



almond facts

NEWS, VIEWS, AND INDUSTRY INSIGHT

MARCH-APRIL 2023

Kai Bockmann Welcomed
to "President's Corner"

Record Setting Rain
in Early 2023

\$45 Million USDA
Grant: What's Next?







Sierra Gold Nurseries

Top Quality Almond Trees

SG1[®]TITAN • KRYMSK[®]86 • BRIGHT'S HYBRID[®]5 • HANSEN 536 • VIKING



EXPERIENCED ONSITE FIELD SERVICE TO HELP YOU AT EVERY STEP



PAUL SMITH



BOB FURMIDGE



RANDY FASANI



JOSH BERGMAN



MATTHEW HADDON



CONTACT YOUR LOCAL FIELD REPRESENTATIVE! SIERRAGOLDTREES.COM/REPS • (530) 674-1145

Blue Diamond Growers does not endorse or verify statements made by advertisers within this publication.



- 8**
FIELD TEAM

- 10**
NEWS IN A NUTSHELL

- 20**
CORNERING THE MARKET

- 22**
GROWING THE GOODNESS

- 24**
ADVOCACY REPORT

- 26**
CULTIVATING SUSTAINABILITY

- 28**
IN YOUR ORCHARD

- 42**
CLASSIFIED ADS

Features

6 **President’s Corner**
 President and CEO, Kai Bockmann reflects on his first two months at *Blue Diamond* with great joy and looks forward to the growth of the cooperative in his first article for “President’s Corner.”

12 **Doherty Family Hosts Orchard Media Tour**
 As winter ended, the Doherty family hosted several consumer media members from backgrounds in food, lifestyle, and parenting publications. Guests gained awareness of *Blue Diamond’s* sustainability practices and learned about the health benefits, delicious flavor, and numerous uses for *Blue Diamond* products.

24 **Record-Setting Rain in Early 2023 in California. Honestly, What’s New?**
 President/CEO of the Almond Alliance, Aubrey Bettencourt, discusses the vast issues involving water in the state of California. The Almond Alliance isn’t interested in playing “the blame game” but in finding solutions.

26 **Update on the Climate-Smart Commodities Grant from the USDA**
 Dr. Dan Sonke discusses the next steps for the \$45 million USDA grant awarded to *Blue Diamond*. The grant will provide cost share to growers for the implementation of practices including annual cover cropping, conservation plantings, hedgerow plantings, and whole orchard recycling.

ON THE COVER:
A Blue Diamond orchard in full bloom under the stars.



● BOARD OF DIRECTORS

Dan Cummings, *Chairman of the Board* | Chico

Stephen Van Duyn, *Vice Chairman* | Modesto

Dale Van Groningen | Ripon

John Monroe | Arbuckle

George A. te Velde | Escalon

Nick Blom | Modesto

Dan Mendenhall | Winton

Matthew Efird | Fresno

Kent Stenderup | Arvin

Joe Huston | Monterey

Kristin Daley | San Francisco

● OFFICERS

Kai Bockmann, *President and CEO*

Mark Jansen, *CEO Emeritus*

Dean LaVallee, *Chief Financial Officer/
Chief Operating Officer*

● ALMOND FACTS STAFF

*Blue Diamond Growers Communications Department,
communications@bdgrowers.com*

Jillian Luna, Manager, Corporate Communications

Mel Machado, Contributing Photographer

Gray Allen, Advertising Sales

916.783.4334 & 916.765.3234

Blue Diamond, the world's largest processor and marketer of almonds, exports to over 100 countries.

Almond Facts, established in 1922, is published bimonthly by Blue Diamond Growers, 1802 C Street, Sacramento, California 95811. Address all correspondence to the Editor, Almond Facts, P.O. Box 1768, Sacramento, California 95812. Advertising subscription rates provided upon request.

Blue Diamond is a registered trademark and marketing brand of Blue Diamond Growers. Other registered trademarks are The Almond People, Smokehouse, Golden State, Celebration, From the Valleys of California, Confetti and Almond Facts.

Blue Diamond Growers does not endorse or verify statements made by advertisers within this publication. Blue Diamond reserves the right to refuse advertising. All rights reserved. Reproduction in whole or in part without written permission is prohibited.

©Blue Diamond Growers 2023



ALMOND
THE BEST GENETICS

The Best Clonal Rootstocks

Most major varieties are available in 2022/2023 including:

- **Brights Hybrid® 5**
(c.v. Arthur V) US PP18, 782 P3
- **Krymsk® 86**
(c.v. AP1) US PP16, 272 P3
- **Hansen**
- **Viking**



Y116-161-99

- Self-fertile
- Released by the U.S.D.A.



JOHN ARELLANO
Sierra Foothills
Lodi & Clarksburg
(559) 804-6949

STEVE SCHEUBER
Central Coast
San Joaquin Valley
(209) 531-5065

AARON SALSEDO
San Joaquin Valley
Southern CA
(559) 892-6028

ED NEEDHAM
San Joaquin Valley
Southern CA
(559) 977-7282

TIA RUSSELL
North Coast
Southern Oregon
(209) 815-2399

JOHN DUARTE
At Large
(209) 531-6874

STEVE NEILL
Chico
Sacramento Valley
(530) 570-6830

TIM COITO
Chico
Sacramento Valley
(530) 521-8733

Duarte Nursery®
Clean. Clonal. Containerized.
1-800-GRAFTED

duartenursery.com | Hughson, CA
sales@duartenursery.com



Clean Plants
For Your Future™

Blue Diamond Growers does not endorse or verify statements made by advertisers within this publication.



Kai Bockmann
President & CEO



It is an honor to be addressing you in my first "President's Corner" as your new president and CEO.

Since officially joining Blue Diamond in mid-January, I've enjoyed looking through past copies of this magazine and reading about industry news and the great work our growers are doing in the areas of sustainability and orchard management. I especially liked recognizing some faces in the last issue through photos of our grower families on the Rose Parade float.

Over the past few months, I've extensively toured our growing region, meeting with growers and directors in every one of our districts. I've made a concerted effort to personally meet as many of you as I can, in your orchards and sometimes in your homes.

As I mentioned at the Grower Liaison Committee meetings in January and District meetings last month, I've been overwhelmed by the generous hospitality provided to me at every stop along the way. I can't thank you all enough for the warm welcome — your kindness speaks volumes about the culture and values of this incredible co-op. I also want to take this opportunity to thank Mark Jansen for his gracious support as we navigated a smooth transition in leadership for the co-op.

At the time I'm writing this, bloom is just finishing up in the later blooming varieties of our region. As you know better than anyone, the weather that Mother Nature provided for this year's bloom was anything but typical.

Orchards throughout the Central Valley experienced record amounts of rainfall along with snow at extraordinarily low elevations during much of the bloom. Our pollinator friends did the best they could during rare periods of favorable weather when they could leave their hives to forage.

Our VP of Member Relations, Mel Machado, has been a wealth of information the last two months as I learn the behind-the-scenes intricacies of almond production. Mel and I talk almost every

day about crop progress, market pricing, and other challenges our growers face and how our co-op can continue to support you and your families.

Mel is quick to reinforce that we won't really know the true impacts of the chaotic bloom weather on the quality of this year's crop until harvest time in the fall. While that uncertainty can be concerning, I recognize it is nothing new for those of you who farm for a living. I have the utmost respect for the resilient farmers and ranchers I've worked with throughout my career.

As your new president and CEO, I pledge that the full resources of the *Blue Diamond Growers* co-op will continue to be ready to support you, our grower-owners, and the almond crop we will ultimately receive this year.

Outside the orchards, our co-op's talented leaders remain more committed than ever to the cutting-edge innovation and global market growth strategies that add value to the almonds you entrust us to market for a strong competitive return.

