Schedule of Events

CSA Officers and Directors

Committee Agendas

CSA Committee Members 2018/2019

AntiTrust Compliance Policy for Members and Staff

List of Attendees for 2018 Mid Year Meeting

Mid Year Sponsors

Upcoming CSA Date

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California Seed Association Mid Year Meeting at Monterey Marriott Hotel

Schedule of Events

Tuesday, September 25, 2018

7:00 am - 5:00 pm

7:00 am - 9:30 am	Board of Directors' Meeting	Santa Barbara Room San Carlos
9:30 am - 11:00 am	Spinach Committee Meeting	Ballroom 1-2

12:00 pm - 5:00 pm "Ginny Patin Scholarship" Golf Classic @ Black Horse Golf Course

A portion of the funds raised at this tournament will benefit the scholarship program

(check-in, registration, pick up boxed lunch —shot gun at 12:30 pm)

12:00 pm - 5:00 pm "Ginny Patin Scholarship" - Bocce Ball @ The Custom House Plaza

Registration/Hospitality

A portion of the funds raised at this tournament will benefit the scholarship program

San Diego Foyer

(please plan to arrive at the Custom House Plaza by 12:00 pm for lunch)

6:00 pm - 7:30 pm Group Reception Ferrantes Bayview

Wednesday, September 26, 2018

8:00 am - 11:00 am	Registration	San Diego Foyer	
8:00 am – 9:00 am	Individual Committee Meetings (concurrent meetings will take place, for Plant Breeders & Biotechnology	San Carlos Ballrooms 1-2 ollowed by the General Session Discussion/Luncheor Legislative	n)
9:00 am – 10:00 am	Field Seed Section (includes Field, Seed Cert, Turf Seed)	Vegetable Seed Section (includes Vegetable, Flower, Grower/Shipper)	
10:00 am – 11:00 am	Industry Communications / Youth Activ	rities	
8:00 am – 9:30 am	New Employee Session: Basics of the Seed Industry Los Angeles		
11:30 am – 2:00 pm	General Session and Group Luncheon Steinbeck 2-3 Located at Monterey Convention Center (walkway from hote Featuring: Keynote Speaker Jennifer Armen, Okanagan Speciality Fruits Inc.		el)
2:00 pm – 3:30 pm	Board of Directors' Meeting Santa Barbara (including Committee Chairs who have recommendations for the board)		
2:30 pm - 5:00 pm	SIPA Workshop	Los Angeles	



CSA Officers and Directors

President
Vice President
Secretary/Treasurer
Past President
Director
Director (Chair, Field Seed) Grant Baglietto Baglietto Seeds
Director (Chair, Vegetable Seed)Leonard Jones HM Clause
Director
Director (Associate Member Representative)
Executive Vice President



SPINACH SEED COMMITTEE

Chair: Dale Krolikowski / Vice Chair: Pine Higgins Tuesday, September 25th 9:30 am / 11:00 am – San Carlos 1-2

- 1. Membership and Financial Update Donna Boggs, CSA
- 2. Update on EU Based Parent Companies of Existing Members Coordination of Funding Research Through CSA Jim Correll (presenting remotely)
- 3. Development of a Database and Rapid Assays for Peronospora effusa in Spinach
 - Allen Van Deynze, UC Davis (or team member working on this project / tba)
- 4. Research Proposal Submission Update Dale Krolikowski, Germains Seed Technology
- 5. Committee Roundtable and Upcoming Concerns Group Discussion
 - a. Proposals for Future Funding Projects
 - b. Committee Priorities
- 6. Any Other Business
 - a. Dale Krolikowski Stepping Down as Chair, Turning Position Over to Pine Higgins
 - b. New Vice Chair Recommendations



PLANT BREEDERS & BIOTECHNOLOGY COMMITTEE MEETING

Chair: John Mizicko / Vice Chair: Manuel Jimenez
Wednesday, September 26th
8:00 am / 9:00 am – San Carlos 1 Room

- 1. EU Court of Justice Decision on CRISPR Technology John Schoenecker, HM Clause
- 2. Breaking Strain of Tomato Spotted Wilt Virus Thomas Turini, UC Cooperative Extension
- 3. Seed Biotechnology Center Update Kent Bradford, UC Davis
- 4. Update on Seed Central and CoRe Lab Project Kent Bradford, UC Davis
- 5. Issues on the Horizon
 - a. What Should CSA Focus on Short Term / Long Term?
- 6. Committee Roundtable and Upcoming Concerns Discussion
- 7. Any Other Business



LEGISLATIVE COMMITTEE MEETING

Chair: Paul DeCarli / Vice Chair: Braden Hoover Wednesday, September 26th 8:00 am / 9:00 am – San Carlos 2 Room

	c. Labor
	d. Wildfires
	e. Organic Recycling
	f. Elections
2.	Federal Issues Update – Chris Zanobini, CSA
3.	Issues on the Horizon
4.	Committee Roundtable and Upcoming Concerns Discussion

1. California Legislative Update/Session – Dennis Albiani, CSA

a. Energy

b. Water



FIELD SEED SECTION MEETING (Includes Field, Seed Certification and Turf Seed)

Chair: Grant Baglietto / Vice Chair: John Ellis Wednesday, September 26th 9:00 am / 10:00 am – San Carlos 1 Room

1.	Section 18 Transform Update – Jean-Mari Peltier, Environmental Solutions Group, LLC
2.	CCIA Update – John Palmer
3.	Port of Oakland Fumigation Requirements – Greg Smith/Grant Baglietto

- 4. Crop Updates
 - a. Sunflowers Lance Atkins
 - b. Others TBA
- 5. Seed Law Update Brenda Lanini, CDFA
- 6. Committee Roundtable and Upcoming Concerns Discussion



VEGETABLE / FLOWER SEED / GROWER & SHIPPER LIAISON & PLANT HEALTH COMMITTEE MEETING

Chair: Leonard Jones / Vice Chair: Greg Cassel
Wednesday, September 26th
9:00 am / 10:00 am – San Carlos 2 Room

- 1. EU Court of Justice Decision on CRISPR Technology John Schoenecker, HM Clause
- 2. Breaking Strain of Tomato Spotted Wilt Virus Thomas Turini, UC Cooperative Extension
- 3. Regulatory and Policy Issues Update-Jean-Mari Peltier, Environmental Solutions Group, LLC
- 4. California Regulatory Report and Updates
 - a. CGMMV Tad Bell, CSA
 - b. Egyptian Bloomrape Jennifer Romero, CDFA
 - c. Branch Broomrape Jennifer Romero, CDFA
 - d. Bacterial Fruit Blotch Jennifer Romero, CDFA
 - e. Potato Spindle Tuber Viroid-Jennifer Romero, CDFA
 - f. Asian Citrus Psyllid Jennifer Romero, CDFA
- 5. Committee Roundtable and Upcoming Concerns Discussion



INDUSTRY COMMUNICATIONS & YOUTH ACTIVITIES COMMITTEE

Chair: Matt Linder / Vice Chair: Valerie Pantone
Wednesday, September 26th
10:00 am / 11:00 am – San Carlos 1 Room

- 1. The Need for More Graduates to Join Our California Seed Industry
 - a. The PCA path is commonly the student's first choice
 - b. Is it pay related? Is this perception or reality?
 - c. As an industry do we need to invest time and resources? Ideas?
 - d. Automatic links on CSA job board/website for job opportunities.
- 2. Shrinking Labor Force/Increasing Labor Costs. What is Our Industry Doing to Control Labor Costs?
 - a. Possible Speaker TBA
- 3. Project Identification. What Projects Can We Attempt Under Our Budgetary Constraints
 - a. Funding, Number of Projects?
- 4. Fall Student Seed Tour Recap September 18, 2018
- 5. Spring Flower Student Seed Tour Plans March 28, 2019
- 6. Ginny Patin Scholarship Update
- 7. CSA Booth for Outreach Purposes Available to Members
 - a. We have CSA booth for all to use
 - b. Available to ship
- 8. Website Updates
- 9. Financials
- 10. Committee Roundtable and Upcoming Concerns Discussion



NEW EMPLOYEE SESSION

Chair: Scott Emanuelli
Wednesday, September 26th
8:00 am / 9:30 am – Los Angeles Room

Panelists / Topics

- 1. Brenda Lanini, California Department of Food & Agriculture
 - a. California Seed Law Update
- 2. Justin Davis, Sakata Seed America
 - a. Production
- 3. Hallie Dodson-Swenson, Ph.D., Syngenta
 - a. Breeding



GENERAL SESSION/GROUP LUNCHEON

Moderator: President Scott Emanuelli
Wednesday, September 26th
11:30 am / 2:00 pm — Monterey Convention Center - Steinbeck 2-3

- 1. President Emanuelli Comments and Overview
- 2. Reports by Panel of Chairs of Each Committee and Group Discussion
 - a. Plant Breeders & Biotechnology John Mizicko
 - b. Legislative Paul DeCarli
 - c. Field Seed Section Grant Baglietto
 - d. Vegetable Seed Section Leonard Jones
 - e. Industry Communication / Youth Activities Matt Linder
 - f. Spinach Committee Dale Krolikowski
- 3. Keynote Speaker: Jennifer Armen, Vice President for Okanagan Specialty Fruits Inc.



Committee
Members
2018/2019

CALIFORNIA SEED ASSOCIATION 2018-2019 COMMITTEES

FIELD SEED / SEED CERTIFICATION / TURF SEED Grant Baglietto, Baglietto Seeds - Chair John Ellis, J.G. Boswell Co. - Vice Chair

Steve Ullrich	ls
Alex Abatti Jr	o.
Octavio Ascolani	o.
Joe BagliettoBaglietto Seeds	
Glenn Powell BASI	
George GoughBayer CropScience	e
John PalmerCalifornia Crop Improvement Assn	
Nicole Hostert	n.
John Toscano	
Joe MachadoForage Genetics International (America's Alfalfa	a)
Shayne BradyImperial Valley Milling Co	
Jim Wadsworth	
Matt Mills K-F Seeds Div. of Fifield Lands	ls
Greg Smith	c.
Tom Hearne L.A. Hearne Co	o.
Ann WalkerLimagrain Sunflowers Inc	c.
Keith Wehri	c.
John HawnPrecision Seed Coaters	rs
Kurt Rubin	С
Dan Gardner	o.
Chuck DeatherageSSI Seed Sales Int'l	1.
John McShaneStover Seed Co	o.
Todd RehrmanSyngenta Vegetable Seeds	ls
Lance Atkins	ls
Don Greif	ls
Nick Henning Syngenta Seeds	ls
Scott Emanuelli	c.
Don Emanuelli	c.
Carson SeybertTop Notch Seed Inc	c.

SEED DEALERS STUDY GROUP Jonas White, White Seed Co. - Chair Danny Fernandez, VoloAgri - Vice Chair

Greg Cassel	AgSeeds Unlimited
Steve Ullrich	Alforex Seeds
Dan Marshburn	
John Toscano	Crop Production Service
Mike Raine	
Barry Case	
Justin Gillies	
Kelly Keithly	Keithly-Williams Seeds
Mike Trebino	
Manny Silva III	
Keith Slocum	
Patty Buskirk	Seeds By Design Inc.
Jeff Karr	
Tom Truxler	TS&L Seed Co.
Doug Sumpter	VoloAgri
Bill White	

PLANT BREEDERS & BIOTECHNOLOGY (RESEARCH SECTION)

John Mizicko, Eurofins BioDiagnostics- Chair Manuel Jimenez, American Takii Inc. - Vice Chair

Mark Massoudi	Ag-Biotech Seed Health Testing Labs
Glenn Powell	BASF
George Gough	Bayer CropScience
Marc Maxey	Bayer CropScience
John Palmer	California Crop Improvement Assn.
J.Michael Dessert	Emerald Seed Co.
	HM Clause, Inc.
Greg Orsetti	Orsetti Seed Co.
	Rijk Zwaan USA
Dan Gardner	
Patty Buskirk	Seeds By Design Inc.
Lance Atkins	Syngenta Seeds
	TS&L Seed Co.
Kent Bradford	UC Davis/Seed Biotech Center
John Heintzberger	Vanguard Seed Inc.
Mervyn Selvidge	Z & S Seed Services Inc.

