprised of PCAs, the best decision for the majority is usually the right decision for everyone.

For those of you who do not know me, my name is Alexis Silveira. I have been with CAPCA for a year, serving as the Communications Director. I graduated from the University of California, Berkeley with a degree in Political Science. I began my career working for Valadao for Congress in 2014 as the Field Operations Manager. When Congressman David G. Valadao won, I moved to the official office as a Constituent Services Representative. After a move to Sacramento, I dove into the agricultural industry and had the pleasure of serving as the Program and Membership Coordinator for Sacramento County Farm Bureau. Most recently, I served as the Director of Membership and Communication for California Citrus Mutual.

My background is important, as I did not come from agriculture and had no preconceived notions about the industry's operation. Instead, I invested and learned why the industry is so vital to California's economy and our nation's food security. PCAs are pivotal in the evolution of sustainable food, fiber production, and also maintenance on cities, parks, golf courses, etc.

When CAPCA was formed in the 1970s, PCAs from across California found a need for their license and profession to be represented in Sacramento. The regulations began to shift, and the industry realized to survive the ebb and flow of government regulation, they needed a well-informed voice. Fast forward to today, when the industry is facing major changes that CAPCA has been working to course-correct for over a year, some would even say a decade.

Oftentimes, the wins are less evident to the membership than they are to the staff and the board. A win in California regulation is rarely altogether canceling a proposed regulation. Instead, it is finding a path forward and working that regulation to be the least negatively impacting to the PCA industry as possible. At times, this can take several years and is often very hard to communicate. Please know by the time a regulation takes effect, we have worked every connection, advocacy, and educational opportunity to try and stop or manipulate that impact on our members.

Those founding PCAs saw the need for an association like CAPCA because they lived in a world without it. Now that two generations have passed, so has the torch. It is up to the PCAs in the middle of their career to

Advertorial

# ENHANCING CALIFORNIA AGRICULTURE BY HARNESSING THE BENEFITS OF THIOSULFATE FERTILIZERS

In March of 1991, the first load of KTS®, potassium thiosulfate, was sold in the state of California. Since that time the product has steadily grown to become a standard potassium fertilizer in California agriculture. The staying power of KTS® and its continued consistent growth to this day, is due to several beneficial factors. For one, KTS® is a highly soluble potassium source that comes ready to inject in a convenient liquid form, but the real reason KTS® is still as popular as ever in California may be much simpler. It consistently works! The conditions of most California soils are conducive to reaping the benefits that come from thiosulfate chemistry. Currently, Crop Vitality™ produces and sells four Tessenderlo Kerley liquid thiosulfate fertilizers that are used across the state, including: KTS®, CaTs® (calcium thiosulfate), Thio-Sul® (ammonium thiosulfate), and MagThio® (magnesium thiosulfate). As versatile and effective nutrient sources, thiosulfate fertilizers offer numerous benefits that can immediately add value to the grower. A few advantages of incorporating thiosulfates into a grower's nutrient program are:

## Enhanced Nutrient Availability

Thiosulfate is a very active chemistry in the soil. As it interacts with certain nutrients, it causes those nutrients to become more soluble and thus more available to the plant. For example, iron sometimes exist in forms that are not very plant available, but by applying thiosulfate, the iron is converted to a form that the crop can more easily access. This has been shown to be the case with other micronutrients, and phosphorous as well.

## Managing Soil pH

In certain areas of the state, excessively high pH is an ongoing challenge. High pH can affect nutrient availability, and most crops are not adapted to thrive in that environment. Adjusting pH can be a long and costly process. Thiosulfate, unlike sulfate, is an acid forming chemistry. This means that while you are delivering essential nutrients like potassium, nitrogen, calcium, and magnesium, you are bringing along with it an added tool to a pH management program.

## Nitrification Inhibition

In California agriculture today, nitrogen is easily the most scrutinized nutrient input. Thiosulfate is a proven nitrification inhibitor, meaning that it will slow the conversion of ammonium-nitrogen to leachable nitrate-nitrogen. This can be advantageous by holding the plant available nitrogen in the upper profile for a longer amount of time. This gives the plant an extended window to access the nitrogen and can potentially reduce nitrate leaching. Demonstrating how this can benefit California growers will be a research emphasis in the years to come.

Beyond these three reasons, additional benefits to using thiosulfates in California, include, remediation of compacted soils, salinity management, increasing water infiltration, and of course providing essential sulfur to the crop. The benefits of thiosulfates have been apparent to growers in California for decades. As more growers continue to look to ways to get more value out of their inputs, enhance crop productivity, and promote sustainable farming methods, thiosulfate fertilizers like KTS, CaTs, Thio-Sul and MagThio will be a tool they will use for many more decades to come.



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believe and understand the value of this association not only for the industry but for the students studying and dreaming of entering this career field in five to fifteen years. A PCA in the previous generation or the one before fought for you. Help CAPCA ensure that there is an industry to enter and continue to fight for.

You may be thinking, “How do I do this? How does one person make an impact?” My most significant piece of advice is to show up and sign up. When we as staff start seeing a PCA who has taken an interest in the industry’s longevity, it opens doors for us all. Constant opportunities exist to ensure and educate the membership on how to be a strong advocate for the industry. Help us at CAPCA invest in making you a strong voice. Here is an upcoming opportunity:

### **Innovative Conversations: Changing the Way We Talk About Pesticides**

October 14th, 2023, 12:00-4:00 p.m.  
Crystal Ballroom, Grand Sierra Resort, Reno (Free)

It can be difficult to talk with elected officials, family, friends, and others in your community about pesticides. Join CropLife America Vice President of Communications Genevieve O’Sullivan and Director, State Government Affairs, Western Region Scott Dahlman for a four-hour interactive training based on consumer research, and learn new tactics and messages to effectively communicate your story. We have developed this training to help you feel more confident when addressing questions and concerns about pesticides.