Here's to pleasant spring weather and a healthy growing season! I look forward to continuing along this journey with you all. ♦

Kai Bockmann
President & CEO



Regional Managers



Vice President, Member Relations

Mel Machado
 (209) 545-6222 – Salida
 (209) 531-6352 – Cellular

Director, Member Relations (North)

Ben Goudie
 (209) 225-0413

Director, Member Relations (South)

Christopher Miller
 (559) 310-5085

Glenn, Butte, Tehama, Placer, Yuba & Sutter
 Christine Ivory, (530) 518-9109

Colusa, Yolo & Solano
 John Aja, (530) 338-6440

Sacramento, Calaveras, Alameda & San Joaquin West of Austin Rd
 Ben Goudie, (209) 225-0413

Stanislaus County North of Tuolumne River & West of San Joaquin River
 Justin Elam, (209) 303-7306

San Joaquin East of Austin Rd; Stanislaus South of Tuolumne, East of San Joaquin River & West of Hwy 99; Merced North of the Merced River, West of Hwy 99
 KC Stone, (209) 596-5375

Stanislaus South of Tuolumne River, East of 99 & Merced North of Merced River, East of 99
 Brian Noeller, (209) 417-2010

Merced County, West of 99 & South of Merced River, East of 99, North of Hwy 140
 Trent Voss, (209) 470-5981

Merced County, South of Hwy 140 & Madera County
 Kenny Miyamoto, (209) 323-8454

Fresno County West of Hwy 99 & North of Hwy 180
 Ashley Correia, (559) 356-1584

Tulare County East of Hwy 99 & Fresno County East of Hwy 99, South of Hwy 180
 Christopher Miller, (559) 310-5085

Kern, Kings, and Tulare County west of Hwy 99
 Anthony Scudder, (559) 470-9731

Membership Office

Jennifer Claussen – Membership Coordinator
 (209) 545-6225

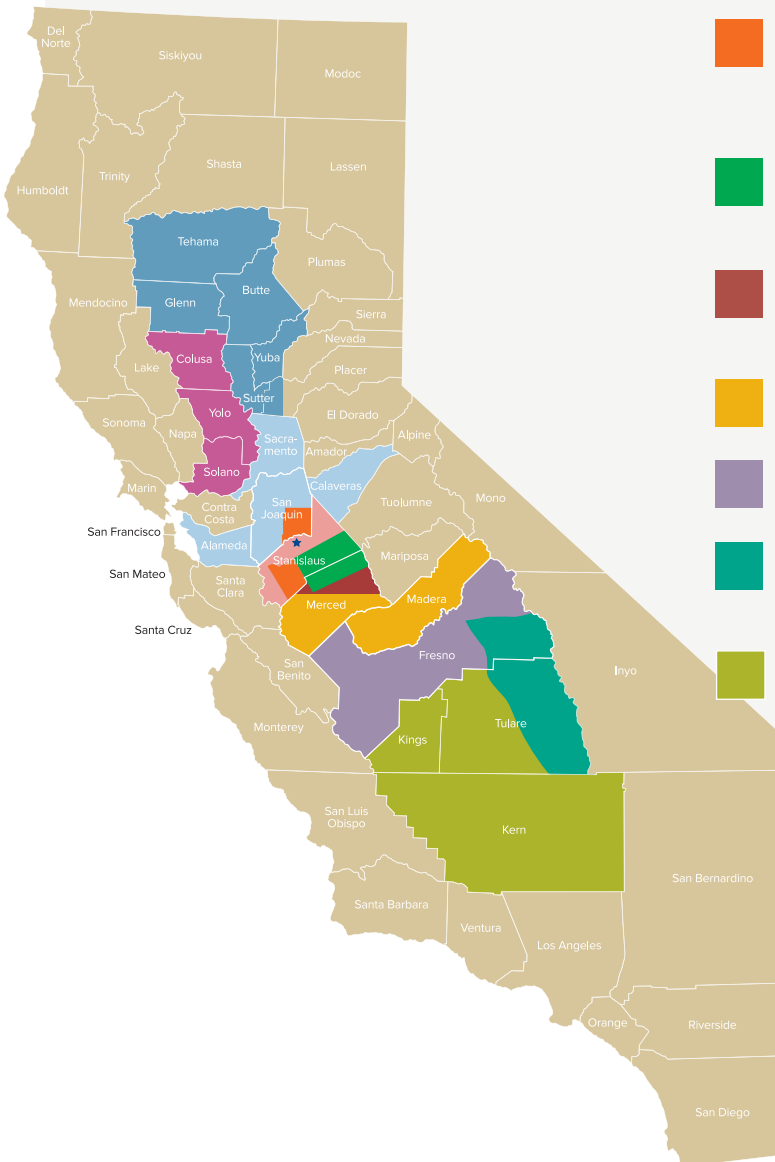
Daniel Dekeyrel – Membership Assistant (*Delivery Tags*)
 (209) 545-6261

Grower Accounting

Joe Lavagnino – Grower Accounting Manager
 (916) 446-8591

Kristie Ezell – Grower Accounting Coordinator
 (916) 446-8368

Erika Martin – Grower Accounting Assistant
 (916) 446-8385



2023 Grower Liaisons Committee Members

DISTRICT 1

P. Samantha Lewis **C**
 Chris Alves
 Luke Konyon
 Robert Thill
 Brian Erickson
 Stacy Gore
 Jerry Montz
 Steve Carlos
 Fred Montgomery
 Daniel Varner **VC**
 Greg Overton
 Darcy Jones **!**
 Dan Cummings ******
 W. Howard Isom *****

DISTRICT 2

Cathy Marsh **C**
 Sid La Grande
 Joe Martinez
 Sarah Pippitt
 Maryann Warmerdam
 Don Bransford
 Ryan Finnen
 Brian Cahill
 Jake Driver **VC**
 Ron Tadlock
 Jake Spooner
 Amy Abele **!**
 John Monroe ******
 Elaine Rominger *****
 Gerald Rominger *****

DISTRICT 3

Nick Alta
 Chris Rishwain **C**
 Jack Dalton **VC**
 Don Van Vliet
 Rick Phillips
 Louie Tallerico
 Mike Bogetti
 Allen Sipma
 Bert Van Ryn
 Rudy Mussi
 Zack Reinstein **!**
 Dale Van Groningen ******
 John Thoming ***** **ABA**

DISTRICT 4

John Almeida
 Phil Mohler
 Jake Sonke **VC**
 Bryan Van Groningen
 Kevin Van Laar **C**
 Rick Morris
 Paul Adrian
 Wayne Bruns
 Tim Roos
 Mike Ballatore
 Dawn Price
 Ian Koetsier **!**
 George te Velde ******
 Kevin Fondse *****
 Kenneth Roos *****

DISTRICT 5

Eric Heinrich
 Naomi A. Layland
 Alex Vanderstoel
 Ryan Valk
 John De Visser
 Manuel Furtado
 Lucas Van Duyn **C**
 Grant Ardis **VC**
 Brandon Riddle
 Mark Giannini
 Dennis Bowers
 Stephen Van Duyn ******
 Neil Van Duyn *****

DISTRICT 6

Christine Gemperle **C**
 Don Clark
 Jared Serpa
 Hal Carlton
 Frank Borba
 Trent Voss
 Michael Mora **VC**
 Paul Danbom
 Eric Genzoli
 Rod Vilas
 Rick Alvernaz
 Gary Marchy **!**
 Nick Blom ******
 Charles Crivelli III *****
 Steve Vilas *****
 Bill Brush ***** **ABA**

DISTRICT 7

Frank Fagundes
 Jeffrey Baize
 Tim Lohman
 Rick Scoto
 Galen Miyamoto
 Joe Sansoni **VC**
 Jimmi Atwal
 Louis Bandoni
 David P. Souza
 James Ohki
 Jason Chandler **C**
 Dan Smith **!**
 Dan Mendenhall ******

DISTRICT 8

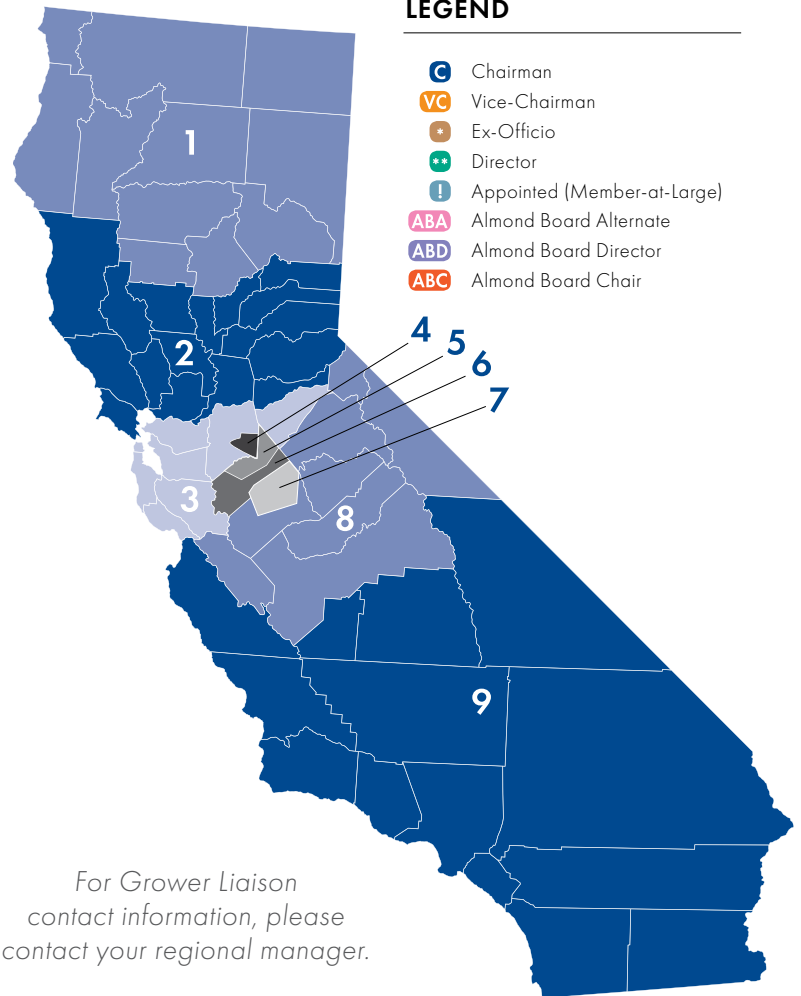
David Tolmosoff
 Robert Allen
 Jens Finderup
 RJ Maan
 Ryan Indart
 Lee Erickson
 Norman Pretzer
 Steve Bains
 Mike Yager **C**
 Neil Amaral
 Mason McKinney **VC**
 Blake Little **!**
 Matt Efird ******
 George Goshgarian *****
 Aldo Sansoni *****