LEGISLATIVE COMMITTEE Paul DeCarli, Incotec - Chair Braden Hoover, Rijk Zwaan - Vice Chair

Alex Abatti, Jr.	Allstar Seed Co.
Octavio Ascolani	Allstar Seed Co.
Jerry Vosti	American Takii, Inc.
George Gough	Bayer CropScience
Jeff Trickett	Bejo Seeds
John Schoenecker	
Meir Peretz	HM Clause, Inc.
Brad Korsten	Incotec
Jim Wadsworth	J.G. Boswell Co.
Greg Smith	Kamprath Seeds Inc.
Kelly Keithly	
Tom Hearne	
Keith Wehri	
Greg Orsetti	Orsetti Seed Co.
Tim Butler	
Wayne Gale	Stokes Seed Company
John McShane	Stover Seed Co.
Todd Rehrman	Syngenta Seeds
Jeff Karr	TS&L Seed Co.
Valerie Pantone	TS&L Seed Co.
Scott Emanuelli	Top Notch Seed Inc.
Carson Seybert	Top Notch Seed Inc.
Bill White	

VEGETABLE / FLOWER SEED / GROWER SHIPPER LIAISON & PLANT HEALTH COMMITTEE

Leonard Jones, HM Clause - Chair Greg Cassel, AgSeeds Unlmited - Vice Chair

Christopher Zalewski Ag	-Biotech Seed Health Testing Labs
-	American Takii, Inc.
•	American Takii, Inc.
	Bayer CropScience
	Bayer CropScience
	Bejo Seeds, Inc.
	Emerald Seed Co.
John Mizicko	Eurofins BioDiagnotics
	Germains Seed Technology
Mike Raine	Gowan Seed Co.
Meir Peretz	HM Clause, Inc.
Chris Martin	HM Clause, Inc.
Barry Case	Imperial Vegetable Seeds Inc.
Justin Gillies	Imperial Vegetable Seeds Inc.
Paul DeCarli	Incotec
Gerard Denny	Incotec
Brad Korsten	Incotec
Matt DiCori	Keithly-Williams Seeds
	Keithly-Williams Seeds
Greg Orsetti	Orsetti Seed Co.
	Rijk Zwaan USA
Robert Foley	SGS North America Inc.
Cliff Hogan, Ph.D	Sakata Seed America
Matt Linder	Sakata Seed America
Manny Silva III	Santa Maria Seeds
Keith Slocum	Seed Science
Sam Cannon	Seteco
Dennis Choate	Syngenta Seeds
Jeff Karr	TS&L Seed Co.
Tom Truxler	TS&L Seed Co.
	Tozer Seeds America
Kent Bradford	UC Davis/Seed Biotech Center
Victor Heintzberger	Vanguard Seed Inc.
	VoloAgri
	VoloAgri
	White Seed Co.
	Z & S Seed Services Inc.

INDUSTRY COMMUNICATIONS COMMITTEE

and

YOUTH ACTIVITIES COMMITTEE Matt Linder, Sakata Seed America - Chair Valerie Pantone, TS&L Seed Co. - Vice Chair

Steve Ullrich	Alforex Seeds
Jeff Sais	Bayer CropScience
Nicole Hostert	Calif. Crop Improvement Association
Katy Soden	Calif. Crop Improvement Association
Ashley Marshburn	Champion Seed Co.
	DuPont Pioneer
Stacy Davis	Germains Seed Technology
Leonard Jones	HM Clause, Inc.
Chris Martin	HM Clause, Inc.
Brad Kortsen	Incotec
Nicole Jansen	Pioneer Hi-Bred
Lisa Branco	Radicle Seed Co.
Braden Hoover	Rijk Zwaan USA
Todd Rehrman	Syngenta Seeds
Dennis Choate	Syngenta Seeds
Valerie Pantone	TS&L Seed Co.
Kraig Kuykendall	Tozer Seeds America
	UC Davis/Seed Biotech Center

MEMBERSHIP COMMITTEE Matt DiCori, Keithly-Williams Seeds - Chair Nicole Hostert, Calif. Crop Improvement Assn. - Vice Chair

CALIFORNIA SEED ASSOCIATION ANTITRUST COMPLIANCE POLICY FOR MEMBERS AND STAFF

STATEMENT OF POLICY

The California Seed Association (CSA) is a trade association composed of individuals and entities regularly engaged in the buying, selling and processing of seed products. CSA has adopted the following policy statement.

As a trade association CSA is subject to both Federal and State antitrust laws. A trade association and its members stand in the same position under the antitrust laws as any other group of persons or firms. The legality of Association activities is judged by the same standards as are applied to other business entities. CSA recognizes the need to be constantly vigilant to assure full compliance with antitrust laws. CSA endorses the principles contained in this document for its members and staff.

The purpose of the antitrust law is to preserve a competitive economy in which free enterprise can flourish. CSA insists upon compliance with the antitrust laws, both because compliance is a legal duty imposed upon all and because CSA believes that the preservation of a free, competitive economy is essential to the welfare of the nation, the seed industry, and of CSA. CSA unequivocally supports the policy of competition promoted by the antitrust laws and reiterates its intent to comply strictly with those laws.

All members of CSA and all CSA staff shall be guided by CSA's policy of strict compliance with the antitrust laws in all CSA activities.

In an effort to insure that staff and members recognize situations which raise the appearance of an antitrust problem, this Compliance Guide shall be published annually in the CSA Directory, and reproduced and made available to the Board of Directors, Committee & Study Group chairs, Council chairs, and all speakers and non-members participating in CSA conventions, meetings, workshops, and other sponsored activities.

Meetings

- 1. All business meetings of the CSA, its Board of Directors, Committees, Study Groups and Councils; and all other meetings sponsored by CSA shall be scheduled by or through the CSA staff. CSA staff shall attend all meetings.
- 2. Secret or "rump" meetings are forbidden.
- 3. CSA staff shall prepare a written agenda for all business meetings of CSA, its Board of Directors, its Committees, Study Groups and its Councils. The written agendas shall be strictly followed by the Chair of the meeting.
- 4. Minutes of all board and committee meetings shall be taken by a member of the CSA staff, who shall accurately record the actions taken at the meeting. The minutes shall be submitted to the appropriate group for corroboration of their accuracy.
- 5. When appropriate, legal counsel shall be invited to be present at meetings of CSA, its Board of Directors, its Committees, Study Groups, and its Councils.
- 6. At social activities held at the site of CSA meetings, CSA members and staff are expected to observe the same standards required by these guidelines.

Topics of Discussion

- 1. CSA activities and communications may include discussion and action on matters of interest to the Industry.
- 2. No CSA activity or communication is intended to result in price fixing nor shall there be any discussion of prices, pricing methods, production quotas, limitations on production or sales, profits, market share, customer or credit terms, supplier classification or selection, sales territories, or distribution methods. However, nothing shall prevent CSA from publishing or communicating known published market prices of seed components.
- 3. No CSA activity or communication shall include discussion or action which might be construed as an attempt to prevent any person or entity from gaining access to any customer, to goods or services, to boycott any person or entity, or to prevent any person or entity from purchasing goods or services freely in the market.
- 4. No CSA activity or communication shall include discussion or action which might be construed as an agreement or understanding to refrain from purchasing materials, equipment, services, or other supplies from any supplier.
- 5. No CSA activity or communication shall include any other discussion or action which would tend to restrict competition in any manner between members or within the Industry.
- 6. If discussions begin which violate the guidelines above, all members of CSA and all staff members have a duty to demand that the offending discussion cease. If the offending discussions continue, CSA members and staff members must inform those engaged in the discussions that their discussions violate the policies of the CSA and antitrust laws. Thereafter, members and staff shall leave the premises and shall report the violation to the Board of Directors for appropriate action.

Other Matters

- 1. Guest speakers at CSA meetings and workshops shall be informed of the CSA Antitrust Compliance Guidelines and that they are required to comply with them in the preparation and presentation of materials to the CSA membership. Where appropriate, outlines and written materials may be reviewed in advance by legal counsel.
- 2. Handouts at meetings shall be prepared by or in consultation with CSA staff and, if appropriate, reviewed in advance by legal counsel.

CSA Mid Year Meeting: Sept. 25-26, 2018 Registration List

Company	FirstName	LastName	City	State
Ag-Biotech Seed Health Testing Labs	Mark	Massoudi	Monterey	CA
Ag-Biotech Seed Health Testing Labs	Chuck	Mouwen	Monterey	CA
Ag-Biotech Seed Health Testing Labs	Chris	Zalewski	Monterey	CA
AgSeeds Unlimited	Greg	Cassel	Woodland	CA
Alforex Seeds	Steve	Ullrich	Woodland	CA
American Takii Inc.	Manuel	Jimenez	Salinas	CA
American Takii Inc.	Keiji	Nakamori	Salinas	CA
American Takii Inc.	Jerry	Vosti	Salinas	CA
American Takii Inc.	Steve	Wiley	Salinas	CA
Baglietto Seeds	Joe	Baglietto	Stockton	CA
Baglietto Seeds	Laurie	Baglietto	Stockton	CA
Baglietto Seeds	Grant	Baglietto	Stockton	CA
Baglietto Seeds	Robin	Baglietto	Stockton	CA
Barkley Seed	Jim	Kautz	Visalia	CA
BASF	Glenn	Powell	Visalia	CA
Bayer CropScience	George	Gough	Woodland	CA
Bratney Companies	Bob	Weatherly	Visalia	CA
CA Dept. of Food & Ag	Brenda	Lanini	Sacramento	CA
CA Dept. of Food & Ag	Jennifer	McLain-Romero	Fresno	CA
CA Seed Assn.	Dennis	Albiani	Sacramento	CA
CA Seed Assn.	Tad	Bell	Sacramento	CA
CA Seed Assn.	Donna	Boggs	Sacramento	CA
CA Seed Assn.	Lora	Velardo	Sacramento	CA
CA Seed Assn.	Chris	Zanobini	Sacramento	CA
California Crop Improvement Assn.	Nicole	Hostert	Davis	CA
California Crop Improvement Assn.	John	Palmer	Davis	CA
California Crop Improvement Assn.	Katy	Soden	Davis	CA
Enza Zaden	Pine	Higgins	Salinas	CA
Eurofins BioDiagnostics	Lorena	Dean	Longmont	CO
Eurofins BioDiagnostics	Farhad	Ghavami	River Falls	WI
Eurofins BioDiagnostics	Amie	Martin	Longmont	CO
Eurofins BioDiagnostics	John	Mizicko	Longmont	CO
Germains Seed Technology	Charlie	Cain	Gilroy	CA
Germains Seed Technology	Stacy	Davis	Gilroy	CA
Germains Seed Technology	Bobby	Garcia	Gilroy	CA
Germains Seed Technology	Surinder	Gulia	Gilroy	CA

Company	FirstName	LastName	City	State
Germains Seed Technology	Dale	Krolikowski	Gilroy	CA
Germains Seed Technology	Brooke	Murphy	Gilroy	CA
Gowan Seed	Mark	Fowler	Chualar	CA
Gowan Seed	Mike	Raine	Chualar	CA
Gowan Seed	Matt	Rianda	Chualar	CA
Gowan Seed	Daniel	Sgheiza	Chualar	CA
Gowan Seed	Dave	Silacci	Chualar	CA
Hazera Seeds	Barry	Younkin	Coconut Creek	FL
HM Clause	Leonard	Jones	Santa Maria	CA
HM Clause	Chris	Martin	Davis	CA
HM Clause	Yoav	Mendel	Davis	CA
HM Clause	Gary	Petersen	Davis	CA
HM Clause	John	Schoenecker	Davis	CA
Holaday Seed Co.	Nate	Holaday	Salinas	CA
Holaday Seed Co.	Brian	Kirkpatrick	Salinas	CA
Holaday Seed Co.	George	Ming	Salinas	CA
Holaday Seed Co.	Chris	Nelson	Salinas	CA
Holaday Seed Co.	Ernie	Ramirez	Salinas	CA
Holaday Seed Co.	Ben	Rianda	Salinas	CA
Holaday Seed Co.	Daniel	Riley	Salinas	CA
Incotec	Andrew	Aldgroft	Salinas	CA
Incotec	Shawna	Castro	Salinas	CA
Incotec	Paul	DeCarli	Salinas	CA
Incotec	Ryan	Latham	Salinas	CA
J Rettenmaier USA	Jerome	Jacobs	Castro Valley	CA
Kamprath Seeds	Greg	Smith	Manteca	CA
Keithly Williams Seeds	Matt	DiCori	Holtville	CA
Keithly Williams Seeds	Kelly	Keithly	Holtville	CA
Laufer Group International	Eileen	Gulian	S. San Francisco	CA
Laufer Group International	Marc	Van Gorp	S. San Francisco	CA
Nunhems USA Inc.	Emily	Stirlen	Acampo	CA
Okanagan Specialty Fruits Inc.	Jennifer	Armen	Hendersonville	NC
Pioneer Hi-Bred	Nicole	Jansen	Connell	WA
Radicle Seed Co.	Lisa	Branco	Gilroy	CA
Radicle Seed Co.	Randy	Costa	Gilroy	CA
Radicle Seed Co.	Steve	Costa	Gilroy	CA
Radicle Seed Co.	Sergio	Torres	Gilroy	CA
Radicle Seed Co.	Michael	Trebino	Gilroy	CA
Ransom Seed Lab	Aleta	Meyr	Carpinteria	CA
		•	•	

