Course Title: CAPCA Conference & Agri-Expo – Sunday Label Update **Course Date(s):** 11-03-2019 **Start time:** 1:00 p.m. **End time:** 5:00 p.m.

Course Description: How does this topic focus on pest management or pesticides?

The topics listed below cover information critical for Pest Control Advisers in California. Updates on emerging diseases/pests specific to this region's agriculture.

Start and end time or Duration of session	Speaker name(s) and Affiliation(s)	Title/Topic of session	Registration #	Main points of session
1:00p	UPL/ Arysta	Banter Mitecide	70506-322	Each presenter will make a presentation covering the pesticide/product label requirements, changes/updates to label instructions, application techniques and requirements for the products including use of product, protection/worker safety requirements, proper storage and disposal. Each Speaker will cover the best management practices for their product(s) and the benefits and use of products for pest management. One presenter will provide software innovations to assist in writing recommendations to be in compliance with DPR laws & regulations (Agrian).
1:10p	Agrian	Label Update software	Not required	
1:20p	Corteva Agriscience	**Sequoia (section 18 for strawberries)**	62719-623	
1:30p	TKI- Crop Vitality	Sevin SL, Surround	432-1227	
1:40p	BioSafe Systems	OxiDate 2.0; PerCarb; SaniDate WTO; TerraStart	70299-12, 70299-15, 70299-19, 70299-18	
1:50p	ADAMA	NiMitz	66222-243	
2:00p	Nichino America	Applaud, Centaur	71711-21	
2:10p	FMC	Exirel; Altacor; Verimark	279-9615, 279-9607, 352-860	
2:20p	AeroVironment	Drone Technologies for recommendations	Not required	
2:30p	True Organic Products			
2:40p	Jet Harvest Solutions	Jet Ag, Peroxyalettic Acid	81803-6	
2:50p	Ocean Organics Corp	Asco Seaweed Extract		
3:00p	Brandt	Brandt Organic Aleo	25(b) material	
3:10p	Westbridge Agricultural Products	Botector	86174-3	
3:20p	Earthsol	Durivilea, Ascophyllum		

3:30p	HELM Agro US	Helmstar Plus fungicide	74530-69
3:40p	Gowan USA	Magister, Torino & Ecoswing	10163-322, 8033-103-10163, 10163-357
3:50p	Plant Food Systems, Inc	K-Phyte 7LP	73806-1
4:00p	Trece, Inc	CideTrak	51934-10
4:10p	Symborg	TrichoSym Bio	Biological Inoculant
4:20p	HCT, LLC	WaterSOLV - We do not and are not required to register with CDPR, we are required to register with CDFA. Plant vitality through nutrition creates natural pest resistance. Treatment of water prevents problems associated with bacteria, coliforms, e.Coli. These are specific areas where CA has had some misfortunes. While we've been accredited by other agencies, i.e. Arizona, we hope CA will recognize the importance of water's effect on pests and pesticides and allow us to present our materials. Not only are we making agronomy healthier and more pest resistant, we are producing 10% more crop with 20% less water and 20% less expense.	ecoli prevention
4:30p	Certis USA	PFR-97	70051-CA-001
4:40p	BASF	Versys/ Safina Insecticide	7969-389
4:50p	CalTec Inc	AG DE-cide	7655-1-71074

CAPCA Conference & Agri-Expo –

Course Title: Monday **Course Date(s):** 11-04-2019 **Start time:** 7:30 a.m. **End time:** 5:30 p.m.

Course Description: How does this topic focus on pest management or pesticides?

The topics listed below cover information critical for Pest Control Advisers in California region. Updates on emerging diseases/pests specific to this region's agriculture.

Start and end time or Duration of session	Speaker name(s) and Affiliation(s)	Title/Topic of session	Main points of session
7:30a-8:00a	Business meeting and Chairman info		
8:00a-8:15a	James McClenahan CAPCA Moderator	Welcome and CE Sign-in Procedures Includes – App instructions	Presentation will cover the types of licenses & certificates (PCA, QAL, and QAC), the minimum requirements and the different categories one may hold (Category H, M, N, P or Q). Information will be given on record keeping and submission for license renewal.
8:15a-8:45a	Jaime Johansson California Farm Bureau Federation	Farming 2024	Utilizing Integrated Pest Management programs, farmers and PCAs are constantly adapting to controlling new pests and disease pressures, while managing resistance of existing pests and diseases. Science has helped provide softer crop protection materials, as well as improved genetics to reduce environmental and worker hazards. Success in the field starts with competent and successful engagement in the development of regulatory policies which are not counter-productive to what we all want…… wholesome food, a healthy environment and a vibrant economy.
8:45a-9:15a	Doug Theil CAAA	New Aerial Aircraft Technologies. How they affect pesticide recommendations.	New technologies for Aerial aircrafts and how PCAs can write recommendations to updated technology. Overview of Aerial application technology and equipment, aerial spray dynamics with an emphasis in Tree crops, Identification of sensitive areas surround application site, impact of tank mixes on droplet spectrum and how all these variables impact Drift mitigation.
9:15a-9:30a	TBD CAPCA Member	AB 1480. What does it mean for you and your CDPR license Renewal.	Discussion of the regulatory bill, how to avoid penalties, and professionalism in continuing education seminars. Presentation to be developed by Ruthann Anderson (CAPCA) and Joe Damiano (CDPR)