For Sustaining Members reading this article and thinking, “How does this pertain to me?” CAPCA can be more to you than a marketing vehicle. CAPCA can and wants to help guide our Sustaining Members to be informed and valuable tools for the PCA industry. Building that trust with the industry makes it easier to build business. CAPCA also has training and educational events for you. Here is one opportunity on the horizon:

### **2024 is Bringing Changes to Sponsor Responsibilities for CE Hours & Reporting**

October 16th, 2023, 2:00 p.m.  
Grand Sierra Resort, Reno (Free)

We have invited the California Department of Pesticide Regulation (CDPR) to present on the impact of new regulation changes brought on by the update of Federal EPA Standards (40 CFR Park 171). Specifically, this will impact hosting and reporting CDPR CE starting January 1st, 2024. After DPR’s presentation, stick around to hear from CAPCA staff on the tools and resources we want to make available to CE sponsors in 2024 to help with compliance!

This workshop is free to all CE sponsors, regardless of event registration. Please note there is no CE credit for attendance.

Can’t make it? CAPCA is working to record the Sponsor Training Session to help sponsors in the future! Please email [conference@capca.com](mailto:conference@capca.com) to get on the CAPCA sponsor outreach list.



Our success in California relies upon each other and the dedication of this industry, including CAPCA, to ensure long-term viability. Everyone is essential, from the founding generation to tomorrow’s generation. If you want to discuss how to get involved, please email our staff at [support@capca.com](mailto:support@capca.com). ■



# Innovative Formulation of 2,4-D with Near-Zero Volatility

Embed® Extra herbicide is a post-emergent herbicide, containing an innovative formulation of the active ingredient 2,4-D with near-zero volatility. In tree nuts, it has an excellent fit in “post-harvest” clean-up sprays and in “residual” programs in late fall and early winter. Once residual herbicides reach their limit of effectiveness, Embed Extra can be used “in-season” prior to harvest. See label for PHIs.

**Labeled Crops:** almonds, pistachios, walnuts, pecans, stone fruit, apples, pears.

**Labeled Weeds:** 102 on the label, including marehail, lambsquarters, shepherd’s-purse, malva, filaree and field bindweed

## Thorough Kill of Weeds

Embed Extra is systemic, taken into plants through above-ground foliage, then traveling through phloem toward roots. The weed kill process is thorough, but not rapid, and foliage “burn” won’t likely be visible within the first 24 hours. Burndown is not as rapid as glufosinate, paraquat or PPO herbicides, but weed control can be more thorough on several weed species. The slower movement of Embed Extra through the plant, by contrast, allows it to thoroughly kill weeds. That weed kill, down to the roots, can prevent regrowth.

## Near-Zero Volatility and Low Drift Potential

Embed Extra contains 2,4-D *choline*, a completely new form of 2,4-D with near-zero volatility. All other 2,4-D herbicides used in California are an *amine* formulation. The use of choline salt to bind 2,4-D choline makes for a much more stable form of the herbicide. 2,4-D choline boasts an 87.5% reduction in volatility compared with 2,4-D amine and a 96% reduction over 2,4-D ester – resulting in near-zero volatility and minimal potential for physical drift.



▲ Untreated at 36 days after treatments

▼ Embed Extra (3 pt/A) + glyphosate (3 pt/A) at 36 days after treatment



**Embed<sup>®</sup> Extra**  
HERBICIDE



# CAPCA Spring Summit

JANUARY 30 - 31, 2024  
NAPA VALLEY MARRIOTT HOTEL & SPA  
NAPA, CALIFORNIA

Join the CAPCA staff and Board of Directors at the 2024 Spring Summit on January 30-31, 2024 in Napa Valley. The event will be hosted at the Napa Valley Marriott Hotel & Spa.

The two-day program will consist of Continuing Education and networking events for PCAs from throughout California. Registration will open in the fall of 2023. You can find sponsor, registration, and program information on [capca.com/events](https://capca.com/events) as they are released.



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**Spear<sup>®</sup>-Lep** is Vestaron's revolutionary insecticide for fruits, vegetables, and other high-value field and orchard crops. Targeting worms and caterpillars such as DBM, Beet Armyworms, Tomato Fruitworms, Cranberry Fruitworms, Oblique-banded Leafrollers, and Red-banded Leafrollers, field trials with Spear-Lep show performance that is equivalent in efficacy and residual to conventional insecticides. With no known resistance or cross-resistance, Spear-Lep works as a standalone, or in rotation with conventional insecticides as an excellent IPM and resistance management tool.

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# Featured Article

## Sonoma County Pest Control District

By: Cindy R. Kron, North Coast IPM Advisor, University of California Statewide IPM Program and Cooperative Extension, Sonoma, Napa, Mendocino, and Lake Counties

California's climate and soil creates a very special place for agriculture. With over 400 commodities, California is responsible for producing more than 33% of the vegetables and 75% of the fruits and nuts in the country although we only occupy 4% of the land that makes up the United States.

According to the California Department of Food & Agriculture's (CDFA) most current annual crop report (2021), California's farms and ranches received \$51.5 billion in cash receipts for their outputs of which grapes (wine, table, raisins) are ranked second bringing in \$5.23 billion. Specifically in Sonoma County, winegrapes were the number one crop, bringing in \$541 million and accounting for over 66% of the total crop value in Sonoma County for 2021. Winegrapes are very important to Sonoma County's local economy and efforts to protect the future of this commodity, along with the numerous jobs that it creates, is of the utmost importance.

Historically, the formation of pest control districts has played the role of organizing industrywide and areawide efforts of a specific commodity to address controlling and responding more effectively to insect pests and diseases that affect a specific crop. A grassroots effort to form a pest control district in Sonoma County started in late 2020 after numerous winegrape growers, viticulturists, and industry professionals struggled with how to control the invasive vine mealybug below economically damaging levels. Although the formation of a pest control district is the first effort of its kind in Sonoma County, pest and disease control districts have a long history in California agriculture dating back to 1922.