Company	FirstName	LastName	City	State
Rijk Zwaan	Merek	Dorf	Salinas	CA
S & W Seed Co.	Dan	Karsten	Sacramento	CA
S & W Seed Co.	Dale	McDonald	Sacramento	CA
Sakata Seed America	Monica	Filimon	Salinas	CA
Sakata Seed America	Justin	Davis	Morgan Hill	CA
Sakata Seed America	Tom	Day	Morgan Hill	CA
Sakata Seed America	Alyssa	Licata	Salinas	CA
Sakata Seed America	Matt	Linder	Morgan Hill	CA
Sakata Seed America	Corinne	Marshall	Morgan Hill	CA
Sakata Seed America	John	Nelson	Morgan Hill	CA
Sakata Seed America	Jeannie	Ruminski	Salinas	CA
Sakata Seed America	Albert	Sousa	Morgan Hill	CA
Sakata Seed America	Bailey	Ulloa Conley	Morgan Hill	CA
Sakata Seed America	Daniel	Wandro	Morgan Hill	CA
Sakata Seed America	Abril	Zarate	Salinas	CA
Santa Maria Seeds Inc.	Eric	Bravo	Santa Maria	CA
Santa Maria Seeds Inc.	Britt	Davis	Santa Maria	CA
Santa Maria Seeds Inc.	Mike	Ruffoni	Santa Maria	CA
Santa Maria Seeds Inc.	Mike	Silva	Santa Maria	CA
Santa Maria Seeds Inc.	Manny	Silva III	Santa Maria	CA
Satake USA Inc.	Pam	Jimenez	Modesto	CA
Seed Innovation and Protection Alliance	James	Weatherly	Denver	CO
SeedQuest	Francois	Korn	Oakland	CA
Summit Seed Coatings	Martin	Luttrell	Caldwell	ID
Syngenta	Hallie	Dodson-Swenson, Ph	Gilroy	CA
Syngenta Seeds	Lance	Atkins	Glenn	CA
Syngenta Vegetable Seeds	Brett	Drawve	Salinas	CA
Syngenta Vegetable Seeds	Todd	Rehrman	Modesto	CA
Syngenta Vegetable Seeds	Patrick	Williams	Arroyo Grande	CA
Top Notch Seeds Inc.	Scott	Emanuelli	Brawley	CA
Top Notch Seeds Inc.	Don	Emanuelli	Brawley	CA
Top Notch Seeds Inc.	Carson	Seybert	Brawley	CA
Tozer Seeds America	Jan	Kleinsmith	Santa Maria	CA
Tozer Seeds America	Danny	Kleinsmith	Santa Maria	CA
Tozer Seeds America	Kraig	Kuykendall	Santa Maria	CA
TS&L Seed Co.	Ron	Colburn	Woodland	CA
TS&L Seed Co.	Jeff	Karr	Woodland	CA
TS&L Seed Co.	Valerie	Pantone	Woodland	CA
TS&L Seed Co.	Chito	Soto	Woodland	CA
UC Davis Seed Biotechnology Center	Kent	Bradford	Davis	CA

Company	FirstName	LastName	City	State
UC Davis Seed Biotechnology Center	Phyllis	Himmel	Davis	CA
UC Davis Seed Biotechnology Center	Barbara	Zadra	Davis	CA
University of Arkansas	Chunda	Feng	Fayetteville	AR
University of California	Allen	Van Deynze	Davis	CA
Verdesian Life Sciences	Chuck	Broughton	Garrison	ND
Verdesian Life Sciences	Todd	Wyman	Garrison	ND
Vilmorin North America	Albert	Villanueva	Salinas	CA
White Seed Co.	Paul	Scaroni	Salinas	CA
White Seed Co.	Jonas	White	Oxnard	CA
Wilke Fleury	Daniel	Egan	Sacramento	CA
Z & S Seed Services Inc.	Mervyn	Selvidge	Salinas	CA



Mid Year Meeting

GOLD SPONSORS







Mid Year Meeting Proudly Sponsored by SILVER SPONSORS



BioDiagnostics



We Maximize Nature's Potential™



Mid Year Meeting Proudly Sponsored by BRONZE SPONSORS



























Golf Hole Sponsors

Ag Seeds Unlimited Alforex Seeds American Takii Inc. **Bayer CropScience Bratney Companies** California Crop Improvement Assn. Enza Zaden **Eurofins BioDiagnostics Germains Seed Technology** Hazera Seeds USA Holaday Seed Co. **InterWest Insurance Services Keithly-Williams Seeds** Radicle Seed Co. Rijk Zwaan USA Santa Maria Seeds Satake USA Inc. **Seed Innovation and Protection Alliance Summit Seed Coatings**

Syngenta Vegetable Seeds
TS&L Seed Co.
Top Notch Seeds Inc.
Tozer Seeds America
White Seed Co.



Bocce Ball Tournament Sponsors

American Takii Inc. **Bayer CropScience California Crop Improvement Association** Enza Zaden **Eurofins BioDiagnostics Germains Seed Technology Gowan Seed Hazera Seeds USA Keithly-Williams Seeds** Radicle Seed Co. **Ransom Seed Laboratory** Rijk Zwaan USA Sakata Seed America **Seed Innovation and Protection Alliance Syngenta Vegetable Seeds** TS&L Seed Co. Top Notch Seeds Inc. **Tozer Seeds America** White Seed Co. Wilke Fleury



Upcoming Date

CSA Annual Convention

OMNI® HOTELS & RESORTS

Carlsbad, CA March 10-13, 2019





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SPINACH SEED COMMITTEE

Chair: Dale Krolikowski / Vice Chair: Pine Higgins Tuesday, September 25th 9:30 am / 11:00 am – San Carlos 1-2

- 1. Membership and Financial Update Donna Boggs, CSA
- 2. Update on EU Based Parent Companies of Existing Members Coordination of Funding Research Through CSA Jim Correll (presenting remotely)
- 3. Development of a Database and Rapid Assays for Peronospora effusa in Spinach
 - Allen Van Deynze, UC Davis (or team member working on this project / tba)
- 4. Research Proposal Submission Update Dale Krolikowski, Germains Seed Technology
- 5. Committee Roundtable and Upcoming Concerns Group Discussion
 - a. Proposals for Future Funding Projects
 - b. Committee Priorities
- 6. Any Other Business
 - a. Dale Krolikowski Stepping Down as Chair, Turning Position Over to Pine Higgins
 - b. New Vice Chair Recommendations



Spinach Seed Committee Research Fund Guidelines

The Spinach Seed Committee established in 2012 with the goal of the group is to identify research needs and to solicit funds to support the research required for the continued success of the spinach seed industry. The objectives include identifying research needs for spinach seed, current/emerging and anticipated issues that could potentially prevent the movement and availability of spinach seed for the leafy greens market in California.

Funding for this committee is provided as outlined below:

Voluntary annual contributions will be used as the mechanism for funding projects. Membership to the Spinach Seed committee is open to all CSA members however, only those who contribute to the fund will have voting privileges.

- Seed Producers \$5000 or a minimum contribution of \$2500
- Seed Dealers/Distributors \$1000 or a minimum contribution of \$500
- Associates \$ 1000 or a minimum contribution of \$500

The Distribution of the funds is to be performed according to the guidance below:

Proposals must be submitted 2 months prior to each CSA meeting. Proposals are voted on by supporting members, one vote per company. Proposals are approved by majority vote.

Fund Balance/ Distribution:

At any given time $1/3^{rd}$ of the balance in the Spinach Seed Committee fund is to be maintained for an emergency situations (E.coli outbreak research as an example). This leaves $2/3^{rds}$ of the balance to be funded on approved proposals at each meeting.

Without the committee voting to increase the maximum amount, the amount that that can be distributed for any single proposal is \$50,000 per year maximum.

Proposals that request annual distributions cannot extend longer than two years, without the committee voting to extend funding.

Proposals should include a break out of expenditures for the project. These should show labor and equipment. Proposals should not include overhead costs, if overhead costs are included they will be rejected without voting.

Proposals that are for basic research (no equipment related) will be paid out on a 60/40 retention plan. The final 40% payment will be distributed upon the receipt of a written research report.

Travel cost will be reasonably reimbursed (coach airfare only, and max of \$50 per day meal per diem).



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EXECUTIVE VICE PRESIDENT CHRIS ZANOBINI Sacramento Re: CSA Spinach Committee

Dear CSA Member:

Voluntary annual contributions for the Spinach Seed committee are due by May 15th. As a reminder these contributions will be used as the mechanism for funding projects and/or other expenses, for example, travel for speakers as agreed to by the committee members. Membership to the Spinach committee is open to all CSA members, however, only those who contribute to the fund will have voting privileges.

For 2016 the suggested contributions remain the same as for 2015 and are as follows

- Seed Producers \$5000
- Seed Dealers/Distributors \$1000
- Associates \$1000

A copy of the Spinach Seed Fund form is attached for you to provide the current contact information for your membership to the Spinach Seed Committee. Please provide updated contact information to the CSA office if changes are made during the year in order to ensure that you are receiving the mailings that go out about this committee. The committee regularly meets during the CSA Mid Year meeting and at the CSA Annual Convention. If there is a need to meet at another time that may take place as a conference call or an in person meeting to be determined by the chair and vice chair. You will be notified by email if there is going to be an additional meeting scheduled.

Please return your contribution along with the completed Spinach Fund form to the CSA office by May 15th. If you have any questions contact Donna Boggs at donna@agamsi.com or 916-441-2251.

The Spinach Seed Fund

	0	\$5,000.	00 See	d Producers
		\$1,000.	00 See	d Dealers/Distributors
	0	\$1,000.	00 Asso	ociates
Name:		Compar	ny:	
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Phone:	Fax:			_ Email:
PAYMENT METHOD:				
Check payable to "CSA / Spir	nach Seed Fund"			
☐ Credit Card: Visa	Mastercard	_Amex		
Send Invoice				
	Card No.			Exp.
	Zip Code:			

Please return to the CSA office: 1521 "I" Street, Sacramento, CA 95814

Phone: (916) 441-2251 * Fax: (916) 446-1063 * Email: donna@agamsi.com



PLANT BREEDERS & BIOTECHNOLOGY COMMITTEE MEETING

Chair: John Mizicko / Vice Chair: Manuel Jimenez
Wednesday, September 26th
8:00 am / 9:00 am – San Carlos 1 Room

- EU Court of Justice Decision on CRISPR Technology John Schoenecker, HM Clause
 Breaking Strain of Tomato Spotted Wilt Virus Thomas Turini, UC Cooperative Extension
 Seed Biotechnology Center Update Kent Bradford, UC Davis
 Update on Seed Central and CoRe Lab Project Kent Bradford, UC Davis
- 5. Issues on the Horizon
 - a. What Should CSA Focus on Short Term / Long Term?
- 6. Committee Roundtable and Upcoming Concerns Discussion
- 7. Any Other Business

ASTA STATEMENT ON EU COURT OF JUSTICE RULING ON PLANT BREEDING INNOVATION

On July 25, 2018

ASTA, ECJ, EU, EU Court of Justice, Europe, Plant Breeding Innovation, Policy

"Today's EU Court of Justice (ECJ) ruling is a legal interpretation of existing EU law; it is not a policy decision. However, the court's interpretation contradicts the direction many other governments outside of Europe are going with respect to plant breeding innovation policy, and sets a dangerous precedent that could impede global trade and stifle innovation for the future.

"The ECJ's decision is based solely on the plant breeding method, without taking into account whether the end-product could have been achieved through more traditional means. Even very small improvements made to a plant would be subject to burdensome regulation under the court's definition. This would be a huge blow to the continuing evolution of plant breeding innovation and the tremendous promise it holds for a more sustainable and secure global food production system."



Cooperative Extension In Fresno County

Tomato resistance-breaking Tomato spotted wilt virus in California, 2018 status

Tom Turini—Fresno County Vegetable Crops Advisor (taturini@ucanr.edu)

Tomato spotted wilt virus (TSWV) is a persistent challenge faced by tomato producers. It is transmitted by thrips and has many weed and crop hosts. This virus causes economic losses in several crops that include processing and fresh market tomatoes. An IPM program to limit damage caused by TSWV includes sanitation, site selection, thrips control and plant resistance. However, in 2016, a strain of the virus caused disease in tomato varieties with the TSWV resistance gene (SW5). Similar SW5 resistancebreaking strains were documented in Europe and other parts of the world, but this is the first report in the Continental United States. In Fresno County, this strain increased in distribution over the past two years and was detected in processing and fresh market tomatoes as well as in lettuce, sow thistle, celery, and peppers. In Mar 2018, the resistance-breaking strain was detected in Fresno County lettuce, which provides evidence that it has persisted in our environment. Control strategies should make use of multiple tactics without total reliance on any one management approach.

BACKGROUND

Symptoms of *Tomato spotted wilt virus*: TSWV causes fruit distortions and bronzed, spotted or yellow leaves in toma-

Western flower thrips transmits TSWV in Central California. Only thrips that feed on TSWV-infected plants as nymphs can transmit the virus as an adult. Thrips retain the virus for life, and viral transmission is optimum several minutes of feed-

The host range includes lettuce, common

bean, celery, pepper and potato are hosts as well as source of virus; particularly late in the season. weeds such as sow thistle, prickly lettuce, mallow, mustards, wild radish, London rocket, shepherd's purse, pineapple weed and many others. Seasonal variations of TSWV levels: In the winter, the virus is detected in a relatively low number winter weeds and crops and may be present in pupating thrips. In areas with substantial tomato production, the virus amplifies through spring and summer. Risk of losses due to TSWV is generally higher in late season production.



Bronzing on tomato leaf due to TSWV

MANAGEMENT

The most effective TSWV management approach is an integrated management program.

Sanitation: Reduce weed densities and till susceptible crops immediately after harvest. Killing weeds after neighboring tomatoes are planted may increase risk as it will result of movement of any insects living on those plants.

Identify high risk situations: If possible avoid, planting near a known virus

Insecticides: Foliar applications of Radiant, dime-

thoate and Lannate can reduce TSWV levels. Insecticide applications may not keep disease below commercially acceptable levels under very high pressure.