9:30a – 10:00a	Tim Pelican President CACASA	CACASA Update	A review of pesticide-related challenges and concerns, based on oversight by agricultural commissions of PCA written recommendations.
10:00a-10:15a	Break		
10:15a-11:00a	Mark Dufau AeroVironment Director of Business Development	Drone Technology	How PCA's can use aerial imaging to improve the efficacy of Scouting and Spraying. How analyzing Data gathered can lead to targeted pest management.
11:00a-11:30a	Daren Williams Senior Director, Global Communications Almond Board of California	Almond Orchard 2025 Goals: Setting a Destination for Almond Orchard of Tomorrow	Recognizing our local role in California agriculture and global role as a powerhouse in almond production, we're working to grow almonds in better, safer and healthier ways, protecting our communities and the environment. This includes finding ways to control pests with more environmentally-friendly pest management tools. PCAs will play a critical role in best management practices regarding managing pest pressures, pesticide applications and identifying emerging pests.
11:30a-12:00p	Jeff Case CropLife America	Cultural Shift away in Active Ingredients such as Glyphosate and other chemicals. leading the discussion on uses and alternatives for weed management	The presentation will focus on the ongoing challenges facing the crop protection industry at the federal level and their effect on state and local level, with an emphasis on industry efforts to defend the science used in the development of the products and the regulatory framework in place to protect health and the environment. Specific examples of regulatory threats to active ingredients in pesticides will be provided, along with strategies to address these challenges. (ie. Gylphosate, and Chlorpyriphos)
12:00p-1:30p	Lunch	LUNCH	
1:30p – 2:15p	Martha Volkoff California Department of Fish and Wildlife	Nutria: Triple Threat to California's Future & Other vertebrate pests	Nutria biology, laws and regulations pertaining to Nutria management, management of Nutria
2:15p – 2:45p	Patrick Simmsgeiger President DWI	What the Muck: Gaining Control of Harmful Algae Blooms	Identification, and treatment of Harmful Algae Bloom (HAB) through double chelated copper algaecides. How to evaluate when bloom is problem, what can be done to treat. Common causes of HABs. Identification of the benthic layer, and its significance in the aquatic ecosystem. Factors that are threatening the benthic layer, such as runoff, chemicals and Algal Blooms. Preventative measures to maintain health.

2:45p – 3:15p	Zach Raven Grower Services Manager Keenan Farms	Sanitation & Importance to IPM	Discussion of case study at Keenan Farms on how we reduced NOW damage on pistachios from 3% to less than 0.5% the following year. The main "tools" I plan to talk about are: Sanitation, Mating Disruption, AF36, and Spray Application. Sanitation: Mummy shake, clean orchard floor, shred, back pack blowers…… Mating Disruption: Using AF36: Seed coated with no toxin strain aspergillus flavus. Applied to orchard floor to combat toxic af spores. Spray Apps: model used to assist on when to spray, speed, coverage, timings.
3:15p – 3:45p	Joshua Huntsinger CACASA Cannabis Workgroup	How to keep your Hemp from accidentally becoming Marijuana. & Regulation updates.	• Update on regulatory status of commercial cannabis and Industrial Hemp (separately) – State licensing and county registration processes and statistics • Clarification regarding status of legal pesticide use on cannabis as it relates to lack of approved pesticide labels • The role of the PCA and issues related to recommendations and label interpretation
3:45p-5:30p	Exhibitor Presentations	Conventional Pest Management Demonstration Manned Exhibits	Exhibitor presentations will include 125 presenters of IPM, pesticide and nontraditional pest management opportunities; pest control products, practices and application techniques & requirements will be demonstrated. – See attachment for list of exhibitors with products and/or relevancy description.