It is hard to imagine that any pest or disease can bring down the Sonoma County winegrape industry that has grown grapes since 1812, but this view is shortsighted.

Florida's citrus industry is an unfortunate example of what can happen when an industry does not organize, adopt, and fund a proactive approach to prevent and address insect pests and diseases. Asian citrus psyllid (ACP) is an invasive species that can spread a bacterium in citrus trees that causes a disease called Huanglongbing (HLB), also known as citrus greening. This disease can affect all varieties of citrus and depletes the tree of needed nutrients making them unproductive within a few years.

A citrus pest control district did not exist when the Asian citrus psyllid was first detected in Florida in 1998. There was no coordinated effort made by the industry because the bacterium that causes the disease had not been found in Florida. It was not until 2005 that Huanglongbing was first detected in Florida citrus. Due to Huanglongbing, in the span of 15 years, from 2002 to 2017, citrus fruit production fell 74%, the number of citrus growers went from 7,389 to 2,775 (62% loss), juice plants dropped from 41 to 14 (65% loss) and packing houses dropped from 79 to 26 (67% loss). Huanglongbing has spread extensively in Florida infecting over 90% of their citrus trees. A once \$10 billion industry has lost 80% of its annual value and with that, the livelihoods of thousands. Currently, there are still noticeable effects on fruit quality even though citrus growers in Florida now spend three times the money to produce half the fruit.

The California Winegrape Pest and Disease District Law of 1993 (California Food and Agricultural Code, Division 4, Chapter 12, Sections 6200-6290) currently exists which allows Sonoma County to establish a pest control district with an assessment maximum of \$5 per acre. This per acre assessment cannot increase above \$5 per acre without further legislation passing and the Sonoma County Pest Control District Coalition is not pursuing

# Wrath

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## WHEN CONTROL MATTERS ABSOLUTE BOTANICALS DELIVER!

legislation for an increase. With almost 60,000 acres, at the assessment maximum, nearly \$300,000 annually would be allocated to address areawide pest control issues in Sonoma County.

Of the 18 pest control districts in California, over half are for the citrus industry to prevent the establishment of the Asian citrus psyllid and subsequent spread of Huanglongbing in commercial plantings of citrus in California. Huanglongbing has been detected in urban areas of California, but no detections have been found in commercial citrus, no loss of production and no loss of growers due to Huanglongbing have been documented from 2010 to 2021. This is largely attributed to the efforts of pest control districts in the different citrus regions of California approaching Huanglongbing and Asian citrus psyllid as a community problem and disease instead of individual efforts.

It is true, pest control districts cost the growers money, but 1) the elected board would be comprised of Sonoma County grape landowners or their appointed agents that work in Sonoma County, 2) the elected board decides what the pressing needs of the grape industry in Sonoma County are and which projects to support with this funding and, 3) the board has the means and the ability to quickly respond, in an areawide effort, to new invasive species that threaten grape production in Sonoma County.

In 2000, Napa County experienced severe economic losses from Pierce's disease and there was an industry concern over the possible introduction of an insect vector, the glassy-winged sharpshooter. State funding to combat this issue was not enough to meet the needs of Napa growers and to successfully protect the Napa wine industry. In 2002, Napa decided to establish a pest control district aimed at providing funding for inspection, detection, prevention, and education with regards to Pierce's disease and glassy-winged sharpshooter. In 2006, the Napa County growers voted to expand the scope of the district to include programs for detection and control of other grapevine pests and diseases. The Napa County Pest Control District has operated successful programs that include the inspections of nursery stock shipments entering Napa for glassy-winged sharpshooter; European grapevine moth trapping; the detection, areawide trapping, and mating

disruption, education, and outreach with regards to vine mealybug, grapevine red blotch vectors, alternative forms of ant control, and others for 20 years now making their investment worthwhile for their growers and the Napa wine industry as a whole.

Many grape growers in Sonoma County currently struggle with keeping vine mealybug under economically damaging levels. Even though European grapevine moth has been deemed eradicated, the possibility of a reintroduction into Sonoma County still lingers. In addition, a known threat to grapevines, the invasive spotted lanternfly, has established in 14 eastern states, and is knocking on California's border with a recent discovery of spotted lanternfly eggs at the California Department of Food and Agriculture agricultural checkpoint in Truckee on a shipment of firewood trying to cross the border into California. In addition, multiple dead adults have been found in cargo planes landing in California. This insect can aggregate in very high numbers on grapevines producing copious amounts of honeydew and causing vine death.

An ounce of prevention is worth a pound of cure. We need not wait until Sonoma County is faced with huge losses to act. The Sonoma County Pest Control District Coalition (SCPCDC) is currently in the petitioning process seeking signatures by winegrape landowners in Sonoma County to support the formation of the Sonoma County Pest Control District. It is our responsibility as members of the wine industry: vineyard managers, viticulturists, pest control advisers, landowners, growers, winemakers, researchers, winegrape buyers, and any contributing member to the winegrape industry, to rally for protecting the winegrape industry in Sonoma County of which our livelihoods depend, and that of the generations that come after us.

To learn more about the SCPCDC efforts, sign the petition, or contact the coalition, please visit [sonomacountypcd.org](http://sonomacountypcd.org) ■

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You will see us throughout our industry, bringing the breadth and depth of our services to California growers. You will see us in your community, working to improve agriculture and our connected economies.

With Grow West®, growers and suppliers can be assured they are working with the same quality organization. With the same extensive agronomic expertise, great personal service and support that cares for you and your business' success.

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**SUPPLIERS** keep a partner who represents products with world-class agronomic expertise, but with more focus and consistency across our entire marketing areas.

**OUR BUSINESS** keeps opportunities to develop long-term customer relationships, but with more integrated services that better fit producer needs.