Fruit symptoms of TSWV include spotting and distortions

The University of California prohibits discrimination or harassment of any person in any of its programs or activities. (Complete nondiscrimination policy statement can be found at http://ucanr.org/sites/anrstaff/files/107734.doc)

Inquiries regarding the University's equal employment opportunity policies may be directed to John Sims, Affirmative Action Contact, University of California, Davis, Agriculture and Natural Resources, 2801 2nd Street, Davis, CA 95618, (530) 750-1397. A single gene resistance (SW5) has been incorporated into many commercial processing and fresh market tomato varieties. Up to 3% of resistant plants my show TSWV symptoms as a result of a wild type strain (strain that is not SW5 resistance-breaking). Also, under very heavy virus pressure, the wild type strain will cause brown concentric rings on the fruit in the absence of symptoms on the leaves.

RESISTANCE BREAKING STRAIN

In spring of 2016, a fresh market field with an SW5 variety had as much as 50% TSWV incidence in the Cantua Creek area within Fresno County. The virus present in the affected plants was similar to what had been reported in a resistance-breaking strain in Europe as determined in Dr. Gilbertson's lab at UC Davis. By fall 2016, the same strain was confirmed in two other areas within Fresno County. Distribution of the new strain increased in 2017. In Feb 2017, the strain was detected in sow thistle in Cantua Creek and in the Huron area. The area affected by this strain increased within Fresno County in both processing and fresh market tomatoes. It also affected tomatoes in Merced and Contra Costa Counties by the end of the 2017 season. In Mar 2018, the resistance-breaking strain was detected in three lettuce fields in the Cantua Creek

area. The wild type strain was present also. Levels of TSWV within the lettuce were 3 to 5 percent incidence.

Potential persistence of resistance-breaking TSWV: The resistance-breaking strain has been detected in celery, lettuce, peppers and sow thistle. In addition, detection in sow thistle and lettuce, as well as increase

into 2017, is documentation of the ability of this strain to survive the winter.

<u>Currently, there is no alternative to SW5 in commercial varieties.</u> There are other approaches to resistance being tested under greenhouse conditions with plans to evaluate these lines under field conditions in 2018. In addition, relative severity of TSWV in commercial varieties are being compared in collaboration with commercial seed companies in 2018.

MANAGEMENT OF TSWV WITH SW5-RESISTANCE BREAKING STRAIN Research is currently underway to better understand this strain and our management options. Based on current information, SW5 resistance remains an important component of a management strategy. Because the wild type strain is present where the resistance breaking strain is, higher disease incidence might be expected where SW5 is lacking. Plus, the resistance-breaking strain is not reported in all production areas at this point. However, avoidance of high risk situations is prudent.

As suggested above an integrated approach is the most reasonable means of reducing risk. In particular, manage potential sources of the virus, avoid extremely high thrips population densities and recognize high risk situations.

Please contact the UC Vegetable Crops Advisor in your county if high TSWV incidence is present in your SW5 tomato varieties.

The research on which this note is based is supported by California Tomato Research Institute.

Acknowledgements to Robert Gilbertson, Ozgur Batuman, Monica Macedo, Diane Ullman, Michelle

LeStrange, Brenna Aegerter and **Scott Stoddard** for laboratory and field research contributions.



Symptoms of TSWV on lettuce leaf

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LEGISLATIVE COMMITTEE MEETING

Chair: Paul DeCarli / Vice Chair: Braden Hoover Wednesday, September 26th 8:00 am / 9:00 am – San Carlos 2 Room

1. California Legislative Update/Session - Dennis Albiani, CSA

a. Energy

b. Water

c. Labor
d. Wildfires
e. Organic Recycling
f. Elections
2. Federal Issues Update – Chris Zanobini, CSA
3. Issues on the Horizon
4. Committee Roundtable and Upcoming Concerns Discussion

Government Affairs Report

September 2018

Early in the morning of September 1, the 2018-19 legislative session was gaveled to a close. During the last month of session, the legislature acted on over 1000 measures, the majority of which made it to the Governor. All of the approved bills are on the Governor's desk and he has 30 days to sign or veto them. While Governor Brown is known for being fiscally moderate there could be some surprises given his lame duck status.

As of September 7th the statistics on legislation pending Governor Brown's action were:

There are 597 Assembly bills remaining to be acted upon.

The Senate has 344 measures pending action by the Governor.

The deadline for final action is Sunday, September 30.

The Governor has signed 269 measures and vetoed 7 measures for a total of 276 Assembly and Senate Bills acted upon. At the end of this signing session, the Governor will have acted upon a total of 1,217 Assembly and Senate Bills for the 2018 year.

Key AG AMSI Legislation

AB 2610 (Aguiar Curry) allows truck drivers carrying grain and feed through rural or remote areas, to commence their meal break after the sixth hour. Current law is restrictive and problematic for both employee and employer alike. This bill, which was sponsored by CGFA, provides truck drivers with the flexibility they need to find a safe and convenient spot to take their well-deserved meal break. The bill passed the legislature with bipartisan and unanimous support and was signed into law by the Governor.

SB 668 (McGuire) authorizes CDFA to increase fines for violations of the Commercial Feed Law and establishes a mechanism for CDFA to carry out administrative hearings on the issue. The current fine structure in place for violations of the Commercial Feed Law is insufficient in deterring violations. The California Feed Industry Advisory Board reviewed the proposal on several occasions and CGFA board of Directors voted to support. CGFA stepped in as the bill sponsor and shepherded the bill, which required a 2/3 vote, through the process. The bill is on the Governor's desk awaiting action.

AB 3021 (Levine, Medina, Salas) provides a pathway to cage-free eggs produced and sold in California by 2024. The bill was sponsored by ACEF; unfortunately, it was held in the Senate Appropriations Committee.

SCR 100 (Lara) would direct OEHHA to list "Processed Meat" under proposition 65 requiring a warning. The bill was ultimately dropped by the Author after strong opposition by CGFA, ACEF and livestock producers.

SB 212 (Jackson) would establish a statewide pharmaceutical drug take back program for all pharmaceutical and sharps waste collection. As originally introduced, SB 212 also covered veterinary medicine which includes all drugs used to prevent, treat or control disease in animals (livestock & pets). The Association was able to get an exemption for veterinary medicine and sharps as well as preemption language on local stewardship programs which will deliver long-term certainty for our industry and avoid a county-by-county approach. The bill is on the Governor's desk awaiting his signature.

AB 2909 (Wood) Legislation on micro enterprises poultry processing, providing more flexibility for small producers to self-process poultry. Bill was held in Appropriations after strong opposition.

AB 3159 (Thurmond) this measure tried to regulate state poultry slaughter facilities similar to USDA inspected livestock facilities. The bill failed to make it out of its first policy committee.

SB 1039 (Pan) makes permanent a regulation that provides a standard of identity for "ultra filtered milk". The bill is currently on the Governor's desk awaiting his signature.

Organics Recycling

California's livestock and food processing industries have recycled food and agriculture byproducts for generations, turning them into their highest and best use as human, pet food and animal feed. Our food processors and biofuel providers have partnered for years to provide a feedstock to biodiesel and biomass. However, as these products provide value, and entities are subsidized to collect organic material, the conflict between traditional recyclers sending material to livestock feed and waste haulers continues to create passionate discussions and many threats to the industry in the legislature.

SB 71 (Wiener) would have given waste haulers extraordinary enforcement powers to enforce their jurisdictional contracts. This measure would have eroded years of recycling practices and provided unjustified enforcement powers to private entities in order to continue institutional harassment of organic recyclers who are sending these products to animal feed, biofuel and other recycling options. The Association lobbied hard against this bill which resulted in the bill failing to make it out of Assembly Appropriations Committee.

AB 3036 (Cooley) would exclude byproducts from processed food, if those byproducts are intended for use as animal feed, from the definition of waste under the California Integrated Waste Management Act of 1989. The Association lobbied hard in support of this measure and it is currently awaiting the Governor's signature.

Energy

SB 100 (De Leon) would require California to obtain 100% of its power from clean sources by 2045. The bill has been debated by lawmakers for nearly two years as it faced cost and feasibility concerns. In addition to the 2045 target, SB 100 would also require electric utilities and other service providers to generate 60% of their power from renewable sources by 2030, up from the current 50% goal set for that date. The bill is currently on the Governor's desk awaiting his signature.

<u>Water</u>

Governor Brown tried, and failed, to secure a deal to provide safe drinking water funding for disadvantaged communities in California. After failing to win approval of a mandatory tax on water bills earlier this year, Senator Monning introduced **SB 844** and **SB 845** that would have applied a voluntary levy on ratepayers of less than \$1 per month and would have established a tax on dairies and fertilizer manufacturers.

The plan put forth by the Governor included:

- A fee structure on agriculture to generate \$30 million/year for 15 years subject to
 fluctuation due to value of fertilizer along with the associated enforcement relief for
 those that pay into the Fund. The fees would decrease after 15 years but do not sunset.
 Specifically, the assessments are:
 - \$8 mil assessment per dollar of fertilizer purchased
 - o \$4 mil assessment per dollar of retail/over the counter of fertilizer purchased
 - \$1000 per permitted non-dairy confined animal facility with a \$12,000 cap per permittee/company
 - \$0.01355 per hundredweight of milk for dairy facility which was expected to raise \$5.6 million
- \$23.5 million from the General Fund for safe drinking water programs for disadvantaged communities. This funding was set aside in the FY 18/19 state budget but not appropriated. The SWRCB will use a portion of these funds to update their "needs assessment". A subsequent needs assessment would occur in 15 years.
- Requiring retail water providers to invoice and collect a "voluntary donation" from each
 customer. The amount of the donation would be based upon service connection size.
 Revenue generated would be deposited into the Safe and Affordable Drinking Water
 Fund. Retail customers can choose to "opt out" of the payment.

Both bills ultimately failed to pass but expect to see this issue come up again next year.

Wildfires

After an impassioned debate, the Legislature approved a \$1 billion wildfire prevention package. One of the major bills in the package was **SB 901 (Dodd)** which would allow utilities to assign

some costs directly to customers — and to borrow money to cover other expenses through bonds repaid with higher utility bills — if state regulators deem it is "just and reasonable". But the proposal sets a lower standard for wildfires that blazed in 2017, requiring only that the PUC determine how much a utility could afford to pay without harming consumers.

SB 901 would also fund grants to fire departments, cities, counties and non-profit organizations to thin brush, cut fuel breaks and reduce fire danger in hundreds of communities around the state in high-risk areas. \$200 million a year would be distributed by Cal Fire through 2024.

Additionally, SB 901:

- Adopts new requirements for investor-owned and public-owned utilities to implement comprehensive fire prevention plans.
- Streamlines landscape and forestry management to include small landowner incentives, fuel reduction and other measures to expedite the removal of dead and dying trees and chaparral.
- Provides access to land that needs to be thinned in order to improve overall forest health and resistance to wildfires.
- Requires rigorous review of utility wildfire costs and expenses to determine which costs investors and ratepayers should bear.
- Contains requirements for investor-owned utilities and public-owned utilities to develop enhanced wildfire mitigation plans, prohibitions on ratepayers and utility customers being required to pay for energy company executive compensation and perks and worker protections.

The bills are currently awaiting the Governor's signature.

<u>Water</u>

SB 606 (Hertzberg) and AB 1668 (Friedman) set permanent overall targets for indoor and outdoor water consumption. The laws set an initial limit for indoor water use of 55 gallons perperson per-day in 2022, which gradually drops to 50 gallons per person by 2030. DWR and the Water Board will conduct studies and recommend standards for outdoor use by October 2021. Since water used for agriculture is regulated by the DWR, under their own Agricultural Water Management Plan, they are not subject to these new conservation rules. These bills have already been signed into law by Governor Brown.

SB 998 (Dodd) proposes to require all public water systems (with more than 200 connections) to have a written policy on discontinuation of residential water service, provide that policy in multiple languages, and include provisions for not shutting off water for those customers that can demonstrate that losing water service will be life threatening. Additionally, SB 998 requires the public water systems to give the residential customer 60 days before the water can be shutoff and caps the amount of the reconnection fee that can be charged to the customer at

\$50 during normal business hours and \$150 for non-operational hours. Bill is on the Governor's desk awaiting his signature.

Labor

Labor legislation tends to cut across all industries. The association has been engaging in several labor legislative issues this year working with coalitions to oppose many and support a few such as PAGA reform.

AB 2841 (Gonzalez-Fletcher) would mandate an increase in paid sick leave from 3 to 5 days per employee per year. The bill faced incredible opposition from the business community and ultimately died in Assembly Appropriations.

AB 3080 (Gonzalez-Fletcher) significantly expands employment litigation and increases costs for employers and employees by banning settlement agreements for labor and employment claims as well as arbitration agreements made as a condition of employment. Bill died in Assembly Appropriations.

SB 1284 (Jackson) requires California employers to submit pay data to the Dept. of Industrial Relations, subjecting employers to unfair public criticism, enforcement measures, and significant litigation costs. Bill died in Assembly Appropriations.

SB 1300 (Jackson) significantly increases litigation by removing the standing requirement for a plaintiff alleging failure to prevent harassment or discrimination when no harassment even occurs, limits the use of severance agreements, and prohibits the use of a general release or nondisparagement clause in employer/employee contracts. The scope of this bill was significantly narrowed in the Assembly Appropriations Committee by removing language requiring employers to provide sexual harassment training, including bystander intervention training, as well as eliminating language that employers who fail to take reasonable steps to prevent harassment may be liable if the conduct continues so as to become severe or pervasive. Bill is on the Governor's desk awaiting signature.