DISTRICT 9

Mark Fanucchi **VC**
 Doug Kindig
 Ray Van Beek
 Mark Palla
 Gurcharan Dhillon
 Kyle Balakian
 Keith Gilbert
 Karamjit Jhandi
 Mark Tos
 Benjamin Wilson **C**
 Paramjit Dosanjh
 Lisa Marroquin **!**
 Kent Stenderup ****** **ABA**
 Clinton Shick *****

LEGEND

- C** Chairman
- VC** Vice-Chairman
- *** Ex-Officio
- **** Director
- !** Appointed (Member-at-Large)
- ABA** Almond Board Alternate
- ABD** Almond Board Director
- ABC** Almond Board Chair



For Grower Liaison contact information, please contact your regional manager.



Almond Alliance Celebrates National Almond Day

A Handful a Day Helps You and the USA

The Almond Alliance celebrated February 16, 2023, as “National Almond Day” by encouraging Americans to eat a handful of almonds a day to help themselves and the U.S.A.

“Almonds have become a staple in our diet, whether for snacking, baking, or cooking,” stated Aubrey Bettencourt, President and Chief Executive Officer of the Almond Alliance. “They are a reliable source of protein, healthy fats, and fiber; have essential vitamins and minerals; and support heart health, healthy cholesterol levels, and healthy blood sugar levels.

More than that, almonds are at the heart of our economy in California and our communities in the Central Valley.”

In celebration of this day, which recognizes work done by the acre, not the hour, Congressmen Duarte, Valadao,

Costa, McClintock, and Garamendi entered into the record a Congressional Resolution saluting everyone involved with the growing, harvesting, and bringing to market this amazing food called almonds. In addition, the Almond Alliance distributed packs of almonds to Congressional member offices on Thursday, the 16th, to celebrate National Almond Day.

In California, Senators Marie Alvarado-Gil (D-Jackson) and Angelique V. Ashby (D-Sacramento) and Assemblymembers Juan Alanis (R-Modesto) and Heath Flora (R-Ripon) introduced Senate Concurrent Resolution No. 19 to proclaim February 16, 2023, as California Almond Day.

There are currently 7,600 almond farmers in the state of California; over 90% are family farms, and many are operated by third and fourth generations of families.

The almond industry in California employs over 110,000 people and contributes about \$9.2 billion to California’s economy. 100% of the almonds grown in the United States, and 80% of the worldwide market of almonds, are grown by almond farmers in California.

Bettencourt continued, “Almond farmers are protectors of our land and environment here in California. They have been for generations. To them, the land is their livelihood to produce this amazing nut. They continue to adjust, be flexible and adapt to changing climate and resources to provide almonds for our country and protect the land for the next generation of almond growers.

And while providing a heart-healthy food for our people, almond farmers are also the heart of our communities, especially in the Central Valley, where they employ people, support small businesses, and give back to the community every single year in so many ways.



So, on February 16th, the Almond Alliance encouraged everyone to go nuts for almonds, have a handful of almonds to celebrate the men and women who bring this amazing food source to everyone in the United States and to many around the world. Remember, a handful a day helps YOU and the U.S.A.”

About the Almond Alliance

Almond Alliance is the leading authority in state and national policy, championing American almond farmers, industry, and community for the continued global growth, innovation, and success of American almonds and agriculture. As the **voice of almonds**, the Alliance represents the fourth-largest commodity in the United States and the third-largest American export.

Established in 1980, the Almond Alliance is a non-profit trade association with a local and international network of almond processors, hullers/shellers, growers, and allied businesses. The Alliance is dedicated to providing resources and solutions for our members, ensuring industry success and growth opportunities. Learn more at almondalliance.org.

Article contributed by the Almond Alliance of California. ♦



FARMER PROVEN SINCE 1938

HOME OF THE INDUSTRY-LEADING INDEPENDENCE™

INTRODUCING THE NEW SELF-FERTILE LIBERTY™ ALMOND

Blooms 4-5 Days after Nonpareil • Harvests 10-14 days after Nonpareil

POTTED AND BARE ROOT TREES AVAILABLE NOW

Viking • Atlas • Rootpac R™ • Hansen • Nemaguard • Lovell

DWN TREES.COM | 1-844-DWN-TREES | [@davewilsonnursery](https://www.instagram.com/davewilsonnursery)



Blue Diamond Growers does not endorse or verify statements made by advertisers within this publication.

Doherty Family Hosts Orchard Media Tour

As winter wrapped up, the Doherty family, third-generation Blue Diamond growers at Chamisal Creek Ranch, welcomed members of the media to their beautiful orchard in Western Colusa County, CA.

The sprawling hills, dotted with almond trees, were bursting with blossoms and buzzing with bees on the first clear, sunny day the region had seen in weeks. The guests, comprised of consumer media members from diverse media backgrounds such as food, lifestyle, and parenting publications were treated to an immersive experience to help them gain awareness of the health benefits, delicious flavor, and manifold applications for *Blue Diamond* products. Along with that, the tour provided a special glimpse into *Blue Diamond's* unique sustainability practices.



Upon arrival, the guests were welcomed by Jason Merideth, VP of Global Marketing, *Blue Diamond*. They then enjoyed a build-your-own trail mix snack bag (featuring *Blue Diamond*

almonds) before Michael Doherty and *Blue Diamond's* VP of Member Relations, Mel Machado, opened with a lesson on rootstock varieties selected for almond trees.

Doherty and Machado guided the group through the almond trees, passing by a *Blue Diamond* Water for Bees bucket that was covered with pollinators stopping for a drink. From within the blooming trees, Machado and Doherty taught the group about several facets of almond farming including weather effects on almond crops, harvest timelines based on almond variety, soil health, and how to determine whether an almond blossom has been pollinated or not.





Doherty then led the guests to his solar panel field where he excitedly educated the group on the fuel and power savings his operation has made from the use of the solar panels. In fact, the farm's panels often generate enough energy to cover the needs of the entire farming operation and more! Just in the last five years, the panels have saved over 527,000 gallons in fuel and mitigated more than 35 tons of carbon emissions.

Blue Diamond's Director of Sustainability, Dr. Dan Sonke, introduced the reporters and editors to Blue Diamond's landmark Orchard Stewardship Incentive Program (OSIP) and its benefits. Sonke also explained the process of whole orchard recycling, sequestering carbon by use of cover crops and conservation planting/hedgerows before moving on to the importance of bee health, Bee Friendly Farming, and Project Apis m.'s Seeds for Bees program.



SELF-FRUITFUL

The leading breeder of the most sought after almonds by handlers statewide.



THE NEXT GENERATION OF SELF-FRUITFUL ALMONDS™

Let our Burchell team help you make the right decisions for the future of your business.

BURCHELL NURSERY

burchellnursery.com

CALL NOW 800-828-TREE

Blue Diamond Growers does not endorse or verify statements made by advertisers within this publication.



After the sustainability lesson, a special lunch was served in the Doherty's beautiful barn. The meal featured several dishes made with *Blue Diamond* products, including *Almond Breeze*®, to showcase the many uses for *Blue Diamond* almondmilk, whether it be for drinking on its own or in coffee, or for use in baking or cooking sweet and savory dishes alike. Nutritionist Bonnie Taub-Dix educated the guests on the nutritional value of *Almond Breeze*® and

how to incorporate this healthy food into everyday life. After lunch, the activities concluded with a hands-on workshop on tending to honey bees led by a professional, local beekeeper.