**CALIFORNIA AGRICULTURE** keeps a true community partner that will be here for decades to come.



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Grow West® symbolizes the very best of California agriculture. Inside our company, you will find a forward-looking focus on innovation and a genuine desire to help our customers succeed. Long standing local knowledge, experience, and the aspiration to improve and serve the communities where we live and work are at the core of our brand.

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- Buying Partnerships
- Technical Services
- Financing Program
- Safety Training and Consulting
- Surfactant and Micronutrient Manufacturing

## Quick Facts

- A local independently-owned operation
- Owners in Aligned Ag Distributors along with Winfield United, one of the largest purchasing entities of agricultural chemicals in the United States
- Entrepreneurs run our locations and store fronts with the support of our management and administration
- Less than 3% turnover and many multi-decade employees
- 15 retail, farm supply and wholesale manufacturing locations throughout Northern California
- 250+ employees, 5,000+ customers, Support 80+ organizations in 15 counties



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# 2024 is Bringing Changes to Sponsor Responsibilities for CE Hours & Reporting!

MONDAY, OCT. 16<sup>TH</sup>, 2 PM | GRAND SIERRA RESORT, RENO NV



We have invited California Department of Pesticide Regulation (CDPR) to present on the impact of new regulation changes brought on by the update of Federal EPA Standards (40 CFR Park 171), specifically, the impact this will have on hosting and reporting CDPR CE starting January 1, 2024. After DPR's presentation, stick around to hear from CAPCA staff on the tools and resources we want to make available to CE sponsors in 2024 to help with compliance!

*This workshop is offered free of charge to all CE sponsors, regardless of event registration.* Please note there is no CE credit for attendance.

Can't make it? CAPCA is working to record the Sponsor Training Session to help sponsors in the future! Please email [conference@capca.com](mailto:conference@capca.com) to get on the CAPCA sponsor outreach list.

CAPCA also hosts the CE Hours Reported trademark. The mark was created to help CAPCA members register for education with confidence that their completed CE hours will be reported and will appear on their official certificate promptly. CAPCA is offering this trademark at no cost to CE sponsors dedicated to advancing the professionalism and educational training of all DPR license holders.



# Innovative Conversations: Changing the Way We Talk About Pesticides

SATURDAY, OCT. 14<sup>TH</sup>, 12:00 - 4:00 PM | CRYSTAL BALLROOM, GRAND SIERRA RESORT, RENO NV



**(FREE)** It can be difficult to talk with elected officials, family, friends, and others in your community about pesticides. Join CropLife America Vice President of Communications Genevieve O'Sullivan and Director, State Government Affairs, Western Region Scott Dahlman for a four-hour interactive training based on consumer research and learn new tactics and messages to effectively communicate your story. We have developed this training to help you feel more confident when addressing questions and concerns about pesticides.

ADVERTORIAL

# BETTER TOGETHER

## Azadirachtin + Neem Oil

**Debug**<sup>®</sup>



**Written by:** Dominique Ebbenga, Ph.D., R&D Entomologist, MGK

**Some things just work better together:** pollinators and plants, bees and their hives, ants and aphids. So what “better together” combinations can be found in our pest management strategies? One answer to that question is Azadirachtin and Neem oil. This combination has an edge on the current products in the market that use either active ingredient alone.

But first, where do these compounds originate from? These compounds are harvested from the Neem tree, *Azadirachta indica*, seeds. After harvesting seeds from the Neem tree, Azadirachtin and Neem oil are separated by solvent extraction or pressing. Neem oil is a by-product of the seed extraction process, where Azadirachtin is the compound that exhibits the most insecticidal activity.

While both Neem oil and Azadirachtin are harvested from the same seed, they differ in impact to insect pests. Specifically, literature supports Neem oil’s ability to act as a suffocant and discourage insect feeding on the treated crop. Whereas Azadirachtin can act as an antifeedant and insect growth regulator.

This combination of Azadirachtin and Neem oil offers broad-spectrum control for various crops and their associated pests. The advantage comes from having multiple modes of action, acting as a suffocant, insect growth regulator, and antifeedant, simultaneously. It is also important to note these active ingredients have demonstrated activity against mites,

plant disease, and nematodes, further expanding the range of pests controlled.

With all these benefits, it may be surprising to know there’s only one brand on the market that combines these two ingredients into one solution: Debug. This convenient and versatile product line includes four different formulations to meet your needs.



**Debug Trés** when you need increased residual efficacy with a higher Azadirachtin content



**Debug Turbo** to get broad spectrum crop protection and fungicidal control



**Debug Optimo** is ideal for flexible applications at a wider temperature range



**Debug ON** for a higher Neem oil content that controls mildew and fungus, plus affects insects at all life stages

Visit [MGK.com/Debug](https://MGK.com/Debug) to learn more about these combination products or stop by **Booth #519 at the CAPCA Annual Conference** to meet the team at MGK! We’re excited to help you find the Debug formulation that’s perfect for your needs.

Visit [mgk.com/debug](https://mgk.com/debug) to learn more



# Member Benefits

**Membership with CAPCA is the best way to take your involvement, education, and skill set to the next level. There are three levels of membership available:**

## ACTIVE MEMBER

Only California State licensed Pest Control Advisers are eligible for Active Membership in the Association.

## ASSOCIATE MEMBER

An associate member is any person not licensed as an agricultural Pest Control Adviser, but may hold other licenses issued by the State of California, and wants to promote the purpose of the Association.

## STUDENT MEMBER

A student member is a student regularly enrolled in a college or university, majoring in biological or agricultural sciences and preparing for a career in pest management. A student member may not hold a DPR license.

**SCAN TO JOIN**



**SIGN UP FOR A CROP TEAM**



**SIGN UP FOR A MEDIA KIT**





# THE THIRIPS THREAT

## HOW TO CONTROL THIRIPS AS AN INSV VECTOR AND PROTECT YOUR CROP



Impatiens Necrotic Spot Virus Infected Lettuce

The threat of Impatiens Necrotic Spot Virus (INSV) grows in the southwestern United States, especially for California lettuce growers. Carried by thrips, INSV poses a significant risk to various crops throughout the region, but particularly lettuce crops in Salinas Valley. Infected plants may have stunted growth, necrotic spots, chlorosis and leaf curling, which could lead to reduced yield. Growers are leveraging Lannate® as a knockdown solution.