AB 2613 (Reyes) would have imposed another layer of Labor Code penalties for wage and hour violations in addition to the penalties already available under PAGA and imposed personal liability onto employees. Due to strong opposition the Author never brought the bill up for a vote.

AB 3092, 3093, 3094 (Patterson) a series of bills that address unfair labor practices in agricultural employee unionization actions. Bill died in its first policy committee.

Taxation

AB 2008 (Salas) ensures that Farmers and Ranchers are not taxed on money they receive through the Carl Moyer engine replacement program. Bill died in Assembly Appropriations.

SB 2 (Aktins) requires those refinancing their homes or filing other real estate documents — aside from home and commercial property sales — to pay a starting fee of \$75 with a maximum of \$225 paid per transaction. The measure is expected to raise about \$250 million a year to finance the construction of affordable housing. Bill was signed by the Governor last year and became law this year.

SB 993 (Hertzberg) is another attempt to shift to a tax on services. The measure expands the sales and use tax Law to impose a tax on the purchase of services by businesses in California. The bill exempts certain types of services, including health care services, from the tax. In a twist over his previous legislation, the Senator directed the funds to be appropriated to provide tax relief to middle-income and low-income Californians. The bill was never brought up for a vote, instead informational hearings were held to research the issue further.

SCA 24 (Galgiani) limits the exclusion for the purchase or transfer of a principal residence from parents or grandparents to their children and would require it to continue as a principal residence of the transferee. The measure also deletes the exemption on the first \$1,000,000 of the full cash value of all other real property, thereby requiring these properties to be reassessed upon a purchase or transfer to a child or grandchild. The bill was never voted on.

Other

AB 1165 (Caballero) establishes the Agricultural Growth Council which would assist in regulatory alignments to aid grower compliance, reduce costs to the agricultural industry, and protect the environment. Bill is on the Governor's desk.

AB 2206 (Aguiar Curry) would have required a certain amount of renewable energy contracts include bioresources such as biomass and geothermal. Bill was held in Assembly Appropriations Committee.

AB 2166 (Caballero) the California Farm Bill providing funding for Ag Research, California Grown program, support direct sales and other activities to promote ag sustainability. Bill died in Assembly Appropriations.

AB 2816 (Muratsuchi) requires the Department of Pesticide Regulation to evaluate the use of pesticides at schools and recommend whether a pesticide should be banned for use based on what other options are available and after consulting experts. Bill is on the Governor's desk awaiting his signature.

SB 1249 (Galgiani) would prohibit cosmetic manufacturers from selling any cosmetic product in California that, in whole or in part, was tested on animals after January 1, 2020. After strong opposition amendments were taken which provide several exceptions to the bill making it more workable for the business community. Bill is on the Governor's desk awaiting his signature.

November Elections

State Senate

There will be a couple interesting Senate races this fall, including in District 12 (Monterey) to replace termed out Senator Anthony Cannella. Current Democratic Assembly Member Anna Caballero leads the race heading into November after receiving 41.2% of the votes in June. She will face Republican Rob Poythress – a farm business owner – who received 26.8% of the vote.

In another noteworthy race in District 22, former Assembly Member Mike Eng will face Baldwin Park Councilwoman Susan Rubio. The race has divided Democrats. Rubio has been endorsed by the Democratic Legislative Women's Caucus, but legislative leaders — including former Senate President Pro Tem Kevin de León and Assembly Speaker Anthony Rendon — are supporting Eng for the seat. Additionally, Rubio shook up the Capitol last year when she obtained a domestic violence restraining order against her estranged husband, then-Democratic Assemblyman Roger Hernández. In the June primary Eng held a safe 16% lead over Rubio but nevertheless this race will be one to watch in November.

State Assembly

A giant upset in June makes for an interesting face in district 76, a conservative region in San Diego. The district's current Assembly Member Rocky Chavez had hopes of becoming the next Representative from the 49th Congressional District so he did not seek reelection. The surprise came when two democrats received the top two votes, despite the district being historically held by Republicans.

In the central valley, San Benito County Supervisor Robert Rivas is in the lead to replace termed out Assembly Member Anna Caballero in district 30, which includes Watsonville and Salinas. Rivas will face conservative Republican businessman Neil Kitchens.

Two current Democratic members face tough reelections in November in their split dem/rep districts. For district 32, Assembly Member Rudy Salas barely came out ahead of his Republican challenger Justin Mendes. In district 60, former federal prosecutor Bill Essayli beat current Democratic Assemblywoman Sabrina Cervantes for first place. Cervantes is facing backlash for her support of the \$52 billion gas tax hike, the same tax that led to Senator Newman's recall. Since the beginning of August more than \$650,000 in campaign donations for the race have come in – among the most in the state – with even more expected in the final three months before the election.

The Assembly democrats are looking to gain a few more seats in some tossup districts. In district 40, Democrat James C. Ramos faces Republican Henry Gomez Nickel and after receiving 26% and 29% of the votes respectfully, it will be a close race. Additionally, in district 72, Democrat Josh Lowenthal faces Republican Tyler Diep, each received 34% and 27% of the vote respectfully.

State-wide Offices

This year Jerry Brown is termed out after four terms in office. Brown is not only the longest serving Governor in California's history, but perhaps more notably he has also governed California for 10% of its history. While many candidates fought to replace Brown in June, the two advancing to November are Lt. Governor Gavin Newsom and Republican John Cox – a San Diego businessman.

As for Lieutenant Governor, Former U.S. Ambassador to Hungary Eleni Kounalakis is facing State Senator Ed Hernandez, a Democrat from LA County and a practicing optometrist. For Attorney General, current AG Xavier Becerra had an almost 20% lead over opponent, retired Republican judge Steven Bailey, in the June primary.

One of the more interesting races in November will be for Insurance Commissioner. Republicanturned-independent Steve Poizner will face current Democratic Senator Ricardo Lara the former Insurance Commissioner, would be the first independent to win such an election and Lara would be the first openly gay statewide officer holder. It will be a tight race in November with Poizner receiving only a 2% lead.

Another interesting race will be for State Superintendent of Public Instruction, LA schools executive Marshall Tuck will face current Assemblyman Tony Thurmond. The race to become the state's top education official has become a proxy battle in a larger fight over how best to improve California schools. On one side of the debate are powerful teachers unions, who are backing Thurmond. On the other are wealthy charter school and education reform proponents, who are supporting Tuck.

November Propositions

12 propositions have earned a spot on California's November ballot.

New borrowing

Four ballot measures will ask voters to authorize the sale of new government bonds, which must be paid back over time with interest.

The largest proposal is an \$8.8-billion bond for water supply and storage efforts including water recycling, storm water capture, restoring fish habitats and repairing the spillways of the Oroville Dam that were damaged in 2017. A second ballot measure seeks approval for a \$1.5 billion-bond to finance construction projects at 13 children's hospitals across the state. Most of the money would go to nonprofit hospitals that serve children from low-income families and with special needs.

Two other measures seek money for housing: a \$4-billion bond for housing aimed at low-income residents and veterans and a \$2-billion bond to finance new housing for the state's homeless.

Housing

A major battle is expected over the ballot measure to give cities and counties expanded power to impose rent control rules, repealing a long-standing state law that has limited new rent control efforts.

Meanwhile, the California Assn. of Realtors have a measure which would allow older homeowners to bring along their existing property tax rate to any new home they buy — a way to encourage those homeowners to consider a new purchase.

Gas Tax

There will be an intense fall campaign over a \$52-billion transportation plan approved by lawmakers last year. That plan, which calls for a major effort to repair and replace the state's aging highways and roads, is financed by higher gas and diesel taxes as well as a new vehicle registration fee. Critics qualified a proposition for the ballot that would repeal those taxes and fees and require voters to approve any future effort to raise them in a future election.

Healthcare

One proposition would impose new caps on charges assessed at outpatient kidney dialysis clinics. Money collected by the clinics above those new limits could be refunded to commercial health insurers.

A second initiative would create new flexibility for when ambulance employees who work for private companies take their meal and rest breaks. It would also require additional worker training.

Eggs

A decade after voters banned small confinement cages for some farm animals, backers of that law want to transition California away from selling any eggs from hens kept in cages. Those chickens would have to be cage-free by 2022. New rules would also apply to pigs and veal calves slaughtered and sold in the state. AB 3021 (Levine)—listed above — is the counter proposal to this initiative which would give the industry two more years to comply and would apply only to chickens.

California could (someday) make daylight saving time permanent

A proposal written and submitted by the Legislature asks voters to give lawmakers the power to switch the state to permanent daylight saving time, but only if Congress acts.

Federal Affairs Update

FARM BILL

- The House and Senate are currently engaged in conference negotiations to reconcile the differences between their two versions of the Farm Bill. The calendar is working against them, as there are less than seven legislative days left before the current Farm Bill expires on September 30. There are still major differences in several titles, mainly the Conservation Title and Nutrition Title.
- If the new Farm Bill is not agreed to in the next week, Congress will need to pass a short-term extension of current law so USDA programs can continue until the new bill is passed.
- If a new Farm Bill is not passed before the end of the year, Congress will have to start the process again.
- ASTA sent a letter to Farm Bill conferees outlining priority issues. These priorities include:
 - An amendment to the Plant Variety Protection Act that expands the scope of the law to include asexually propagated materials such as flowers.
 - Creates a federal definition for plant biostimulants, and directs USDA to develop a report on a regulatory framework for biostimulants.
 - Supports continued funding for the merged Market Access Program and the Foreign Market Development program. ASTA is a USDA cooperator with both these programs, which are crucial to ASTA's international work.
 - Clarifies policies around the use of cover crops as a Good Farming Practice under Risk
 Management Agency guidelines, so farmers and producers no longer run the risk of losing
 their crop insurance because cover crops were used as an approved conservation practice
 on their farm.

APPROPRIATIONS

- Fiscal Year 2018 funding expires on September 30. In order to avoid a government shutdown, the House and Senate are crafting several "minibus" packages. These are groups of appropriations bills that would fully fund their agencies for Fiscal Year 2019
- Currently, the FY19 Agricultural Appropriations Bill (which funds USDA and FDA) is in conference with several other bills, including the Interior Appropriations bill.

TRADE

- On July 10, the US Trade Representative's Office issued a proposal to implement a 10% tariff on over \$200 billion worth of products imported from China. This proposal includes 23 HTS codes pertaining to planting seed – primarily vegetable and flower seed.
- ASTA has submitted comments to USTR explaining how many member companies multiply seed in China, and how these tariffs would affect small U.S. companies, and not Chinese companies.
- Retaliation from the Chinese government with counter-tariffs is a very real concern. The U.S. is the largest seed supplier to China.
- USTR will offer a process for companies to apply for a tariff exemption for products. As that process
 moves forward, ASTA will work with member companies on the application process with Hogan
 Lovells, ASTA's outside counsel.



August 15, 2018

<u>Via</u> E-Mail

The Honorable Senator Pat Roberts
Chairman, Senate Agriculture Committee

The Honorable Michael Conaway
Chairman, House Agriculture Committee

The Honorable Senator Debbie Stabenow Ranking Member, Senate Agriculture Committee

The Honorable Collin Peterson
Ranking Member, House Agriculture Committee

Subject: ASTA Farm Bill Priorities

Dear Farm Bill Conferees:

We appreciate the opportunity to provide the seed industry perspective on the 2018 Farm Bill. Founded in 1883, the American Seed Trade Association (ASTA) represents over 700 companies involved in seed production, plant breeding and related industries in North America. ASTA's broad membership offers varieties from alfalfa to zucchini and all production types including conventional, organic and biotech. Because of our broad membership, ASTA and our members have priorities in a number of Farm Bill titles that directly affect the seed industry.

As the conference committee meets to negotiate a final Farm Bill, we would like to highlight those proposal areas that are of critical importance to the seed industry, and request these issues be included in the conferenced bill.

Title II: Conservation

ASTA is concerned with the proposal in H.R. 2 that would limit the cost share for seed in the Conservation Reserve Program to 25 percent. Conservation programs must be cost-effective and affordable to incentivize participation. Reduction of cost-share for the seed necessary to establish cover may disincentivize producers from enrolling in specialized CRP programs, such as CP42 for pollinators. If the goal of Congress is to reduce the cost of seed mixes in conservation plantings, more must be done at the state level to evaluate seed mix recommendations.

In order to promote transparency in conservation seed mix formulation, ASTA suggests conference report language directing the states to form standing Seed Subcommittees under the State Technical Committees (STC) to review and formulate seed mixes that both implement conservation goals and are cost effective. There is precedence for specialized subcommittees under the STC Policy Guidance, and this would allow seed industry experts and other conservation groups to partner with USDA in implementing conservation practices.

ASTA is additionally supportive of the Soil Health Demonstration Project from the Senate bill, and is supportive of its inclusion in the conference Farm Bill.

Title III: Trade

The creation of the International Market Development Program proposed in H.R. 2 by merging the Market Access Program (MAP), the Foreign Market Development Program (FMD), the Technical Assistance for Specialty Crops Program (TASC), and the E. (Kika) De La Garza Emerging Markets Program (EMP) is supported by ASTA. Our association has been a cooperator for MAP and FMD for decades, and the funding provided through these programs is critical for the continued success of the U.S. seed industry globally.