As just one of the social media posts generated that day shows (left), it's quite likely that this exclusive experience made new advocates of *Almond Breeze*® and *Blue Diamond* products for life! ◆



Jillian Luna,
Manager, Corporate Communications
Blue Diamond Growers

GET AHEAD OF FIRE ANTS

TREAT NOW WITH EXTINGUISH® ANT BAIT

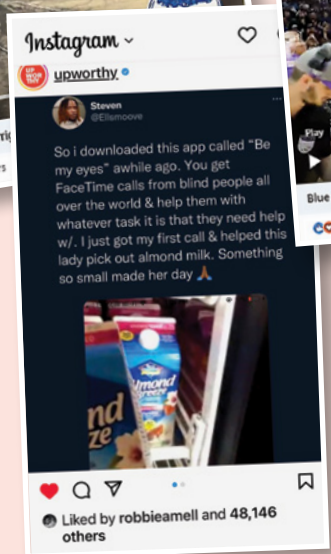


- Approved for all crops
- Cost-effective ant control
- Sterilizes the queen(s)/destroys the colony
- Available in economical 25 lb. bags
- A usage rate of 1-1.5 lbs. per acre

To learn more about Extinguish® Professional Fire Ant Bait and to find a list of regional sales representatives near you, visit CentralAntControl.com or call **800.347.8272**.

#WeAreBlueDiamond Social Media Activity

Blue Diamond has had a very full spring so far! We highlighted some of our community grant recipients, we served as a sponsor for the Sacramento Kings vs. Los Angeles Clippers basketball game with our Almond Breeze® Extra Creamy leading the way. We celebrated National Almond Day and welcomed special visitors to our Sacramento campus including Senator Alvarado-Gil and Sacramento's Mayor Steinberg. The Doherty family (Blue Diamond grower-owners) hosted a special orchard tour for members of the media to get to know more about our co-op. Finally, we provided a 6-part educational video series featured on social media surrounding our bloom season titled "Welcome to the Orchard." ♦



There's nothing variable about our rate.

Suterra's Puffer® NOW Ace is just \$99 per acre

As a grower-owned company, we're laser-focused on keeping costs as low and predictable as possible. Choose the world's most popular aerosol mating disruption solution in 2023 and save.

Suterra's Puffer® service includes complimentary mapping, expert placement consultation and deployment training.

Contact your ag retailer and ask for Suterra Puffer® by name.




BLUE DIAMOND INVESTMENT PROGRAMS

Current Investment Rates available as of April 1, 2023

Blue Diamond Growers offers members short-term and long-term investment programs.

The objective of these programs is to serve as a competitive investment alternative for our members and provide Blue Diamond Growers with a steady source of funds. The interest rates effective April 1, 2023, for the program are listed here:

	Short-Term Investment Certificate (STIC)	Long-Term Investment Certificate (LTIC) (Maturity Date of 6/30/2025)
Initial Investment Required	\$1,000	\$50,000
Interest Rate	5.75%	2.95%
	(Variable, subject to change)	(Fixed rate)

For more information, contact your local Regional Manager, or Member Services at (209) 545-6225.

This summary does not constitute an offer to sell or a solicitation to purchase investment certificates. We will provide a package of documents for the programs to those members who are California residents and who express an interest in participating in the program.

Almond Macarons

Cooking Time: 15 minutes Difficulty: Medium Servings: 24

Ingredients

Batter:

- 1½ cups *Blue Diamond* Almond Flour
- 1½ cups powdered sugar
- 3 large egg whites, room temperature
- 2 tablespoons granulated sugar
- ½ teaspoon cream of tartar

Vanilla Buttercream Filling:

- 4 tablespoons unsalted butter, room temperature
- ¼ teaspoon salt
- 1 cup powdered sugar
- 1 teaspoon vanilla extract

Directions

1. Preheat oven to 300°F.
2. Line two baking sheets with parchment paper.
3. Combine *Blue Diamond* Almond Flour and powdered sugar in a food processor and process until very fine, about 40 seconds. Sift into a bowl to remove any large clumps.
4. In a stand mixer, whip egg whites on medium-high speed until soft peaks form. Add granulated sugar and cream of tartar while machine is running. Continue to whip until stiff and glossy peaks form.
5. Using a rubber spatula, gently fold in almond flour mix one third at a time. Do not overmix. Transfer mixture into a large piping bag.
6. Pipe 1-inch circles onto the parchment paper, leaving 2 inches of space in between. Tap trays against the countertop to release extra air from cookies. Let sit for 30 minutes, until they form a dry skin.
7. Bake 18 to 20 minutes, turning pans halfway through baking. Keep a close eye, as they will brown quickly.
8. Let cookies cool completely before removing from pans.
9. For filling, beat butter and salt until fluffy, about 2 minutes. Slowly add powdered sugar and vanilla and beat until light and smooth, about 3 to 4 minutes. Transfer to piping bag and pipe between two cookies.



Spring Roasted Vegetable “Risotto”

Cooking Time: 60 minutes Difficulty: Medium Servings: 6

Ingredients

- Olive oil
- 1 bunch of asparagus, washed and chopped
- 1 cup grape tomatoes
- 2 bell peppers, sliced
- Salt and pepper to taste
- 1½ cups short grain brown or white rice
- 1 tablespoon butter
- 1 shallot, finely minced
- 2 cloves of garlic, minced
- ½ cup white wine (or vegetable broth)
- ½ cup vegetable broth
- 2 cups *Almond Breeze*® Unsweetened Original Almondmilk
- 2 4 oz. crumbled goat cheese (*optional*)
- Fresh chopped parsley for garnish



Directions

1. Preheat the oven to 400°F and spray a standard cookie sheet with olive oil or nonstick spray.
2. Add asparagus, tomatoes and bell peppers to the cookie sheet, drizzle with olive oil and season well with salt and pepper.
3. Place in the oven and cook for 30 to 40 minutes.
4. Start the rice. In a large saucepan on medium-low heat, add the butter, shallot and garlic. Heat for 3 to 5 minutes, until translucent, turn the heat to low and add the wine to scrape up the bits from the bottom of the pan.
5. Add the broth, the *Almond Breeze*® almondmilk and rice.
6. Bring up to high heat, then reduce to a simmer and cover.
7. Make sure to stir frequently and that there is always enough liquid to prevent the rice from burning. This will take about 45 minutes.
8. When the rice is fully cooked, stir in the goat cheese (*optional*), the roasted vegetables and top with chopped fresh parsley.

Almond Breeze® Named “Most Admired Brand” in Thailand

Almond Breeze® has been awarded “2023 Thailand’s most admired brand” in the plant-based milk category by BrandAge Magazine. As this is based on a consumer survey conducted by the magazine, it demonstrates the success of Almond Breeze® in winning consumers’ hearts and trust as Thailand’s number one almondmilk brand! This encourages Blue Diamond’s pursuits of promoting a healthy lifestyle amongst Thai consumers. ◆



Caption Translation: Brand: Blue Diamond Almond Breeze®, Category: Plant-based milk, Group: Consumer goods

Walaitip Suetrongmankong, Communication Director of Heritage Snacks & Food Co., Ltd.



L to R: Bjorn Grobler, Dale Tipple, U.S. Counsel General to the UAE Meghan Gregonis, USDA Administrator Daniel Whitley, Warren Cohen, and Chris Cromwell

Blue Diamond Visits Dubai

At the end of February, the Blue Diamond team attended the Gulf Food Show in Dubai. Blue Diamond team members who attended were Warren Cohen, Chris Cromwell, Bjorn Grobler, Larry Steinbach (not pictured) and Dale Tipple.

The Blue Diamond booth was highly visible in its position as the gateway to the U.S.A. pavilion the morning of February 20 as part of the ribbon cutting ceremony. ◆

Blue Diamond Visits Delhi, India

Blue Diamond team members attended the Almond Board of California's, India Conference in Delhi, India. In addition to the meeting, the group also visited with the USDA at the U.S.A. Embassy in Dehli where they discussed the opportunities before Blue Diamond in further accelerating the sale of almonds and Almond Breeze® in this crucial market.

Those attending all events for Blue Diamond included Laura Gerhard, Nitin Batra, Dale Tipple, and Warren Cohen who also served as a panelist.

It's truly amazing seeing the rapid transformation of this market and the role Blue Diamond plays today and the potential for the future. ♦



L to R: Warren Cohen, Laura Gerhard, Dale Tipple, Nitin Batra and Mufaddel Yousef (owner of Tahoe Private Limited – Blue Diamond's sales and distribution partner in India)



Costco Visits a Blue Diamond Orchard

This picture from the orchard of a grower family during a meeting with Costco. Notice they are sporting Blue Diamond hats! ♦

L to R: Mike Murrow – Sales Director – Channels (Blue Diamond Growers), Andy Vennum – D12 Buyer (Costco), Marissa Guches – Business Manager, Northwest Region (ADW), Jim Leavitt – Director of Sales, Channel/Broker Accounts (Blue Diamond Growers)



Mark Jansen Recipient of Distinguished California Cultivator Award

Ag Council celebrated Mark Jansen, CEO Emeritus, *Blue Diamond Growers*, as the 2023 California Cultivator Award recipient on March 30, 2023, during the association's 104th Annual Meeting in Monterey. This award recognizes and honors a person who clearly has made significant contributions to agriculture or who has demonstrated leadership and personal commitment beyond the normal expectations of a person serving the farmer-owned business sector.