### Lannate: No Ordinary Insecticide

Lannate by NovaSource is a fast-acting carbamate insecticide with a powerful punch against a broad range of pests, including Western Flower Thrips, Lettuce Aphid, Beet Armyworm and Cabbage Looper. This mode of action makes Lannate a highly effective insecticide against thrips, as it provides rapid control and prevents thrips from causing further damage to crops. Lannate is effective against larvae, nymphs and adults, and can control eggs by direct contact.

Lannate's translaminar activity gives the active ingredient, methomyl, the ability to move from one side of the leaf to the other, making it extremely effective in combating insects that feed on the top and bottom of the leaf. This means thorough protection of your crop without needing complete coverage, and safeguarding growers, limited resources.

### Flexible Formulations

Lannate is available in two formulations: a water-soluble powder (Lannate SP) and a water-soluble liquid (Lannate LV) for flexible application options depending on the specific needs and preferences of farmers. Lannate may be applied as a foliar spray

or via chemigation, providing convenience and compatibility with various farming practices.

Lannate does not accumulate in plant tissue or soil, and there are no damaging effects on nitrifying bacteria or other soil microorganisms, which means growers can plant their next crop with more confidence. Its relatively short residual and pre-harvest interval means growers can enter their fields soon after applying and harvest their crop when its ready.

As a carbamate, Lannate is highly effective in resistance management programs with other insecticides that have a different mode of action. Some thrips species have already developed resistance to the newest insecticides on the market, reinforcing the vital need to follow sound resistance management practices.

### A Broad Spectrum of Protection

Thrips can pose a significant threat to lettuce crops, but with the right insecticide such as Lannate, farmers can effectively manage thrips populations and protect their crops from damage. Lannate offers broad-spectrum activity, quick knockdown, flexible application, efficacy against multiple stages of insect pests, and short residual and pre-harvest interval, making it a trusted resistance management tool for thrips control. By incorporating Lannate into their pest management program, farmers can ensure healthy crops and optimize their yields. It is essential to follow the label's instructions, including proper application rates and safety.

**Lannate® SP**      **Lannate® LV**  
Insecticide                      Insecticide

Find out more and view the label by visiting [NovaSource.com/Lannate](https://www.novasource.com/Lannate).



Call 800.525.2803 | Email [info@novasource.com](mailto:info@novasource.com) 2910 N. 44th Street Suite 100 Phoenix, AZ 85018

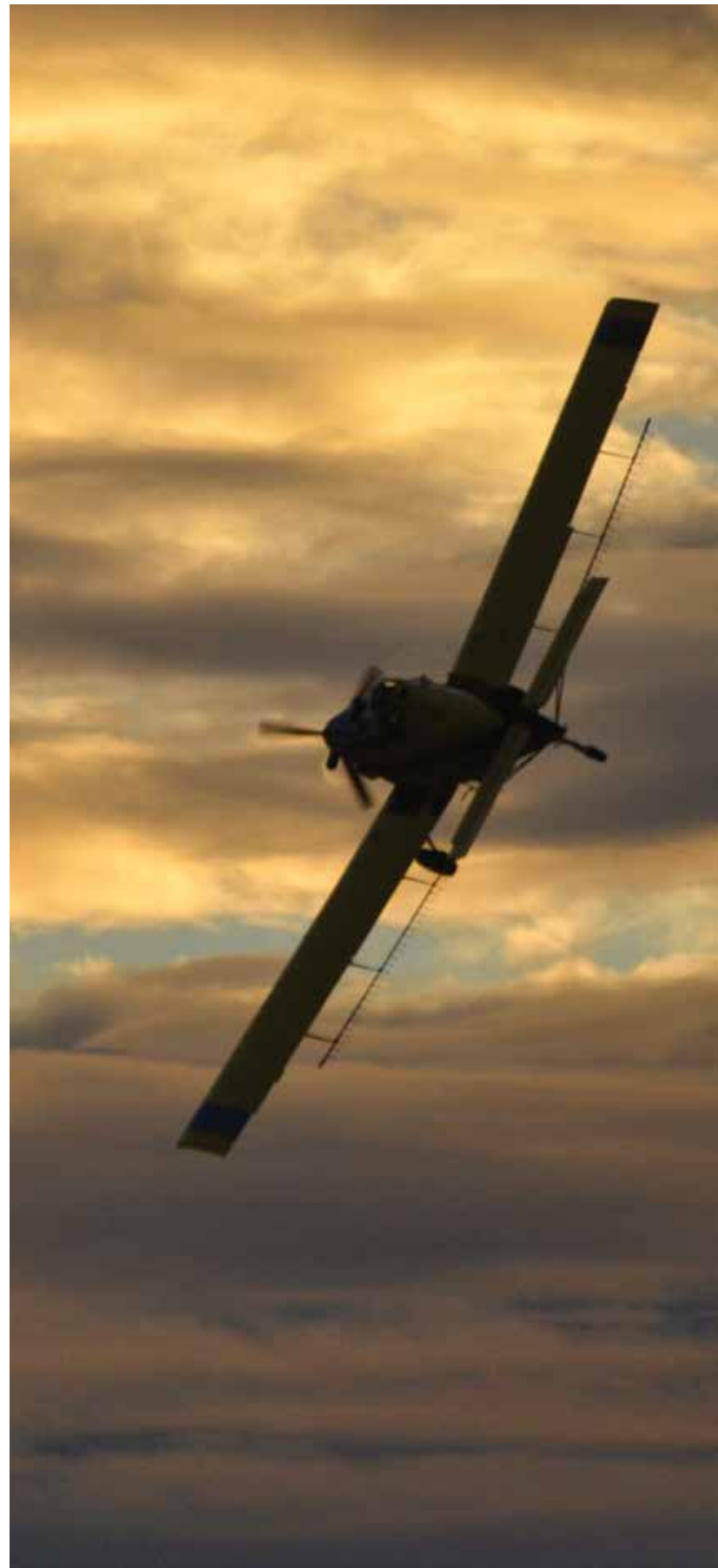
*NovaSource®, Lannate® LV, and Lannate® SP are registered trademarks of Tessengerlo Kerley, Inc. ©2023 Tessengerlo Kerley, Inc. All rights reserved.*

# Mission & Purpose

**CAPCA's mission** is to facilitate the success of the PCA and to represent our 3000 members who provide pest management consultation for the production of food, fiber and ornamental industries of California.