Title VII: Research

Federal research and education programs supported through the Farm Bill help secure the U.S.'s position as the global leader in agricultural innovation. The work funded by the Farm Bill enables USDA to provide services and conduct research that will maintain U.S. agricultural security for years to come. There are separate proposals from the House and Senate Farm Bill that ASTA strongly encourages be included in the final Farm Bill:

- Section 7608 of the House Farm Bill directs USDA to carry out a national science-based education campaign to increase public awareness regarding the use of technology in food and agriculture production.
- Section 7205 of the Senate Farm Bill creates an opportunity for the USDA to analyze its current germplasm holdings in the National Plant Germplasm System and its cultivar development programs to plan for the future.
- Section 7413 of the Senate Farm Bill provides a new authorization of \$200 million in mandatory funds for the Foundation for Food and Agriculture Research (FFAR).

ASTA also supports continued funding for pest and disease prevention programs in the Horticulture Title and funding for the Agriculture and Food Research Initiative (AFRI).

Title IX: Horticulture

ASTA is grateful both the House and Senate Farm Bills included language that amends the Plant Variety Protection Act, and expands the scope of the law to include asexually propagated materials such as flowers. This expansion is crucial to maintaining strong intellectual property protections for American companies in the horticulture industry. ASTA requests the conference committee use the language amending the Plant Variety Protection Act from the House Farm Bill

Section 9201 of H.R. 2 creates a definition for biostimulants, and directs USDA to develop a report on a regulatory framework for biostimulants in order to address significant uncertainty created by a patchwork of state regulations. Identical language was also offered as an amendment during the Senate process. ASTA strongly supports inclusion of this provision in the final Farm Bill so that these products can be more broadly used in the future.

Title XI: Crop Insurance

ASTA is encouraged by Section 11107 Title XI in the Senate Farm Bill which amends section 508(a) of the Federal Crop Insurance Act to clarify conditions for voluntary conservation practices, including cover crops, to be considered as good farming practices. This much-needed clarification will better align the policies of the Natural Resource Conservation Service and the Risk Management Agency regarding cover crop usage alongside cash crops, so farmers and producers no longer run the risk of losing their crop insurance because they used cover crops as an approved conservation practice on their farm. We strongly urge the conference committee to adopt this provision in the final conferenced Farm Bill.

ASTA appreciates the opportunity to provide comments to the conference committee and leadership, and stands ready to act as a resource throughout the Farm Bill conference process.

If there is any additional information you need, please do not hesitate to reach out.

Sincerely,

Andrew W. LaVigne President & CEO

American Seed Trade Association

A.W. Zakja

Plant Breeding Innovation Update

Plant Breeding Innovation, focus on gene editing. ASTA and partners are focused on communicating the broad benefits of gene editing tools including the opportunities for breeding programs of all sizes in the private and public sector and all crop sectors including smaller and niche markets. Focus group testing shows consumers are interested in human health and environmental benefits. ASTA's website SeedingInnovation.org has fact sheets, videos and other content that can be distributed.

ASTA is working domestically and internationally to foster government policies that facilitate innovation. Our guiding principal is that plant varieties developed through the latest breeding methods should not be differentially regulated if they are similar to or indistinguishable from varieties that could have been produced through earlier breeding methods. In other words, many applications of gene editing should not be regulated like GMO's.

On March 28, 2018 U.S. Secretary of Agriculture Sonny Perdue issued a statement providing clarification on USDA oversight. The statements says "Under its biotechnology regulations, USDA does not regulate or have any plans to regulate plants that could otherwise have been developed through traditional breeding techniques as long as they are not plant pests or developed using plant pests."

Unfortunately FDA and EPA are not moving as quickly. FDA's 1992 policy statement provided guidance to developers on when they should consult with FDA before a new plant variety is commercialized. In this guidance, FDA acknowledged the practices that plant breeders use to test their new plant varieties before seed is commercialized. ASTA's position is that FDA should reaffirm that their current guidance remains appropriate for products of plant breeding innovation such as gene editing. EPA is evaluating their policy on gene edited plants. However, it is worrisome that some staff at EPA have suggested gene edited plants must be regulated.

There are numerous international discussions taking place amongst regulators. ASTA, International Seed Federation (ISF) and USDA are active in many of them. Many South American countries have adopted policies that are aligned with ASTA's policy goals. In recent weeks, Japan has also announced similar intentions.

However, the European Court of Justice recently ruled that organisms obtained by mutagenesis are GMO's under the GMO Directive because they alter the genetic make-up of an organism in a way that does not occur naturally. Plants created by certain mutagenesis techniques that have been used for many years (prior to 2001) and have a long history of safety are not included. Gene editing is considered a mutagenesis technique. This ruling is binding on all Member States and can't be appealed or overturned. This is a blow to the future of gene editing in Europe, but many countries appear to be moving forward with their plans despite the EU announcement.

For up to date information follow us on Twitter @Better_Seed



FIELD SEED SECTION MEETING (Includes Field, Seed Certification and Turf Seed)

Chair: Grant Baglietto / Vice Chair: John Ellis Wednesday, September 26th 9:00 am / 10:00 am – San Carlos 1 Room

1.	Section 18 Transform Update – Jean-Mari Peltier, Environmental Solutions Group, LLC
2.	CCIA Update – John Palmer
3.	Port of Oakland Fumigation Requirements – Greg Smith/Grant Baglietto
4.	Crop Updates
	a. Sunflowers – Lance Atkins
	b. Others - TBA
5.	Seed Law Update – Brenda Lanini. CDFA

6. Committee Roundtable and Upcoming Concerns Discussion

What's Behind the Label on a Bag of Seed?

Pat T. Miller, Director State Affairs, American Seed Trade Association Mike Stahr, Seed Lab Manager, Iowa State University Seed Laboratory & Vice President, Association of Official Seed Analysts

The seed label, or tag as it is often referred, is like the inside jacket of a novel. It tells you everything that's important about your bag of seed. The United States is frequently cited as one of the most reliable producers of food in the world. One of the reasons for that is because we have some of the most stringent seed laws in the world. The seed label reflects those laws. Strong seed laws provide the means to ensure plant breeder's rights, encourage biodiversity, and greater opportunity for financial success by the grower community. Of course, the ultimate benefit is the consumer.

When you look at a seed label you'll see a lot of numbers. But on closer look, all of those numbers are significant. The Federal Seed Act and all state seed laws require a seed label, although they vary slightly in their requirements. Most of these laws were created over 80 years ago and variances have evolved, but they generally all have the same means to an end. Some of the notations on a label are obvious, some not so much. Here's what most states require on a seed label and what each item means:

- Product name: the brand name and/or species name, so the consumer knows what they are getting
- Pure seed: percentage by weight of the desired seed(s) based on the entire contents of the bag
- Other crops seed: percentage by weight of seeds not considered weed. If the amount is over 5% (generally) then those species are considered Pure Seed and are to be listed by name. In some cases those species present at 5% or less may also be listed as Pure Seed if so desired by the seller.
- Weed seed: the percentage by weight of weed seeds unless they are considered restricted noxious weed seeds by law where the seed will be sold. If they are restricted noxious weed seeds, then they must be listed individually by name and are limited to the amount in the state law (usually around 0.25%). (NOTE: prohibited noxious weed seeds are not allowed at all)
- Inert matter: the percentage by weight of whatever is in the package that doesn't grow (i.e. broken seed that are half or less what was originally there, seed coats, insects, etc.).
- Address: the contact information for the company providing the seed
- Origin: state where the seed was grown
- Lot number: a unique number so that the seed can be traced to its origin
- Test date: month and date that this lot was tested. The date of the standard germination test must be listed, even if it is different from the dates of other tests done.
- Germination: the percentage of seed in the bag that is expected to grow (based on a lab test)
- Treatment: coatings generally used to enhance germination, protect the seed, or assist in growth
- Other items deemed necessary by the state, as this list is not all-inclusive.

The seed label is generally backed up by a test from a seed lab. It is required that the person from a seed lab signing the report of analysis be certified in testing or that the person conducting the testing be certified. Certification is in purity testing which includes conducting the mechanical purity test & the noxious weed seed exam and also in germination testing. The Association of Official Seed Analysts (AOSA, which is composed of state, federal, university and some crop improvement labs) and the Society of Commercial Seed Technologists (which is composed of analysts from seed companies, private labs, crop improvement labs and some AOSA labs) jointly give certification exams. A person must

provide evidence of training (related college courses; workshops and training within their lab) and experience to qualify to take the exams. A person passing both exams becomes a Registered Seed Technologist (RST) and is able to sign and put their seal on reports of analysis. Certified analysts must show evidence of continuing education & proficiency testing to remain in good standing.

Seed labs can conduct more than 50 distinct types of tests. A number of these are not used to provide information for the label, but rather provide supporting information (such as vigor) to the seed company. Many states require testing for the label to be done according to the AOSA Rules for Testing Seeds and seed produced in one state and sold in another must meet the requirements of the Federal Seed Act and its regulations. Others don't list the AOSA Rules. A mechanical purity test is done on approximately 2,500 seeds, while a noxious weed exam is approximately 25,000 seeds. Seeds aren't counted out, but rather a table in the Rules lists the required weight for more than 700 species of seed. Some seeds are easy to identify, but others (example: Quackgrass from Western Wheatgrass) take a highly trained person with good eyes and a lot of patience. The standard (or warm) germination test is conducted under conditions considered ideal and so its results are likely the maximum germination rate of that seed. It must be remembered that fields (gardens, etc.) vary in soil type, fertility, fungal & insect population, environmental conditions, etc. and so the germination percentage or the result of a vigor test may or may not match field emergence. Vigor of a seedling isn't considered in the germination test, but rather that the parts of a seedling are present and not badly damaged mechanically or by fungi or insects. Volume four of the AOSA Rules provides information on how to classify seedlings as normal or abnormal according to the species of seed. Also determined in the germination test is the percentage of dead seed, dormant seed (those that take up moisture, but don't grow) and hard seeds (certain types of seeds that can have a seed coat that doesn't allow water to penetrate until later).

As you can tell, there is more to a bag of seed than meets the eye. However, a grower can find out all they need to know by studying the seed bag label. And then, like reading a novel, they'll know the rest of the story.

For more information, contact:

Pat T. Miller
Director, State Affairs
American Seed Trade Association
(512) 259-2118
pmiller@betterseed.org

Mike Stahr Seed Lab Manager Iowa State University Seed Laboratory (515) 294-0117 mgstahr@iastate.edu



VEGETABLE / FLOWER SEED / GROWER & SHIPPER LIAISON & PLANT HEALTH COMMITTEE MEETING

Chair: Leonard Jones / Vice Chair: Greg Cassel
Wednesday, September 26th
9:00 am / 10:00 am – San Carlos 2 Room

- 1. EU Court of Justice Decision on CRISPR Technology John Schoenecker, HM Clause
- 2. Breaking Strain of Tomato Spotted Wilt Virus Thomas Turini, UC Cooperative Extension
- 3. Regulatory and Policy Issues Update-Jean-Mari Peltier, Environmental Solutions Group, LLC
- 4. California Regulatory Report and Updates
 - a. CGMMV Tad Bell, CSA
 - b. Egyptian Bloomrape Jennifer Romero, CDFA
 - c. Branch Broomrape Jennifer Romero, CDFA
 - d. Bacterial Fruit Blotch Jennifer Romero, CDFA
 - e. Potato Spindle Tuber Viroid-Jennifer Romero, CDFA
 - f. Asian Citrus Psyllid Jennifer Romero, CDFA
- 5. Committee Roundtable and Upcoming Concerns Discussion

ASTA STATEMENT ON EU COURT OF JUSTICE RULING ON PLANT BREEDING INNOVATION

On July 25, 2018

ASTA, ECJ, EU, EU Court of Justice, Europe, Plant Breeding Innovation, Policy

"Today's EU Court of Justice (ECJ) ruling is a legal interpretation of existing EU law; it is not a policy decision. However, the court's interpretation contradicts the direction many other governments outside of Europe are going with respect to plant breeding innovation policy, and sets a dangerous precedent that could impede global trade and stifle innovation for the future.

"The ECJ's decision is based solely on the plant breeding method, without taking into account whether the end-product could have been achieved through more traditional means. Even very small improvements made to a plant would be subject to burdensome regulation under the court's definition. This would be a huge blow to the continuing evolution of plant breeding innovation and the tremendous promise it holds for a more sustainable and secure global food production system."



Cooperative Extension In Fresno County

Tomato resistance-breaking Tomato spotted wilt virus in California, 2018 status

Tom Turini—Fresno County Vegetable Crops Advisor (taturini@ucanr.edu)

Tomato spotted wilt virus (TSWV) is a persistent challenge faced by tomato producers. It is transmitted by thrips and has many weed and crop hosts. This virus causes economic losses in several crops that include processing and fresh market tomatoes. An IPM program to limit damage caused by TSWV includes sanitation, site selection, thrips control and plant resistance. However, in 2016, a strain of the virus caused disease in tomato varieties with the TSWV resistance gene (SW5). Similar SW5 resistancebreaking strains were documented in Europe and other parts of the world, but this is the first report in the Continental United States. In Fresno County, this strain increased in distribution over the past two years and was detected in processing and fresh market tomatoes as well as in lettuce, sow thistle, celery, and peppers. In Mar 2018, the resistance-breaking strain was detected in Fresno County lettuce, which provides evidence that it has persisted in our environment. Control strategies should make use of multiple tactics without total reliance on any one management approach.