Blue Diamond's Chairman of the Board, Dan Cummings said, "Mark has earned the respect and admiration of our grower-owners with his personable style and engagement in the industry." Cummings added, "His contributions have poised us for future growth and success." ♦

Congratulations to Mark on being selected to receive this distinctive award!

“Mark has earned the respect and admiration of our grower-owners with his personable style and engagement in the industry.”

—Dan Cummings, Blue Diamond's Chairman of the Board

Best Rootstock for Heavy & Wet Soils



BURCHELL NURSERY, INC.

1-800-828-TREE



DUARTE TREES & VINES

1-800-472-3833

Krymsk[®] 86

Almond Rootstock (cv.AP 1) USPP#16,272



Fowler NURSERIES, INC.

1-800-675-6075



Sierra Gold Nurseries

1-800-243-4653

- Nonpareil Compatible
- Strongest Anchorage
- Tree Size Similar to Nemaguard & Lovell
- Good Nut Size
- Grower Friendly

info@ p2g.us.com



Blue Diamond Growers does not endorse or verify statements made by advertisers within this publication.

Blue Diamond at the Tulare World Ag Expo

At the end of winter, *Blue Diamond* hosted a booth at World Ag Expo®, one of the largest Ag trade shows in the world with more than 1,200 exhibitors on 2.6 million square feet of exhibit space. The *Blue Diamond* Member Relations team did a great job on the booth as it was a hit amongst attendees. ♦



Fan-Jet® Microsprinklers

Add a line of Fan-Jets®

Precision Rain - Rain when you want it, where you want it.

Frost Protection - Fan-Jets can help provide frost protection by raising the ambient temperature by 2-3 degrees.

Fan-Jets will allow you to push salts away from the root zone.

Fan-Jets will help your pre-emergents penetrate the soil.



American Made ★ **Family-Owned**
Tell your dealer you want Fan-Jets.

Scan this code to learn more about Fan-Jet Microsprinklers



BOWSMITH®
Quality & Trust Since 1974

Contact us at 1-800-BOWSMITH
or www.bowsmith.com

“California Coast Hit by Fourth Storm Since Clean-Up.”

—New York Times – 1/27/1983

“California Storms – Wettest Weather Years so far in 122 Years of Record.”

—Mercury News – 3/8/2017

“California Rain Breaks All-Time Records.”

—Los Angeles Times 10/25/2021

Record Setting Rain in Early 2023 in California. Honestly, What’s New?

Rain in California isn’t new. We know it’s coming, we know it comes after a drought, so why aren’t we doing anything about it?

We knew 40 years ago, and if you look back at the cycle of drought and rain in California we knew even as far back as the 1860’s, but all we do is play the blame game on who gets the water when it rains.

Enough is enough.

We need to stop the blame game, the fight on dividing water, and work to find solutions. We would be in a better position to do so if over the last four decades our elected leaders did something to preserve water when we get it. But that’s water under the bridge — literally. The question is what we do now, today, to start solving this problem.

California’s lack of 21st-century water storage, technology, and policy impacts us all. Allowing farmers to use existing infrastructure for movement and storage right now helps everyone — fish, people, farmers, and the environment. It is better to store water now than run into the ocean, because that water can be used later by fish, underrepresented communities, cities, and farms.

Today, one million Californians lack access to clean drinking water, hundreds of thousands of agricultural acres fallow, and specific fish populations continue to dwindle. There is no villain in this situation, only victims. California’s water challenges shouldn’t be an “us versus them” situation. That’s not how we find a solution.

Our water infrastructure was last updated 55 years ago for less than half our current population. This system was originally built for two water users, people, and food producers. Because of numerous state and federal regulations and legislation, we now have a third straw: protected species and environmental protection legal requirements. Everything impacted by water is essential for our state whether it’s growing food like almonds and citrus, or dairy and salmon. As the fifth largest economy in the world, we should not have one million of our people living without water in their homes. After knowing for decades what the ecosystem is, we should be able to figure out a way to save the water we need for the future. We need to stop talking and start doing.

We applaud Governor Gavin Newsom and his administration for looking at all sides, listening to various groups, and working to produce short-term solutions as we

work on providing long-term infrastructure, technology, and policy upgrades. None of us will agree with 100% of what he wants to do, but at least he is listening and trying to weigh everything to find workable and sometimes imperfect solutions. Breaking the cycle of rhetoric without action, to try something new. The most recent and monumental examples being the Executive Order expediting groundwater recharge on working farmland in order to assist in providing immediate public health and safety protection from flooding and contributing to the long-term health and safety of our communities by recharging our aquifers.

An emergency such as this is absolutely a stressor and a challenge, but perhaps can be an opportunity to see if we can maximize existing infrastructure resources for multiple benefits.

A Los Angeles Times column recently serves as the shining example of how we got into this mess in the first place by laying blame, seeking to divide people and groups, and offering no solutions. The article points out that groundwater recharge needs to be improved, yet the same authors oppose the governor's recent Executive Order allowing just that. This perpetuates the sins of the past in its aim to pit California food producers, especially almonds, against salmon.

We've heard that one before; it's getting old. I'm anxiously awaiting something new.

Picking winners and losers is the old way of doing things – the way that has gotten us here in the first place. The Almond Alliance is not interested in repeating past mistakes

or joining a chorus of complaints. We are in the business of offering solutions and solving problems, and we will work with anyone who will help us achieve that.

Once we are in a drought, and we all know it will be again, it is too late to do anything. As history shows, like other droughts in the past, this drought has not been solved by smart people, government officials, or policymakers. Mother Nature has solved it.

So, weirdly enough, during a flood, the real question we should all be asking is, what are we doing to prepare for the next drought?

The Almond Alliance has practical and doable ideas that can be done immediately and won't break the bank. Because farmers deal in solutions, we firmly believe farmers and working lands are a part of the water, sustainability, environmental, and equity solution, not the problem, and we are committed to being leaders in developing those solutions. We will work with any organization or elected officials – either party – or sit down with any reporter or columnist to offer concrete solutions, not hollow rhetoric, to finally address our water challenges in California now. ◆



**Aubrey Bettencourt,
President & CEO,
Almond Alliance**

Want more information like this? Don't miss our annual convention April 24 - 27!

The Almond Alliance team has the volume cranked to ten as we prep for this year's 41st annual convention, Won't Back Down, in La Quinta, CA, April 24-27, 2023.

[Register at almondalliance.org/convention/](https://almondalliance.org/convention/)

SUSTAINABLY SPEAKING, WITH DR. DAN

Update on the Climate-Smart Commodities Grant from the USDA

Previously in this column, I discussed the announcement of a \$45 million grant to *Blue Diamond Growers* from the USDA Partnerships for Climate-Smart Commodities fund. We will be using these funds to support growers in implementing specific “climate-smart” practices on *Blue Diamond* member orchards. Our primary partners in the grant include Project *Apis m.* and Pollinator Partnership, two organizations that have frequently contributed to Almond Facts in the past. This grant will provide cost share to growers for the implementation of one or more of the following practices:

- Annual cover cropping
- Conservation plantings (i.e. permanent cover outside the orchard/bee pastures)
- Hedgerow plantings (pollinator-friendly trees and shrubs)
- Whole orchard recycling

In addition to aiding farmers in adopting these practices, funds will be devoted to connecting these climate-smart practices to markets to enhance sales for the cooperative. As always, at *Blue Diamond*, our goal is to maximize returns to our growers, while we deliver the benefits of almonds to the world.

For this issue, I want to give a brief update on where we are with the grant process and the anticipated next steps.

What happens next?

Even though the award was announced in September, all grant awardees must have a signed contract with the USDA before the funds are made available. There are many requirements related to how federal funds must be spent which must be addressed in writing. To address these requirements, we have been actively collaborating with the USDA through a series of back-and-forth revisions. This all

takes time, and as I am writing this, we are in the process of submitting our third round of revisions. We will continue to keep our members informed as we work to move towards having a signed contract with the USDA. Believe it or not, we are told that we are one of the first organizations to get this far.

As I previously reported in this column, **growers and partner organizations cannot be reimbursed for any work related to the grant until the contract is completed and signed.** Once we have a contract, we will define the processes and policies for our staff and our partners to use in applying for the planting material and/or cost share reimbursement dollars. We recently hired a new staff person who will begin this planning even before the contract is finalized. However, other planning activities with our partners are directly funded by the grant and thus cannot be addressed before the contract is in place.