**CAPCA's purpose** is to serve as the leader in the evolution of the pest management industry through the communication of reliable information.

CAPCA is dedicated to the professional development and enhancement of our members' education and stewardship, which includes legislative, regulatory, continuing education and public outreach.





# SUPPRESS<sup>®</sup>

## Herbicide EC

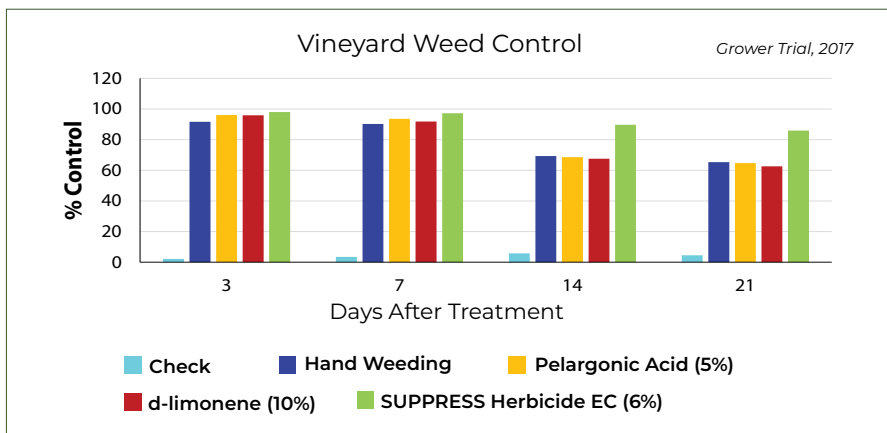
### YOUR YEAR-ROUND ORGANIC SOLUTION FOR WEED CONTROL AND DESICCATION

**SUPPRESS<sup>®</sup> Herbicide EC** is the first and trusted leader in certified organic weed control. With years of grower-proven efficacy and university testing, **SUPPRESS<sup>®</sup>** consistently provides fast and effective broad-spectrum burndown on a wide variety of post-emergent grasses and weeds.

#### ADVANTAGES

- Excellent tool in IPM programs
- Helps break chemical resistance
- No pre-harvest interval or MRLs
- Low-foaming and easy-to-use
- Highly effective pre-harvest desiccant

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# Understanding CE Hours Reported



The CE Hours Reported mark was created in an effort to ensure that CAPCA members are registering for continuing education that will be reported and appear on their official printout in a timely manner. Your CE hours and renewal are important to CAPCA; you will start to see this mark appear for sponsors who have committed to report your attendance to CECPM within seven business days of the meeting/online CE completion. We hope this allows you to register with the assurance that your Official Cert will include all your CE hours when you are ready to renew.

For questions, please contact the CAPCA office at [support@capca.com](mailto:support@capca.com).

## CURRENT PARTNERS:

- Association of Applied IPM Ecologists
- Buttonwillow Warehouse
- California Farm Bureau Federation
- Fruit Growers Laboratory, Inc.
- Oro Agri
- UC IPM Webinars



## CE Hours Reported Page Updates:

### CFBF Webinar - Mixing and Loading

**Date:** 10/26/2023

**Time:** 9:30 a.m. - 10:30 a.m.

**Contact:** Anna Genasci,  
[annag@stanfarmbureau.org](mailto:annag@stanfarmbureau.org)

**CE Hrs:** 1.0 (0.5 other & 0.5 Laws)

### CFBF Webinar - Pesticide Use Around Bees

**Date:** 11/30/2023

**Time:** 9:30 a.m. - 10:30 a.m.

**Contact:** Anna Genasci,  
[annag@stanfarmbureau.org](mailto:annag@stanfarmbureau.org)

**CE Hrs:** 1.0 (1.0 Laws)

**LOOK FOR THE MARK!**



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for human  
progress**

Most agricultural top soils and irrigation water contain very low concentrations of iodine, and it is often not available for plant uptake.

In a series of trials combining different methods, scientists have discovered that plants need iodine, a nutrient which is not often spoken about in agriculture. Scientists in Pisa and Naples describe in a publication just accepted in the peer-reviewed journal, *Frontiers of Plant Science*, that plants bind iodine in at least 82 proteins in leaves and in roots.

Studies show that plants need iodine for timely flowering, increased seed production, biomass accumulation, and efficient photosynthesis. Additionally, iodinated proteins are involved in the activation of an early warning system that defends the plant against damage from abiotic and biotic stress.

*Most agricultural top soils and irrigation water contain very low concentrations of iodine*

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K Plus**

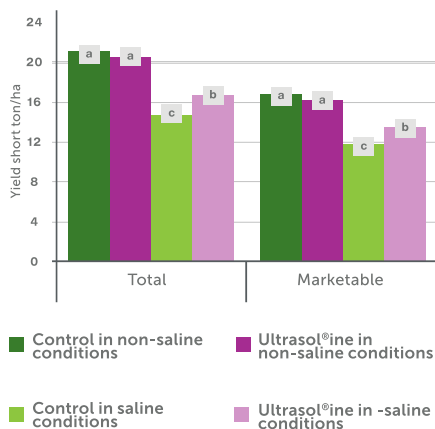


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**SQM Ultrasoline<sup>®</sup> produced the highest yield per acre versus other standard potassium nitrate sources**



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A study was conducted by Pacific Ag Research, in Santa Maria, California, where Ultrasoline<sup>®</sup> produced the highest number of marketable strawberries versus other standard potassium nitrate sources.