BACKGROUND

Symptoms of *Tomato spotted wilt virus*: TSWV causes fruit distortions and bronzed, spotted or yellow leaves in toma-

Western flower thrips transmits TSWV in Central California. Only thrips that feed on TSWV-infected plants as nymphs can transmit the virus as an adult. Thrips retain the virus for life, and viral transmission is optimum several minutes of feed-

The host range includes lettuce, common

bean, celery, pepper and potato are hosts as well as source of virus; particularly late in the season. weeds such as sow thistle, prickly lettuce, mallow, mustards, wild radish, London rocket, shepherd's purse, pineapple weed and many others. Seasonal variations of TSWV levels: In the winter, the virus is detected in a relatively low number winter weeds and crops and may be present in pupating thrips. In areas with substantial tomato production, the virus amplifies through spring and summer. Risk of losses due to TSWV is generally higher in late season production.



Bronzing on tomato leaf due to TSWV

MANAGEMENT

The most effective TSWV management approach is an integrated management program.

Sanitation: Reduce weed densities and till susceptible crops immediately after harvest. Killing weeds after neighboring tomatoes are planted may increase risk as it will result of movement of any insects living on those plants.

Identify high risk situations: If possible avoid, planting near a known virus

Insecticides: Foliar applications of Radiant, dime-

thoate and Lannate can reduce TSWV levels. Insecticide applications may not keep disease below commercially acceptable levels under very high pressure.



Fruit symptoms of TSWV include spotting and distortions

The University of California prohibits discrimination or harassment of any person in any of its programs or activities. (Complete nondiscrimination policy statement can be found at http://ucanr.org/sites/anrstaff/files/107734.doc)

Inquiries regarding the University's equal employment opportunity policies may be directed to John Sims, Affirmative Action Contact, University of California, Davis, Agriculture and Natur M Resources, 2801 2nd Street, Davis, CA 95618, (530) 750-1397. A single gene resistance (SW5) has been incorporated into many commercial processing and fresh market tomato varieties. Up to 3% of resistant plants my show TSWV symptoms as a result of a wild type strain (strain that is not SW5 resistance-breaking). Also, under very heavy virus pressure, the wild type strain will cause brown concentric rings on the fruit in the absence of symptoms on the leaves.

RESISTANCE BREAKING STRAIN

In spring of 2016, a fresh market field with an SW5 variety had as much as 50% TSWV incidence in the Cantua Creek area within Fresno County. The virus present in the affected plants was similar to what had been reported in a resistance-breaking strain in Europe as determined in Dr. Gilbertson's lab at UC Davis. By fall 2016, the same strain was confirmed in two other areas within Fresno County. Distribution of the new strain increased in 2017. In Feb 2017, the strain was detected in sow thistle in Cantua Creek and in the Huron area. The area affected by this strain increased within Fresno County in both processing and fresh market tomatoes. It also affected tomatoes in Merced and Contra Costa Counties by the end of the 2017 season. In Mar 2018, the resistance-breaking strain was detected in three lettuce fields in the Cantua Creek

area. The wild type strain was present also. Levels of TSWV within the lettuce were 3 to 5 percent incidence.

Potential persistence of resistance-breaking TSWV: The resistance-breaking strain has been detected in celery, lettuce, peppers and sow thistle. In addition, detection in sow thistle and lettuce, as well as increase

into 2017, is documentation of the ability of this strain to survive the winter.

<u>Currently, there is no alternative to SW5 in commercial varieties.</u> There are other approaches to resistance being tested under greenhouse conditions with plans to evaluate these lines under field conditions in 2018. In addition, relative severity of TSWV in commercial varieties are being compared in collaboration with commercial seed companies in 2018.

MANAGEMENT OF TSWV WITH SW5-RESISTANCE BREAKING STRAIN Research is currently underway to better understand this strain and our management options. Based on current information, SW5 resistance remains an important component of a management strategy. Because the wild type strain is present where the resistance breaking strain is, higher disease incidence might be expected where SW5 is lacking. Plus, the resistance-breaking strain is not reported in all production areas at this point. However, avoidance of high risk situations is prudent.

As suggested above an integrated approach is the most reasonable means of reducing risk. In particular, manage potential sources of the virus, avoid extremely high thrips population densities and recognize high risk situations.

Please contact the UC Vegetable Crops Advisor in your county if high TSWV incidence is present in your SW5 tomato varieties.

The research on which this note is based is supported by California Tomato Research Institute.

Acknowledgements to Robert Gilbertson, Ozgur Batuman, Monica Macedo, Diane Ullman, Michelle

LeStrange, Brenna Aegerter and **Scott Stoddard** for laboratory and field research contributions.



Symptoms of TSWV on lettuce leaf

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Inquiries regarding the University's equal employment opportunity policies may be directed to John Sims, Affirmative Action Contact, University of California, Davis, Agriculture and Natur Resources, 2801 2nd Street, Davis, CA 95618, (530) 750-1397.



INDUSTRY COMMUNICATIONS & YOUTH ACTIVITIES COMMITTEE

Chair: Matt Linder / Vice Chair: Valerie Pantone
Wednesday, September 26th
10:00 am / 11:00 am – San Carlos 1 Room

- 1. The Need for More Graduates to Join Our California Seed Industry
 - a. The PCA path is commonly the student's first choice
 - b. Is it pay related? Is this perception or reality?
 - c. As an industry do we need to invest time and resources? Ideas?
 - d. Automatic links on CSA job board/website for job opportunities.
- 2. Shrinking Labor Force/Increasing Labor Costs. What is Our Industry Doing to Control Labor Costs?
 - a. Possible Speaker TBA
- 3. Project Identification. What Projects Can We Attempt Under Our Budgetary Constraints
 - a. Funding, Number of Projects?
- 4. Fall Student Seed Tour Recap September 18, 2018
- 5. Spring Flower Student Seed Tour Plans March 28, 2019
- 6. Ginny Patin Scholarship Update
- 7. CSA Booth for Outreach Purposes Available to Members
 - a. We have CSA booth for all to use
 - b. Available to ship
- 8. Website Updates
- 9. Financials
- 10. Committee Roundtable and Upcoming Concerns Discussion

Reservations Now Being Accepted! California Seed Association 2018 Student Seed Tour - Davis/Woodland September 18, 2018

Come join the fun and learn about the seed industry and discover possible career opportunities in this dynamic part of California agriculture and horticulture. The tour will focus on key aspects of the industry such as:

Seed Production and Processing, Sales and Marketing

Mark your calendars for this year's tour scheduled for **September 18**th. Seed industry professionals will lead the tour, and students will be given opportunities to meet "seed people" and become familiar with their companies.

The seed industry is an interesting and dynamic part of the agricultural and horticultural community. So, if you are interested in knowing how field and vegetable seed is developed, produced and brought to market, you won't want to miss the 2018 CSA Seed Tour.



Our goal is to help you learn about the mechanics of the seed industry and possible career opportunities by:

- * Gaining a hands-on experience and understanding the seed industry's role in agriculture and horticulture,
- * Learning more about traditional plant breeding, biotechnology and the value-added benefits of seed development,
- * Having contact with industry representatives and learning about possible internship/career opportunities.

Be sure to save the date for this year's Seed Tour that will be held in the Davis/Woodland area. As in previous tours, we will begin with a social gathering the night before with students and industry representatives at a Davis restaurant. We will spend all day Tuesday touring facilities and research fields as well as a hosted luncheon.

Planned Stops At:

TS&L Seed Company Pioneer Sakata Seed America Syngenta



There are a limited number of spaces available, so please contact

Donna Boggs of the California Seed Association at 916-441-2251 or donna@agamsi.com to find out more details about this year's tour and to reserve your spot. We expect between 34-40 students on the tour from various colleges.

CSA Fall Seed Tour September 18, 2018

Attendee List

California State University, Fresno

Advisor, Ranijt Riar Advisor, Imelda Dudley

Carina Duran
Josue Diaz
Lizbeth Cordova
Ignacio Mendoza
Julio Cadona
Georgina Reyes
Liliana Reyes

University of California, Davis

Paul Kasemsap Samantha Hilborn Amanjot Kaur Taylor Becker Yaxin Wang Yufei Qian Gina Sildeli Bichen Kou

Cal Poly, Pomona

Jameson Bradford James Chow Laura Gonzalez Bryce Stevenson Joseph Juarez

University of Nevada, Reno

Advisor, Christie Howard Monika Bagha Chloe Freeman Marina MacClean

California State University, Chico

Advisor, Garrett Liles Advisor, Hossain Zackari Chris Boggs Mike Alvarez

Mike Alvarez
Matt Hamon
Connor Pate
Sean Conley
Jorge Lopez
Saul Reyes
Steven Bressan
Erick Arciga

Devin Pike

Adalia Cajias

Woodland Community College

Advisor, Candice Stafford-Banks Laura Rodriguez-Garcia Lacey Yuke Cria Decious

Monica Bauermeister

Joe Tauzer Sean Novotny

Cal Poly, San Luis Obispo

Ashley Yeager

Committee and Staff

Matt Linder, Sakata Seed America Valerie Pantone, TS&L Seed Company Donna Boggs, California Seed Association Lora Velardo, California Seed Association

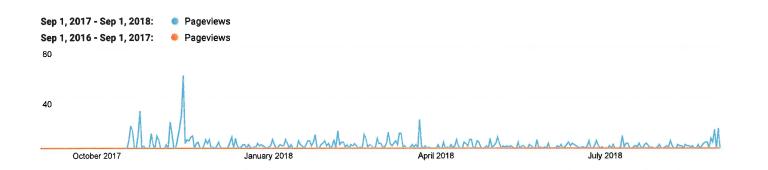
Pages

ALL » PAGE TITLE: California Seed Association » PAGE: /careers/careers.html

Sep 1, 2017 - Sep 1, 2018 Compare to: Sep 1, 2016 - Sep 1, 2017



Explorer



Page	Pageviews	Unique Pageviews	Avg. Time on Page	Entrances	Bounce Rate	% Exit	Page Value
	100.00% 🍲 992 vs 0	100.00% 🍲 582 vs 0	100.00% 🍲 00:00:27 vs 00:00:00	100.00% 🍲 200 vs 0	100.00% <u></u> 37.50% vs 0.00%	100.00% 🍲 16.23% vs 0.00%	0.00% \$0.00 vs \$0.00
1. /careers/careers.html							
Sep 1, 2017 - Sep 1, 2018	992 (100.00%)	582 (100.00%)	00:00:27	200 (100.00%)	37.50%	16.23%	\$0.00 (0.00%)
Sep 1, 2016 - Sep 1, 2017	0 (0.00%)	0 (0.00%)	00:00:00	0 (0.00%)	0.00%	0.00%	\$0.00 (0.00%)
% Change	∞%	~%	∞%	∞%	∞%	∞%	0.00%

Rows 1 - 1 of 1

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NEW EMPLOYEE SESSION

Chair: Scott Emanuelli
Wednesday, September 26th
8:00 am / 9:30 am – Los Angeles Room

Panelists / Topics

- 1. Brenda Lanini, California Department of Food & Agriculture
 - a. California Seed Law Update
- 2. Justin Davis, Sakata Seed America
 - a. Production
- 3. Hallie Dodson-Swenson, Ph.D., Syngenta
 - a. Breeding

The Requirement for Authorization to sell Agricultural, Vegetable or Grass Seed in CA

Prepared by John Heaton – CDFA Seed Services Program May 11, 2010

Who made the California Seed Law?

<u>FAC 52288</u> The Legislature hereby declares that it is the intent of this chapter to enable the seed industry, with the aid of the state, to ensure that the seed purchased by the consumer-buyer is properly identified and of the quality represented on the tag or label. The Legislature further declares that the success of agriculture and the seed industry in this state depends upon the continued commitment to industry funded research in order to improve the quality and variety of seed available to the consumer-buyer.

Why do firms or persons have to register for authorization to sell seed and pay assessments?

In 1968, funding for enforcement of the seed law began to change. The Governor's Task Force recommended that the seed inspection program become self-supporting (i.e. pay for services) and that legislation be prepared for a license <u>or tonnage tax</u> or some similar device to present to the legislature. In FY 1972, zero funds were allocated from the state's general fund for the Seed Services Program. Enforcement of label violations was assigned solely to counties. Inconsistencies in enforcement between counties created a less than orderly market that were unacceptable to the seed industry.

In 1973 the Seed Law was amended to include article 2.5, which established the Seed Advisory Board and article 4.5 which established the requirement for registration of seed sellers and payment of an annual assessment on the value of seed sold in California. By 1974, a Seed Advisory Board was in place to oversee the expenditure of funds used to implement enforcement of the California Seed Law and to advise the Secretary on seed-related issues.

What is the cost for registration and how much is the assessement?

Currently the cost to obtain authorization to sell agricultural, vegetable or grass seed is \$40. The assessment is paid by labelers, and the cost is \$0.30 per \$100 of sales on seed intended for planting or distribution in CA.

Who has to register under the California Seed Law before they sell seed?