Course Title: CAPCA Conference & Agri-Expo – Tuesday Breakouts **Course Date(s):** 11-05-2019 **Start time:** 7:30 a.m. **End time:** 12:00 p.m.

Course Description: How does this topic focus on pest management or pesticides?

The topics listed below cover information critical for Pest Control Advisers in California. Updates on emerging diseases/pests specific to this region's agriculture.

Start and end time or Duration of session	Speaker name(s) and Affiliation(s)	Title/Topic of session	Main points of session
Breakout Session1			
7:30a-9:06a	Exhibitor Presentations	Conventional Pest Management Demonstration Manned Exhibits	Exhibitor presentations will include 130 presenters of IPM, pesticide and nontraditional pest management opportunities; pest control products, practices and application techniques & requirements will be demonstrated
9:06a – 9:21a	Break		
9:21a-10:09a	David Haviland UCCE Kern County	Mating Disruption for Navel Orangeworm in almonds	Navel orangeworm is the most significant insect pest of almonds and serves as the single largest target for insecticide applications. This presentation will talk about integrated pest management of navel orangeworm in almonds, including sanitation and insecticides, and how to integrate mating disruption into the management system. Topics will include the impact of mating disruption on trap captures, crop losses, decisions regarding insecticide applications, and economics. PCAs in the audience will be asked to assist growers in making sure applications of mating disruption products are reported in monthly pesticide use reports (many applications currently go unreported) to DPR.
10:09a-10:57a	Dr. Jhalendra Rijal UCCE	Brown Marmorated Stink Bug: Identification, Monitoring and pest status in California Crops	Brown marmorated stink bug (BMSB) is an invasive stink bug species which has been causing significant economic damage to crops in much of the United States. In 2013, BMSB was detected in Sacramento residential areas and other several counties after that. Currently, we observed BMSB infestation in a number of peach and almond orchards in the northern San Joaquin Valley, with substantial fruit and nut damage in some cases. Our study showed that BMSB is capable of doing damage to almond throughout the season. We will discuss the identification, pest phenology, and monitoring and control tools for this bug in tree crops in California.

10:57a- 11:45a	Jim Stapleton Kearney Ag Research and Ext Center	Biosolarization for non-fumigant soil pest management and soil health	Our research and extension team addresses alternatives to agricultural soil fumigants, in order to reduce the associated health and environmental risks, and provide for changing consumer preference. By improving the broad-spectrum efficacy and field-level technology of solarization and biosolarization, the team seeks to expand the array of effective alternatives to soil fumigants available to PCAs and end users. Solarization is a well-established pest management practice. Biosolarization, and its cousin anaerobic soil disinfestation (ASD), are newer and lend themselves to further innovations in quality and implementation. The team's work on determining and quantifying factors that influence effectiveness has the potential for tailoring treatments to individual sites and reducing pesticide use throughout California.
11:45a- 12:00p	Conference Chairman PCA		Conference Summary and Questions
Breakout Session 2			
7:30a- 9:06a	Exhibitor Presentations	Conventional Pest Management Demonstration Manned Exhibits	Exhibitor presentations will include 130 presenters of IPM, pesticide and nontraditional pest management opportunities; pest control products, practices and application techniques & requirements will be demonstrated
9:06a – 9:21a	Break		
9:21a- 10:09a	Dr. Igor Lacan UCCE – Urban Forestry	Emerging Issues in Urban Landscape	The world of urban landscape pests never sleeps: new problems arise yearly, and the relative importance of established pests changes over time. I will present an overview of the newly emerging pests that PCAs and pest management professionals (even those who specialize in agricultural crops) are likely to encounter when they work in or near urban areas. Of the new pests, we will cover the Plum bud mite, the ISHBs (Polyphagous and Kuroshio), Boxwood blight, Gold Spotted Oak Borer, Walnut Twig Beetle, South American Palm Weevil, Madrone leafminer, New Phytophthoras, Myrtle rust, and a brief reminder of the Asian Citrus Psyllid/Huanglongbing disease problem. The emphasis will be on early recognition of these new problems, and on BMPs to prevent their further spread.