*Ultrasoline<sup>®</sup> K Plus guarantees the administration of an adequate dose of iodine in all crop stages*

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**Advertorial**

## Ultrasoline<sup>®</sup> K Plus

*provides the optimal amount of iodine to the crop*

*Content provided by SQM North America*

For optimal crop production, iodine should be supplied to crops at the right dosage. Ultrasoline<sup>®</sup> K Plus contains two macronutrients essential for plants, potassium and nitric nitrogen, and in addition, iodine.



### Iodine is needed for

- *Timely flowering and fruit production*
- *Photosynthesis and sugar production = increased biomass*
- *Root growth, defense from stress and calcium signaling*



Scan for further details

Source:  
Evidences for a nutritional role of iodine in plants. C. Kiferle, M. Martinelli, S. Gonzali, S. Beltrami, P.A. Salvadori, K. Hora, H.T. Holwerda, A. Salzano, A. Scaloni, P. Perata. January 2021, *Frontiers in Plant Science*, DOI: 10.3389/fpls.2021.616868



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# CE HOURS REPORTED

Understanding how your PCA License Continuing Education Requirements are Tracked and Reported

## CURRENT FRAMEWORK FOR CE HOURS TRACKING

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### CAPCA

CAPCA provides members a printout of hours (Official Certificate) for license renewal.

CAPCA encourages and directs sponsors to report hours to CECPM. (use scantrons/report hours of attendees)

---

### CECPM

CECPM provides and processes scantrons from Sponsors for easy hours tracking.

CECPM maintains a master database of all CE hours for PCAs, QAL, and QACs reported by Sponsors through scantrons or Excel upload.

CECPM provides a total hours summary to DPR to streamline renewals and audits. DPR uses this total hours report to outreach to licensees who have achieved their hours early to renew early.

*CECPM is a third-party database.*

---

### DPR

DPR approves all DPR CE course hours for sponsors.

DPR renews license utilizing CECPM total hours report and Official Certificate for CAPCA members.



Look for the CE Hours Reported seal to ensure your hours are being reported and appear on your official certificate.

# MATING DISRUPTION AS A CRUCIAL COMPONENT OF YOUR NAVEL ORANGEWORM IPM PROGRAM



Navel Orangeworm, *Amyelois transitella*

**CIDETRAK<sup>®</sup>  
NOW MESO<sup>™</sup>**

MATING DISRUPTION PRODUCT  
FOR NAVEL ORANGEWORM IN  
ALMONDS, PISTACHIOS & WALNUTS

## TURNED ON 24-7!

- **BETTER** Pheromone Distribution
- **NO**-Maintenance!
- **NO**-Second Guessing!
- **Season-long control through post-harvest**

**MINIMIZE LOSS AND  
MAXIMIZE  
PROFITABILITY**



— **Thomas Martin,**  
Regional Technical Representative,  
Trécé, Inc.

READ MORE go to:  
[trece.com/field-notes/  
optimizing-your-2023-control-  
program-for-navel-orangeworm-now/](https://trece.com/field-notes/optimizing-your-2023-control-program-for-navel-orangeworm-now/)



Utilizing a thorough Navel Orangeworm (*Amyelois transitella*), or NOW, control program is crucial to protect your crop and preserve yields. Five main components should be used to create a strong defense: Winter sanitation, Monitoring, Mating Disruption, Insecticides, and Timely harvest. By focusing on the above five principles, your orchard will have the best support possible in the fight against NOW.

As one of the core principles of NOW control, mating disruption covers the orchard with NOW's naturally produced pheromones which makes it more difficult for males to sense the real female pheromone. This results in fewer males mating with NOW females and leads to a reduction in fertile eggs laid on new crop nuts. UC and industry research has shown this process leads to a 50% or more reduction in nut damage due to NOW. Typically, mating disruption is used in conjunction with the other 4 components of a quality IPM program for NOW to ensure you keep your pest damage in check.

The damage reduction due to mating disruption has a big impact on the grower's bottom line. Not only are growers preserving their yields by reducing damaged nuts in the field, but they're also able to hit higher quality bonuses at the processor by lowering their damage.

These two factors can equate to big savings at the end of the season. A study by UC's David Haviland shows that mating disruption typically pays for itself at around 1% predicted damage in almonds (Haviland 2021). Additionally, orchards with high yields and higher damage can improve their margins, as NOW mating disruption still provides damage reduction at higher pest pressures. Given these conditions where mating disruptions provides a positive ROI, most orchards would benefit from the use of mating disruption.

When choosing your mating disruption, Trécé's CIDETRAK<sup>®</sup> NOW MESO<sup>™</sup> offers benefits that are unmatched in the market. MESO<sup>™</sup> dispensers utilize 15-28 dispensers/acre, based on the extent of your pest pressure, to ensure thorough pheromone coverage in your orchard – even in oddly shaped blocks. Additionally, as the only available passive dispenser, CIDETRAK<sup>®</sup> NOW MESO<sup>™</sup> releases pheromone 24/7 for the length of the season. There are no mechanics or adjuvants involved, which allows the product to be used in organic orchards. Once CIDETRAK<sup>®</sup> NOW MESO<sup>™</sup> is applied in your orchard, you can be confident NOW mating is being prevented and your crop is protected all season long.