It is essential to define "sell" under the law, before this question can be answered. FAC 44. "Sell" includes offer for sale, expose for sale, possess for sale, exchange, barter, or trade. So anyone that offers for sale, exposes for sale, possesses for sale, exchanges, barters, or trades agricultural, vegetable or grass seed, is selling in CA and is required to register per FAC 52351.

<u>FAC 52351</u> Every labeler of agricultural or vegetable seed offered for sale in this state, or **any person**, as defined in Section 52256.5, **who sells** that seed in this state, shall annually register with the secretary to obtain authorization to sell agricultural or vegetable seed before engaging in this activity, except any of the following:

- (a) An individual grower that conditions such seed exclusively for the grower's **own** planting use.
- (b) A person using agricultural or vegetable seed, or both agricultural and vegetable seed, only for purposes of **planting seed increase**.
- (c) Any person licensed to sell nursery stock pursuant to Chapter 1 (commencing with Section 6701) of Part 3 of Division 4, except when he or she also engages in activities as defined under Section 52257.5. For clarification and reference:

<u>FAC 52256.5</u> "Person" also means any individual, partnership, trust association, cooperative association, or any other business unit or organization.

<u>FAC 52257.5</u> "Conditioner" means any person who cleans, scarifies, or blends to obtain uniform quality, or who conducts other operations which would change the purity, germination, or identity of any lot of seed, including, but not limited to, packaging, labeling, blending together of uniform lots of the same kind or variety, or the preparation of a mixture.

What exactly is a labeler?

<u>FAC 52254.5</u> "Labeler" means any person whose name and address appears on the label pertaining to, or attached to, a lot or container of agricultural or vegetable seed, or both agricultural and vegetable seed, for sale and distribution within the state.

<u>FAC 52452</u> and 52453 require that each container of agricultural and vegetable seed offered for sale or sold in CA, shall bear upon it or have a tag attached, with various pieces of information including the name and address of the person that labeled the seed, or the person that sells the seed within this state.

What is a dealer?

The seed law does not define a "dealer." The industry and state enforcement program refer to individuals or companies that simply sell product labeled by others as dealers. Since dealers do offer seed for sale, they are required to pay \$40 in order to register with the Secretary and to obtain authorization to sell seed in CA.

Since dealers are not labelers, do they have to pay the assessment?

Under the "perfect" scenario, dealers do not have to pay the assessment. However CDFA does occasionally find that a firm which believes they are only a dealer, are in fact a labeler and is required to pay an assessment.

What does the law actually say about who has to pay assessments?

<u>52354</u>. Each person who is required to be registered pursuant to Section 52351 shall pay an assessment annually to the secretary in an amount not to exceed forty cents (\$0.40) per one hundred dollars (\$100) gross annual dollar volume sales of agricultural or vegetable seed, or both, in this state for the preceding fiscal year defined in Section 52352, except in the following cases:

- (a) No assessment shall be paid by any labeler or any other person for any agricultural or vegetable seed for which the assessment has been previously paid by another labeler or person, <u>unless the identity of the lot has been changed.</u>
- (b) No assessment shall be paid on that portion of a person's sales of agricultural or vegetable seed, or both, that is sold in containers of four ounces or less net weight of seed. (Packet seed).
- (c) No assessment shall be paid on agricultural or vegetable seed, or both, sold and shipped out of this state.

Scenarios that turn a dealer into a labeler:

1.) The dealer receives seed from a supplier and **repackages** into smaller containers.

Per section <u>FAC 52257.5</u>, packaging is considered to be conditioning and since it can change the purity, germination, or identity of any lot of seed, the dealer is responsible for the proper labeling and therefore becomes the labeler of the newly packaged seed.

2.) The dealer receives seed from a supplier and doesn't repackage, but simply **over-labels** the dealers firm name on the package. The packaged seed is never opened and everything else remains as indicated by the original labeler, including all components of the analysis tag.

Simply over-labeling with just the firm name of the "dealer" constitutes a lot change.

Title 3, Division 4, Chapter 5, Subchapter 3. Article 1, Section 3850(a)(2) of the Food and Agriculture Code states:

As used in Section 52354(a) of the Food and Agricultural Code the identity of the lot has been changed whenever the information required by any of the following sections of the Food and Agricultural Code has been changed: 52452 (b), (h) and 52453 (c), (d).

The information required by Section 52452(h) is the name and address of the labeler for agricultural seed and 52453(h) is the same requirement on vegetable seed. It is false and misleading to place more than one labeler name on the tag.

If a lot number is changed (i.e. over-labeled) the original supplier is considered a labeler selling seed to the "dealer" and the "dealer" that over-labels is now considered a labeler offering seed for sale, and they each must pay the assessment because they each satisfy section 52354.

3.) The dealer receives seed from a supplier that packages the seed for the dealer, with the dealer's name on the packaged seed. The **supplier** is providing the purity analysis, and **labeling the seed for the dealer.**

Section 52354 (a) states that no assessment shall be paid by any labeler or any other person (i.e. dealer) for any agricultural or vegetable seed for which the assessment has been previously paid by another labeler or person, except when the identity of the lot has been changed."

Since the dealer has not changed the lot, and somebody else (the supplier) labeled the seed, who is supposed to pay?

The California Seed **Law requires the supplier/labeler to pay the assessment.** This is clearly stated in the following section.

52355. Any registrant who packages or labels seed, or both, with the name and address of the person who only retails the seed within the state shall, at the time of sale to such person, collect from the person whose name and address appears on the label, the assessment due based upon the invoice price for the seed, and pay such assessment to the Secretary, as provided by regulations. The person collecting the assessment as provided under this section may charge, collect, and retain an additional reasonable fee established by the Secretary for handling this collection and payment.

Then why do some dealers pay an assessment?

In many instances dealers are receiving seed from out of state suppliers who label the seed for them. Under such a scenario, the out-of-state supplier is required to be in compliance with the following:

- 1. Have authorization to sell seed to the dealer in California.
- 2. Have written permission from the firm in California to place the California firm's name on the label.
- 3. Have a USDA AMS number and use it on labels of seed packaged with another firm's name.
- 4. Comply with the Federal Seed Act for shipments of seed in interstate commerce.
- 5. Make sure the seed is labeled in accordance to the seed laws of California. Labs should always test for noxious weed seeds specified in the seed law of the state the seed is destined to.
- 6. Collect and pay the assessment as provided in section 52355 (see above).

When CDFA finds seed in commerce, CDFA verifies that the labeler is paying the assessment. If the "dealer's" name appears on the label, CDFA attempts to determine who the supplier or real labeler is. CDFA will then attempt to collect the assessment from that labeler. Many out-of-state labelers refuse to pay assessments on seed they sell to "dealers" in California. When that occurs, CDFA may cancel their authorization to sell seed and refuse to allow entry of any seed they ship to California customers. This is possible because such firms are no longer authorized to sell in California. Since dealers don't want to see their ordered inventory delayed, dealers will often pay the assessment themselves so that the supplier doesn't have to. Under this scenario a dealer is paying the assessment and CDFA will not attempt to collect the assessment from the out-of-state supplier that is labeling for the dealer.

Payment of assessments by out-of-state suppliers and retailers of seed.

Periodically, CDFA cross references border inspection reports with the list of firms authorized to sell seed in California. If the determination is made that the total weight of seed calculated from border inspection reports greatly exceeds the value of reported seed sales for the specified time period, CDFA will request a written explanation be provided within 30 days. The request letter from CDFA clearly states that a failure to provide a written explanation, or correction to their reported sales and payment, may result in one or more of four possible scenarios.

- 1. CDFA can perform an audit on the out-of-state firm to verify reported sales of seed in CA.
- 2. CDFA can revoke the authorization of the out-of-state firm to sell seed in CA for failure to cooperate in an investigation.
- 3. CDFA can revoke the authorization of the out-of-state firm to sell seed in CA for failure to pay the proper assessment.
- 4. CDFA can report the inadequate payment and identify the out-of-state firm as a delinquent debtor to the Franchise Tax Board for the Intercept Collections Program.

Besides identifying possible inadequate payments of the assessment by out-of-state firms that already have authorization to sell seed in California, the Border Inspection Reports also reveal the names of firms located out-of-state that are shipping seed into California but have not obtained authorization to sell seed.

Periodically, the Seed Services Program contacts out-of-state firms that are selling seed in California but have not obtained authorization. Such firms are notified of the California Seed Law and informed that failure to comply with the law may result in their seed being denied entry at the border or stop-saled at the location it is found. For this reason it is very important that dealers make sure their out-of-state suppliers are authorized to sell seed in California. Such a determination may prevent untimely delays for seed they have ordered.

A list of firms authorized to sell seed in California can be found at:

https://www.cdfa.ca.gov/plant/PE/nsc/docs/seed/Dir_SeedLabelers.pdf

Through enforcement of the seed law, the Seed Services Program at CDFA will ensure that firms which do not comply with the seed law do not gain an unfair advantage over firms which do follow the law. In addition, when inadequate enforcement of existing laws and regulations occurs, the door is opened for all sorts of interests to sight inadequate regulation as the reason to demand new laws that undoubtedly will cost the industry more money to comply with. The present seed law was developed with extensive industry input and provides a model for industry oversight and participation. The Seed Services Program at CDFA thanks you for your continued cooperation.



GENERAL SESSION/GROUP LUNCHEON

Moderator: President Scott Emanuelli
Wednesday, September 26th
11:30 am / 2:00 pm — Monterey Convention Center - Steinbeck 2-3

- 1. President Emanuelli Comments and Overview
- 2. Reports by Panel of Chairs of Each Committee and Group Discussion
 - a. Plant Breeders & Biotechnology John Mizicko
 - b. Legislative Paul DeCarli
 - c. Field Seed Section Grant Baglietto
 - d. Vegetable Seed Section Leonard Jones
 - e. Industry Communication / Youth Activities Matt Linder
 - f. Spinach Committee Dale Krolikowski
- 3. Keynote Speaker: Jennifer Armen, Vice President for Okanagan Specialty Fruits Inc.

KEYNOTE SPEAKER'S BIOGRAPHY INFORMATION

Jennifer Armen is Vice President for Okanagan Specialty Fruits Inc., the developer of the nonbrowning Arctic® apple.

Jenn has spent over 30 years in the fresh produce industry. Originally trained as a botanist and plant pathologist, she spent the first half of her career in the post-harvest crop protection industry, culminating in managing a global post-harvest business. The focus of this work was assuring that crop quality, largely tree fruit and vegetables, was maintained from farm to consumer.

Recruited to the vegetable seed industry, Jenn was instrumental in the establishment of the company that launched the PureHeart® personal sized watermelon. At the time, there was little industry support for a small watermelon for fear that both the watermelon and melon markets would suffer. Certainly that did not happen and now personal sized watermelon are consumed in over 60% of US households. This work also set the stage for the produce industry to pay closer attention to the impact that variety selection throughout the supply chain.

Jenn's work with the Arctic® apple began 10 years ago, when the company needed support in their industry relations work. Three years ago, Jenn joined the company full time and today oversees the commercial activities for OSF.

Always active in the produce industry, Jenn has served on multiple industry association boards and committees. Of Greek heritage, Jenn has a passion for preparing and sharing meals with friends and family. A life long athlete, Jenn resides with her husband, Corey, in the North Carolina mountains where she is an avid road and off-road cyclist. Additionally, as an expert skier, Jenn finds herself roaming the world to experience the next steep and deep!

Keynote Speaker Sponsored by:





45% OF ALL FRUITS AND VEGETABLES NEVER MAKE IT TO YOUR TABLE¹

Mechanical handling can sometimes lead to surface bruising causing wasted or lower quality apples

19% of apple shrink occurs at the supermarket level;2 even superficially bruised apples cause waste at retail



Apple losses on the farm can be attributed to pests. weather, and handling issues

FRESH SLICED

Arctic*

10 oz. (283.5 g)

Minor bruising and superficial browning can lead to consumers throwing away apples - accounting for up 2/3 of total apple waste³



Arctic®apples take a bite out of waste!

Arctic® apples don't brown when bitten, sliced or bruised; this means fewer apples are wasted and more get eaten!

Vereincles.
FAO. (2015). Food Loss and Waste Facts.
USDA. (2016). Updated Supermarket Shrink Estimates for Fresh Foods and Their Implications for ERS Loss-Adjusted Food Availability Data.
Tesco PLC. (2013). Tesco and society: Using our scale for good.









MAKING

Arctic MAKING Persect Funt EVEN BETTER

HOW APPLES BROWN

When an apple is cut, bitten or bruised, an enzyme called Polyphenol Oxidase (PPO) triggers the browning reaction







PPO ENZYME REDUCED

ARCTIC® APPLE



Kids eat 71% more apples when they're pre-sliced



CONSUMERS LOVE ARCTIC® APPLES

After learning that the browning reaction can be turned off, the majority of consumers expressed interest in buying Arctic® apples



Convenient

snack



ARCTIC® APPLES ARE JUST AS SAFE & HEALTHY AS ALL APPLES



CONVENIENCE

PACK AGING

WE STOP BROWNING?



"turned off" the enzyme that makes apples brown when cut.





A successful transformation is confirmed by growing this tissue under special conditions

We introduce apple genes that produce less PPO into apple leaf tissue



Arctic® trees can then be

planted and grown just like any other apple tree!

tissue has grown into plantlets we graft it onto rootstock

Once the



when bitten, sliced or bruised!

Doesn't brown