Here are some of the details the team will be working on between now and harvest:

- **Application materials** — All members who apply for funds through this grant must also participate in the Orchard Stewardship Incentive Program (OSIP), so we will be integrating the materials for both programs. As the OSIP program also provides a higher return for your crop delivery, it is an additional source of funding to members for going through this effort.
- **Cost share and Incentives** — Our latest draft proposal sent to USDA certainly estimates the cost share dollars for each practice, but we cannot finalize and publicly share these until the contract is signed and all the above items are addressed. Nonetheless, the cost share dollars for three of the practices are anticipated to lower the cost of

implementing the practices needed for an orchard to become Bee Friendly Certified, which is one factor in getting the top OSIP payment per pound. Our hope is that these combined resources will be a significant benefit to participating members.

- **Documentation requirements** — One of our partners recently commented that a strength of our proposal is that we intentionally plan to keep the measurement requirements for growers as minimal as possible. Many climate-smart programs require time consuming measurements and costly soil testing. We are committed to reducing this burden to our growers. That said, as we are using Federal dollars, there will be documentation requirements that will have to be followed by all parties. Documents will certainly include application forms but may also include reports from an online carbon calculator and/or receipts and photographs of the activities in the orchard.
- **Internal procedures** — We will be coordinating activities by members, our partners, our Grower Accounting team, and our Member Relations team. And that is just on the work related to grower practices and payments. There will also be workstreams related to carbon accounting and tracking the almonds we sell through the market development efforts funded by the grant. All of these will require verifiable internal documentation procedures.

Given the procedural requirements around U.S. government grants, there is a lot of work ahead. **Thus, growers should not plan on implementing eligible grant practices until after this year's crop harvest.**

What to do while you wait

Growers should register for and participate in OSIP if not already doing so. If you plan to take advantage of the USDA grant in the future, being a part of OSIP will reduce your workload when you submit your application. Contact your Regional Manager for details on how to register. They



Photo credit: Chris Rishwain

have already been conducting OSIP workshops this winter and spring and can share tips they've learned to make the process easier. The program has also been streamlined compared to prior years. There is also a financial reward for participants in the form of a payment on the crop already delivered in 2022. **The deadline to participate in OSIP for this crop year is approaching on May 26;** don't miss out on this opportunity unique to *Blue Diamond* membership. ◆



Dr. Dan Sonke,
Director of Sustainability,
Blue Diamond Growers

THE BEE BOX

Cover Crops in Almonds, What We Know and What We Don't

Overview of a Recent Research Paper

With more farmers adopting cover cropping each year, it is important to understand its benefits, implications, and current unknowns. An article recently published in the *Journal of Soil and Water Conservation* by UC Davis researcher, Dr. Vivian Wauters et al. titled “Developing cover crop systems for California almonds: Current knowledge and uncertainties” covers what we currently know and don't know about cover crops in almond orchards.¹ Although the practice of cover cropping in almonds is still relatively new, researchers are dedicating time, thought, and experimentation to this practice, expanding the science to answer our questions. Here are takeaways from the article, which includes several cover crop questions and concerns, and how the scientists addressed them.

California Almond Orchards and Cover Crops: The Big Picture

Almond orchards are a highly productive crop which dominates the California landscape. While a bare orchard floor is required for harvest, there is a window for using cover crops during the winter season which can provide a variety of benefits for the orchard, the grower, and pollinators.

Below ground, cover crops can loosen compacted soil, increase organic matter, improve water infiltration, increase microbial diversity, and, depending on cover crop variety, potentially reduce nematode populations.

Above ground, cover crops can suppress weeds, slow soil water evaporation, and support beneficial insect populations, such as pollinators and predators and parasites of pest insects. More specifically, a flowering cover crop can hugely benefit the honey bees present in the orchard before, during, and after bloom by providing ample nutrition that stimulates population growth and supports a healthy workforce of bees for almond pollination.



Erik Stanek, Blue Diamond Growers' Sustainability Specialist, stands in a field of blooming cover crop. Photo Credit: Dr. Dan Sonke



SHIELD YOUR YIELD.

DON'T LET LEPIDOPTERAN PESTS GO UNPUNISHED WITH CONCENTRATED ALTACOR[®] EVO INSECT CONTROL.

Evolved and optimized Altacor[®] eVo insect control powered by Rynaxypr[®] active offers the same benefits of Altacor[®] insect control but with a lower tank mix use rate. The optimized product concentration allows growers to handle, store and dispose of less product and packaging. It provides long-lasting, fast-acting residual control of Lepidopteran pests in tree nuts. Altacor eVo insect control is a foundational rotation partner in an integrated pest management program for tree nuts, pome and stone fruits and over 100 other crops.

Visit your FMC retailer or ALTACOREVO.AG.FMC.COM to shield your yield this season.



Chico, CA on January 12th, 2023. Standing water can be seen where no cover crop is present. Photo credit: Project Apis m.

Diving in: Below the Orchard Floor

Compaction

Cover crops can reduce soil compaction by simply forcing compacted particles apart through root growth. This root growth helps build stable soil pores and channels, improving soil aeration and water infiltration, thus reducing run-off of fertilizer material and pesticide residues. In one study, it was shown that soil compaction could be reduced by almost 40% using cover crops.

Soil Water

There is some concern that cover crops might compete for, or increase overall water use. Recent research has shown that cover crops can have a minimal impact on total water consumption. In some vineyards cover crops have been shown to increase water content in deeper soil levels. This is thought to be due to increased water infiltration. Cover crop evapotranspiration and soil evaporation have not been fully studied in almonds and further research is needed to understand all its effects. In particular, drip irrigation systems and how they relate to cover crop growth and soil water conditions is under investigation. Some of these water-related research questions are currently being studied at UC Davis, funded by Project Apis m.²

Soil Microbes

Cover crops support a diverse variety of soil dwelling organisms that can benefit tree crops. Cover crops in perennial agriculture systems increase arbuscular mycorrhizae — a type of fungi which colonizes tree roots and helps provide almond trees with greater access to nutrients and water. Greater diversity in the soil environment may also decrease soil-borne pathogens.

Organic Matter

The decomposition of plant matter, particularly roots, increases soil organic matter. The bulk of the chemical composition of organic matter is carbon. Because of this, sequestering carbon from the atmosphere through cover crops is a major potential environmental service that is actively being studied in almond systems. Currently, it is suggested to add compost along with cover crops to reliably build soil carbon levels.

Seeing the Action: Above the Surface

Suppression of Weeds

Cover crops may suppress weed growth in the areas of the orchard they are grown by outcompeting and shading weeds or reducing weed seed germination via the cover crop termination process.

Orchard Pests

The use of cover crops can help with managing above ground insect pests. Most notably cover crops can provide harborage and breeding habitat for beneficial insect species.

It is important to plan cover crop planting around pest control practices. Of greatest note is Navel orangeworm (NOW), a problematic pest for almonds. Winter sanitation practices, where mummy nuts are shaken from the trees and destroyed, are vital in NOW control. There are many ways to work cover crop around winter sanitation. For example, cover crop could be planted in every other row, leaving clear rows available for mowing



A daikon radish — an example of how cover crops break up compacted soils and increase organic matter beneath the surface. Photo Credit: Project Apis m.



Cover crops are exceptional places for pollinators and beneficial predatory insects Long-term implementation and proper management is the key to success in using cover crops for integrated pest management (IPM) in almonds. Photo Credits: Project Apis m.

FOR EVERY PHASE OF
NUT PRODUCTION...

WE'VE GOT YOU COVERED!



Eligible for the
LOW-DUST
Nut Harvester
Replacement Program
by the San Joaquin
Valley Air Pollution
Control District



To see our complete line
of harvesters, sweepers,
conditioners & orchard
cabs, please scan



www.exactcorp.com or call 209.544.8600
Built by farmers for farmers... we understand!



mummy nuts. Interestingly, cover crops have been shown to reduce the number of NOW. This is thought to be due to changed orchard floor conditions which accelerate the decomposition of mummy nuts on the ground and increased mortality of the NOW larvae. Cover cropping is not a replacement for winter sanitation but can work synergistically with NOW suppression.



Seeds for Bees' Pollinator Brassica Mix blooming with colonies in the orchard. Photo Credit: Project Apis m.

Pollination and Bees

Cover crops also provide strong pollination benefits. The vast majority of commercial almond orchards depend on pollination services provided by managed honey bees. However, most almond orchards lack diverse



pollen and nectar resources that can benefit honey bee health. Flowering cover crops present an opportunity to expand nutritional resources for bees and increase brood stimulation and thus pollination productivity and efficacy.