Citation: David R Haviland, Jhalendra P Rijal, Stephanie M Rill, Bradley S Higbee, Charles S Burks, Chelsea A Gordon, Management of Navel Orangeworm (Lepidoptera: Pyralidae) Using Four Commercial Mating Disruption Systems in California Almonds, Journal of Economic Entomology, Volume 114, Issue 1, February 2021, Pages 238–247; <https://doi.org/10.1093/ee/taaa297>

**PHEROCON<sup>®</sup>**  
MONITORING SYSTEMS  
FOR NAVEL ORANGEWORM IN  
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# Job Opportunities

## Account Manager – California

Company: Precision Laboratories

**Area of Responsibility:** The ideal candidate would reside in California (Kern, Tulare, Fresno, Kings, Merced, Madera, Stanislaus counties) and is responsible for supporting the company's sales activity with assigned customers in California and Arizona.

### Required skills:

- Bachelor's degree in Agriculture; Ag business, Soil Science, Ag Technologies, or related fields.
- 10+ years of sales experience in agriculture required. Sales experience with specialty crop production inputs (i.e. adjuvants, biologicals, plant nutrition, etc.) and (or) crop protection chemistry preferred.
- Excellent communication (oral and written) skills.
- Excellent interpersonal and presentation skills.
- Intermediate computer skills; Microsoft Office Suite.
- Ability to travel 60% of the time.
- Pest Control Adviser license, including certification in categories A through G.

### Physical Demands & Work Environment:

- Work is partially performed in an indoor office setting with extended periods at a computer sitting or standing.
- Physical effort is needed to move, lift, or carry office equipment or supplies.

- Occasionally lift 10-40 lbs.
- Use of computer keyboard, mouse, calculator, and other office equipment.
- Putting up plot signs.
- Walking through fields or customer warehouse/operations.

**Why Choose Us?** At Precision Laboratories we create a unique employment experience by combining a strong company culture with a clear plan for growth. Whether you're very experienced or just entering your career, we will create a stimulating and challenging opportunity. You will have a lot of responsibility and accountability in your position, while being supported by both peers and managers. The business knowledge gained from our fast paced, stimulating environment will add to your learning and expand your capacity to contribute.

<https://www.precisionlab.com/>

**Benefits:** 401(k), 401(k) matching, Dental insurance, Flexible spending account, Health insurance, Life insurance, Paid time off, Vision insurance

**To apply email:** [cstevens@precisionlab.com](mailto:cstevens@precisionlab.com)

To view the full job description please follow the QR Code:







## EFFECTIVE TOOLS TO PREVENT AND COMBAT POWDERY MILDEW AND BOTRYTIS

Fungal plant pathogens are a main cause of considerable economic crop losses each year. Botrytis and powdery mildew are two destructive diseases that can quickly and significantly impact a wide variety of California crops. It is important to find effective disease management solutions to prevent and minimize crop damage.

### BOTRYTIS

*Botrytis cinerea*, the pathogen responsible for gray mold diseases, is a highly successful pathogen due to its flexible infection modes, high reproductive output, wide host range, and ability to survive for extended periods. Botrytis overwinters on plants, in or on the soil, and as sclerotia. Symptoms appear as grayish colored soft mushy spots on leaves, stems and flowers. Spores develop when conditions are optimal and are moved by wind or water onto blossoms or leaves, where they germinate and can enter the plant through wounds on plant surfaces.



### POWDERY MILDEW

Powdery mildew is a fungal plant disease that causes a powdery growth on the surface of leaves, buds, shoots, fruits, and flowers. It does not need a vector to spread.



Spores are carried by air currents from a proliferation site to new infection sites, where they can stunt and distort plant growth. Cultural and biological practices may reduce the risk of infection but standard fungicides from multiple chemical groups are an effective way to manage powdery mildew and limit chemical resistance.

**SAN Agrow** products can be used in an Integrated Pest Management program that can be implemented throughout the growing season to optimize crop quality and yield, and reduce resistance issues. At SAN Agrow, we have developed effective organic and sustainable crop protection and nutrition solutions that provide comparable efficacy to conventional inputs. SAN Agrow products are MRL exempt, have zero or low entry intervals and can be used up to the day of harvest.

Contact your regional sales representative for more information about the SAN Agrow product line, application timings and tank mix compatibilities.

### SAN Agrow offers a toolbox of solutions to help manage botrytis and powdery mildew diseases throughout the season.

Get ahead of disease infection with preventative products such as BOTECTOR®. As disease pressure increases, DART® and GARGOIL® can be utilized as curatives to manage disease once it sets in.

### DART® Fungicide EC

DART® is a great fungicide to include in your cleanup sprays, and is an excellent tool for IPM programs to combat resistance issues. Apply DART® starting at initial powdery mildew infection pressure, and continue through the beginning of bloom. Protection against powdery mildew can also help prevent Botrytis infection. Powdery mildew leaves behind microcracks on plant surfaces, which become entry points for secondary fungi like Botrytis. DART® is a contact fungicide, therefore non-systemic. Good coverage is important.

### BOTECTOR® Biofungicide

BOTECTOR® works through competitive exclusion to stop disease before it gets started. Beneficial microorganisms in BOTECTOR® out-compete the Botrytis pathogen for space and nutrients, creating a protective barrier between the plant and potential disease. In berries, BOTECTOR® applications can be made from the beginning of bloom until the end of harvest. For additional crop application timings and rates, contact your local SAN Agrow representative.

### GARGOIL® Insect, Mite & Disease Control

GARGOIL® provides fast and effective broad spectrum control of fungal diseases, including Botrytis and powdery mildew. Apply GARGOIL® when disease pressure is low to limit spread of disease. It can be applied throughout the growing season up to day of harvest. No PHI or MRLs, and no limit on the number of applications per year.

Call (760) 599-8855 or visit [www.san-agrow.com](http://www.san-agrow.com) to learn more.

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# Chapter Events

## Central Coast Chapter

July Board Meeting



CE Meeting



## Ventura Chapter

Ventura Board Meeting



# Central Valley Chapter

## Central Valley's Bug Stompers Golf Tournament



*Let us know what is happening in your chapter!*

Send email to: [chapter@capca.com](mailto:chapter@capca.com)



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