10:09a- 10:57a	Anthony Griffin Sustainable Solutions Specialist Valent U.S.A. LLC	Organic Integrated Pest Management	Pest management in organic systems relies on preventing pest problems before they can become economically damaging. Prevention, in turn, relies on maintaining a vibrant and healthy soil ecology, as well as supporting biodiversity above ground through diverse rotations, providing habitat for beneficial organisms and reducing habitat for pests. Pest management includes physical and cultural controls as well as OMRI listed pesticides that NOP compliant for organic production. Learn about organic integrated pest management and resources available to PCAs.
10:57a- 11:45a	Paul Cushing Agronomist Golf Course & Sports Turf Consultant	Turfgrass Integrated Pest Management Programs – The Importance of Understanding Water Quality and soil Chemistry in an IPM Program.	1. Sodium is a troublesome problem for growing turfgrass in the Western United States a. Causes: 1. Poor water quality 2. Low amounts of recent rainfall over past 10 years 3. Prolonged periods of drought during summer months in California 4. Increased use of reclaimed water and well water 5. Lack of understanding on the importance of leaching programs b. Results: 1. Increases use of fungicides, insecticides and herbicides 2. Sodium in water combined with prolonged periods of drought in turfgrass lead to these problems a. Sodic and saline soils b. Inability for roots to take up air, water and nutrients c. Increased plant pathogens and/or diseases d. High accumulation of salts in upper root zone 1. Need for gypsum or lime to leach salts e. Buildup of bicarbonates in upper rootzone 1. Need for Calcium and/or acid injection (urea hydrochloride) programs combined with leaching f. Thin turf leading to weed populations and increased usage of herbicides g. Weakened plants increasing insect issues and the need for insecticides h. Test water source periodically 3. Effects of poor water quality on turfgrass a. Weakens turfgrass plant causing higher disease pressure and need for use of fungicides 1. *Chlorothalonil* 2. *Iprodione* 3. *Mancozeb* 4. *Flutolanil* b. Weakens plant which opens wounds for increased insect populations and the need for insecticides 1. *Bifenthrin* 2. *Imidacloroprid* 3. *Acephate*

			c. Thin turfgrass canopies lead to greater weed populations and the need for selective herbicides 1. *Carfentrazone-eythl* 2. *2,4-D+MCPP-P+Dicamba* 3. *Isoxaben* 4. *Foramsulfuron* d. Decreased wear tolerance of turf e. Sodium accumulation in root zone decreases ability for plants to utilize existing nutrients 4. Strategies to combat sodium in soils a. Use of moisture meters, TDS meters and POGO Turf Pro to monitor water and salt contents in soils b. Frequent aerification to improve gas exchange and air movement in soil c. Deep and infrequent watering cycles to flush sodium d. Utilization of calcium (gypsum or hi-cal lime) to leach salts through the root zone e. Frequent applications of Potassium to harden off turf plants and strengthen cell walls f. Use of wetting agents to support in leaching sodium g. Utilization of fungicides in a preventative program for disease suppression 1. *Azoxystrobin* 2. *Metalaxyl-M* 3. *Trichoderma* h. Increased hand watering to cover dry spots 5. Proper ratios needed in soils to support healthy turfgrass and to combat sodium in a fertility program a. Potassium to sodium ratio 1. At least 3-5 parts potassium to 1-part sodium b. Calcium to Magnesium ratio 2. At least 6 parts calcium to 1-part magnesium c. Soil's research shows that these proper ratios will lessen the need for chemical applications: fungicides, insecticides and herbicides 6. Importance of 6:1 Calcium to Magnesium ratios in a base saturation program a. Increased flocculation and ability for soils to release water b. Fewer wet spots and dry spots in soils c. Greater nutrient availability d. Fewer fungicide, insecticide and herbicide applications due to healthier stand of turf e. Lower grassy weed populations (Poa annua) 7. Calcium for plant defense in an IPM program a. Cell wall strength and turgidity of plant aids in: 1. Defense against insects (Use of insecticides) 2. Defense against pathogens (Use of fungicides) 3. Intrusion of weeds (Use of herbicides) b. Aids in reclaiming sodic soils

			c. Balances cation ratios d. Holds on to water and nutrients for longer periods 8. Repairing Sodic and Bicarbonate soils a. Aerification is helpful prior to calcium applications to break surface tension and open holes in soil b. Use calcium to dislodge sodium along with leaching program c. Use of leaching irrigation and/or micro emitters to mimic slow rainfall d. Replace displaced sodium with potassium after leaching salts e. Use of Pre-emergents to control grass and weed populations f. In heavy sodic soils, test soils quarterly and tissue test monthly during this process 9. Importance of Humic Acid in turfgrass programs a. Raised level of microbial activity stimulates essential bugs in soil profile b. Increases root mass, water intake and nutrient uptake c. Greater disease resistance and needed use of fungicides d. Improved turf quality 10. Soil test examples before & after stressing of importance that soil chemistry plays in use of chemicals in a turfgrass management program 11. Conclusion
11:45a-12:00p	Conference Chairman		Conference Summary and Questions