For years, almond growers rightfully asked whether a blooming cover crop would compete with almond blossoms for bee visitation and pollination. This research article showed that a flowering cover crop does not compete with nor decrease pollination effectiveness in almonds. In some instances, the presence of non-almond flowering plants has been shown to improve almond pollination. When bee hives are placed in orchards in the late winter, honey bees will not have yet received the signals to begin growing their numbers and preparing for spring. The first pollen brought into the hive by early foragers serves as that signal. Once the queen bee notices there are new pollen sources, she will begin laying eggs. This stimulates the colony to begin collecting more pollen and nectar. Cover crops — which flower before the almond bloom — kick-start this early foraging behavior, meaning that when the almond bloom time arrives, it's met by bees that are ready to go rather than just waking up. One of the reasons why almond pollination services have become so expensive is because beekeepers have been forced to start this process of stimulation by adding pollen patties and sugar water at high cost to have hives ready to go when they arrive in the orchards. Just like growers, the more inputs and "touches" to any beekeeping operation, the higher the costs go.

Cover Crop Termination and Harvest

Managing cover crops for pollinator health may entail some tradeoffs. When 50% of the cover crop is in bloom, the carbon to nitrogen balance in plant matter begins to favor carbon. As less nitrogen is available compared to the amount of carbon, plant matter break down is slowed. Thus, as Project Apis m.'s Seeds for Bees program advises growers, it is imperative to manage the cover crop properly. If the above ground biomass of the cover crop is not properly managed, crop residues may indeed become a nuisance during harvest. Proper management has shown

that this factor is easily eliminated if the grower pays careful attention to certain factors and terminates the cover crop at the proper time for each particular orchard situation.



Frost

Lastly, the flowering of the cover crop can be affected by current recommendations for frost risk management. The current recommendation is that cover



Weiss McNair
NUT HARVESTING EQUIPMENT



2850 SWEEPER



5510 CONDITIONER



7510 HARVESTER

For more information or to find a dealer near you, call us at **(530) 891-6214**
or visit our website at weissmcnair.com/dealer-locations

100 Loren Avenue, Chico, CA 95928
(530) 891-6214 | Fax (530) 891-5905 | www.weissmcnair.com

crops or resident vegetation be terminated below two inches if a frost event is forecasted because cover crops keep the soil cooler than bare ground. This can prevent cover crop flowering and thus eliminate important sources of pollen and nectar. Choosing to manage cover crops for pollination benefits must be balanced with other potential tradeoffs in orchard priorities. Project Apis m. is currently dedicating research funding to help assess this question.

Summary

Based on their review of the research, Wauters et al. suggest that a variety of plant species be utilized in cover crops and allowed to grow for as long as possible to maximize benefits, while acknowledging that orchard conditions and a grower's goals for using cover crops are diverse.

On a Personal Note

As the new Seeds for Bees program manager at Project Apis m. I bring an almond growing background to my work. In my experience, cover crops performed their best when planted in October. During bloom I noted that both the trees and cover crop were coated in bees, though the bees seemed to favor the almond blossoms in the morning hours. We would mow the crop sometime after our bees had been removed and I still marvel at how quickly the plant matter would disappear (though we did have the benefit of solid set irrigation to help break the material down). Our soil was better, and our trees were happy and healthy. We even had some personal crop records being surpassed after using cover crops for a few years. Of greatest note, for me at least, was how well the triticale grass in our mix suppressed our Round Up resistant hairy fleabane. In some places where our planter missed a spot it seemed like we had purposefully planted that weed, it was so prevalent in that orchard.

Setting Growers Up For Success

Growers who haven't tried or haven't continued with cover crops have an opportunity. With *Blue Diamond Growers'* USDA Partnership for Climate Smart Commodities Grant, cover crop seed is being almost fully subsidized for your orchard, regardless of operation scale. ♦



TGS IS IN THE ZONE
Better Water Penetration With The Schmeiser Orchard Max Aerator

Patented Smart-Till tines fracture and open the soil 8" deep with little soil disturbance. Breaks hardened soil for longer irrigation sets and less ponding in the row middles. Delivering water and soil amendments directly to the root zone for Max results.



- Maximizes water penetration
- Increase irrigation runs
- Incorporate soil amendments
- Reduces soil compaction
- Fast at 6-8 mph reducing cost/acre

Call your dealer for a demo or see the video in action at www.TGSchmeiser.com
Better Root Zone Management from

T. G. SCHMEISER®
1-800-288-8128 • www.tgschmeiser.com

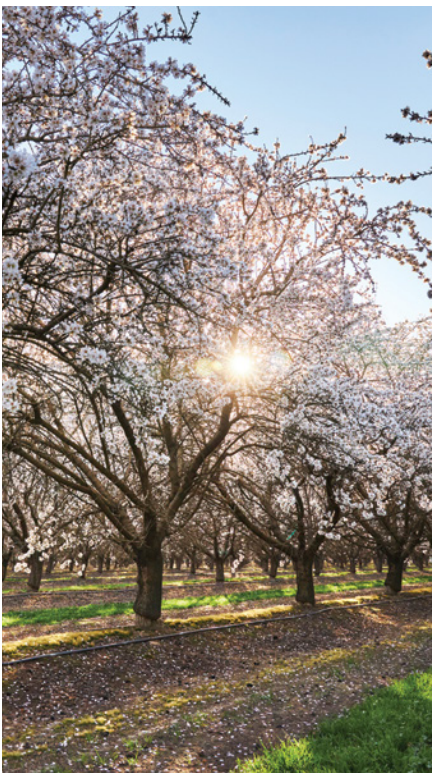
Resources For This Article:

(1) Wauters, Vivian M. et al. "Developing cover crop systems for California almonds: Current knowledge and uncertainties" Journal of Soil and Water Conservation January 2023, 78 (1) 5A-11A; DOI: <https://doi.org/10.2489/jswc.2023.1109A>

(2) Project title: "Measurements and Modelling of Regenerative Almond Impacts on Water Balance and Frost Risks." Principle Investigator: Dr. Kosana Suvočarev, University of California Davis. More information about this work can be found at: projectapism.org/research



Stetcyn Maldonado,
Seeds for Bees Program Manager, Project Apis m.



Hybrid Rootstocks

Our well-branched roots will be the anchor to your orchard success.

Bright's Hybrid 5® (USPP #18782)

- Vigorous & drought tolerant
- Nematode resistant

Hansen 536

- Good anchorage
- Vigorous & drought tolerant

Krymsk® 86 (USPP #16272)

- Superior anchorage
- Adapted to heavy & wet soils



**ORDER NOW FOR
2024 & 2025
Bareroot and Potted**

(800) 675-6075
FowlerNurseries.com
Newcastle, CA

Blue Diamond Growers does not endorse or verify statements made by advertisers within this publication.

THE ALMOND BOARD

Opportunity Alert: Got Fallowed Land? Recharge Water from Spring Snowmelt Runoff

The recent winter storms have reminded us that California must do more to use rain and snowmelt flood flows for recharging California's groundwater aquifers. A key part of any strategy to utilize the excess water that comes from these atmospheric rivers and storm events is directing some of those flows to landowners who are able and willing to apply water to their land for groundwater recharge.

Growers who are able to receive floodwater can help recharge local groundwater basins, ease pressure on flood control infrastructure by diverting water elsewhere and help support meeting the goals set in the Sustainable Groundwater Management Act (SGMA). This practice can help ensure a sustainable and reliable source of groundwater for all: farmers, communities and the environment.

A Lot of Snow to Melt

The Sierra snowpack — measuring nearly 200% of normal as of February 27, and more than 150% of the April 1 peak — will be a significant source of increased runoff flows this spring. When rapid snowmelt and reservoir releases occur, flood control agencies and local governments will again face the challenge of managing increased flows.

The Almond Board of California (ABC) and the non-profit Sustainable Conservation have developed an *Introduction to Groundwater Recharge Guide* so California almond growers can begin evaluating their options for addressing local sub-basin overdraft through recharge, helping secure reliable, sufficient, and drought resilient groundwater supplies.

These on-farm recharge strategies can be adapted so almond growers can play a big part in helping recharge groundwater with valuable runoff flows this spring and even into summer.

Not Using a Block This Year?

Many growers have fallowed fields that have yet to be replanted for the coming season, which

can serve as potential recharge sites. Depending on local soil conditions and other factors, this temporarily fallowed acreage can be instrumental in ensuring that almond growers are helping to utilize the precious water supplies from the winter storms and snowmelt.

If you are a grower with fallowed acreage and interested in helping put surface water into groundwater aquifers, contact your local irrigation district to see if they will be making flows available to apply to lands for recharge. The more landowners who participate in this effort, the better off groundwater basins will be. A healthier basin is more likely to come into compliance with SGMA and may be able to support larger allocations for growers.

ABC and Sustainable Conservation are available to work with growers, irrigation districts and water managers to make sure that all available water can be recharged this year and in future years.

Article contributed by the Almond Board. ◆

Have More Questions?

ABC Contact: Jesse Roseman — jroseman@almondboard.com

Sustainable Conservation Contact: Rogell Rogers — rrogers@suscon.org



Blue Diamond grower, Christine Gemperle opens a valve to allow excess storm flows to flood a portion of her land



A Turlock irrigation canal flows from heavy February storms in 2023



BLUE DIAMOND GROWERS SCHOLARSHIP FOUNDATION GOLF SCRAMBLE



MAY 8, 2023

**Brookside Country Club
3603 St. Andrews Dr.
Stockton, CA 95219
9:30a.m. Shotgun Start
Register by April 21**

Registration is limited to 152 golfers and based on a first-come, first-served basis and due by April 21

Sponsorship Opportunities Available (Due by April 21):

Supreme Sponsor \$3,500 (1 available) – includes 8 golfers (2 teams), the option to have a Blue Diamond golf pro on one team, 3 hole sponsor signs, dedicated logo banner at event and in Almond Facts Magazine, social media posts, 20 raffle tickets, 16 drink tickets, 8 mulligans

Nonpareil Sponsor \$1,750 – includes 4 golfers (1 team), 1 hole sponsor sign, logo at event and in Almond Facts Magazine, 10 raffle tickets, 8 drink tickets, 4 mulligans

Carmel Sponsor - \$1,250 includes 4 golfers (1 team), 4 raffle tickets, 4 mulligans

Pollinizer Sponsor \$500 – includes 2 golfers

Hole Sponsor – \$250 per hole, or \$600 for 3 holes

Raffle Sponsorships are available

Note: Golf cart, breakfast burritos, and lunch are provided for golfers

**Contact Justin Elam for
availability & registration
Phone: 209.303.7306
Email: jelam@bdgrowers.com**



TIME TO CONSIDER

Gone are the times where growers only needed to worry about disease during spring. After that dramatic sentence, I hope I have your attention! Spring used to be a time where growers would watch the weather forecast and determine if there was a need for fungicide applications and then put their focus on Navel orangeworm going into the month of May. Here at Blue Diamond, we have noticed a frightening trend in reject data from a particular group of pests, which likes to do its damage during this previously quiet time of the almond growing season. What are those pests? **Leaf-Footed Bug** and **Stink Bugs**! Some growers are quite familiar with these pests, but for those who are not, I am going to breakdown what these pests look like, how to scout for them, and what you can do to try to control them.



Figure 1 UC Davis Statewide IPM Program



Figure 2 UC Davis Statewide IPM Program

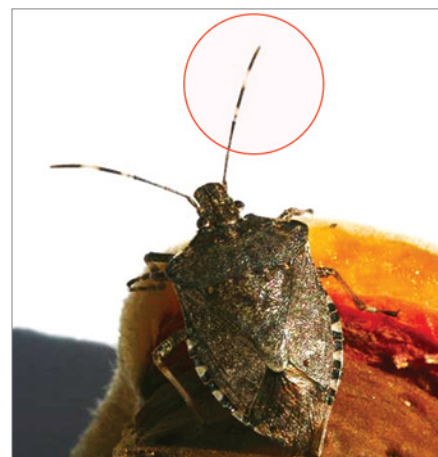


Figure 3 UC Davis Statewide IPM Program

Leaf-Footed Bugs and Stink Bugs come from the same family of insects, called Hemiptera, which is just the scientific way of saying they are an insect with piercing/sucking mouthparts. Both pests cause damage when they feed on maturing almonds with their needle-like mouth parts, which is called a proboscis. They insert the needle-like mouth part into the nut and that damage can lead to the nut aborting, or if feeding is done later in the season, it may not abort but will leave a lesion known as **Brown Spot**. How can you tell the difference between the pests? Leaf-Footed Bug (Figure 1) is fairly

easy to identify since it has a small appendage on its hind leg that looks like...you guessed it, a leaf! There are three different species of Leaf-Footed Bug, but they all look relatively similar. Stink Bugs are another story. We have quite a few native Stink Bugs in California and not all cause damage. I am only going to talk about the species that cause problems for you as growers. Green Stink Bugs are a native species to California and look just like they sound (Figure 2). The second, possibly more worrisome Stink bug, is the invasive Brown Marmorated Stink Bug also known as BMSB. BMSB was first found in

California in the mid-2000s and has now been found in more than 16 different counties. BMSB looks similar to a native stinkbug but has one very noticeable marker, two white bands on their antennae (Figure 3). The damage caused by BMSB and Green Stink Bug is very similar as they will feed/sting a nut multiple times. BMSB can also be a nuisance for homeowners where large populations of the pest will try to enter homes in the fall and winter months.

Hopefully you are now confident in what these pests look like, but I am going to burst your bubble a bit.


These pests are not easy to find in the field for two reasons. One, they are perfectly colored to blend into the almond trees, so you may walk right past them, and two, they hide really well! When I was working as a Pest Control Advisor I found a Leaf-Footed Bug in a grower's field, mostly by luck, but it actively tried to hide from me. If I moved to the left it would move to the right, if I pulled the branch down it would try to move lower under the leaves. They work hard to not be seen. In most situations you'll hear a Leaf-Footed Bug flying before you see one. Just be ready though, it will sound like a Chinook helicopter buzzing by. Since these pests are hard to find in the field, the best way to identify if you have a problem is probably also the most depressing. You must look for the damage. The **damage** is identified by dropped or aborted nuts especially early in the season months of March and April or nuts with exuding gumming (Figure 4). These insects will continue to feed after the nut has hardened which will result in the defect known as **Brown Spot** (Figure 5).



Figure 4 UC Davis Statewide IPM Program

The damage caused by both insects can be severe. You may lose production from aborting nuts, have high reject levels because of Brown Spot, or both! Controlling them becomes the number one priority. The problem is, as growers, you have lost some of the best tools against these pests. Chlorpyrifos used to be a successful product when battling these bugs, but with new restrictions it has become a relic of the past. This leaves growers with pyrethroids, which can cause secondary pest issues like mites when used multiple times. The hardest part about controlling these pests is the spray material needs to make contact with them. They are notorious for walking on their "toes" and not having much contact with foliage. They also feed from deep inside the nut, so they have little chance of ingesting material. In my opinion, the best way to achieve control

GET EVERY NUT



The New Schmeiser V-Blade Roller combines all the advantages of a durable V-Blade with a Rear Roller to provide groove-free smoothing and reduced loose dirt at the row ends.

Contact us for complete details.

Because every nut counts!

T. G. SCHMEISER®

1-800-288-8128 • www.tgschmeiser.com



Figure 5 by Mel Machado

starts well before an application. It starts with finding and removing areas or hosts where these pests can overwinter. Leaf-Footed Bugs will overwinter in fruit trees (pomegranates), evergreens, and wood piles. Stinkbugs can overwinter in the orchard, but that is why scouting becomes vital as we enter the season. Once a bug or damage is found, there is no waiting period before an application should be made. The longer you wait the longer they will have to feed. Lastly, choose the correct product and make sure to have a good application. Your PCA can help you with all the elements listed above.

There may be a few of you readers who have not yet dealt with these pests and are wondering why I am talking about them so much. Here is why: according to our *Blue Diamond* reject data, since 2014 Brown Spot has increased dramatically and is now the number two cause of rejects, only behind Navel orangeworm. In 2022 Brown Spot was the number one reject in the Independence variety. In some cases, the damage has been so severe that reject levels exceeded 30%, deeming those deliveries as oil stock. These are pests that you, as growers, need to be aware of so you can scout for and control them. They are a pest we can no longer ignore. ♦



Trent Voss,
Regional Manager,
Blue Diamond Growers

FLORY

LEADING THE WAY IN NEW TECHNOLOGY
PRESENTING THE **MULTI-PURPOSE...**

FLORY ST14 SHUTTLE TRUK



Standard features include...

- Next generation air-cab with 180° swivel seat
- Updated controls and operator comfort
- ½" Shatter resistant orchard glass
- Service brake for quick powerful stopping
- Cruise control for consistent ground speed
- LED headlights and tail lights with high-low beam for improved road safety
- Easy engine and DEF access
- Rubber isolated cooling package with reversing hydraulic fan
- Service friendly

YEAR ROUND USES



Air-O-Fan Sprayer



Flat Bed



Nelson Hardie Sprayer



Herbicide Sprayer

TRADITION - INTEGRITY - SERVICE - CRAFTSMANSHIP
Since 1936

Flory Industries, Salida, CA 95368 USA 209-545-1167

See all our products at goflory.com

Watch the video on ShuttleTruk.com



goflory.com



GO CLEAN
GO EFFICIENT
GO FLORY



Call Your Local Dealer Today!

WANTED

Approximately 400 6' fence t-posts. Also 3,500' of 5' fencing in good condition.

Call Daryl: 209-667-6895

WANTED

3-axle Dump truck with steel sides (diesel).

Call (209) 614-2632

WANTED

Used walnut chain for Johnson pickup machine.

Call (209) 838-2108

WANTED

1930-36 cars or pickups and 1932 Ford pines winterfront grille insert also 1930-1934 Ford running chassis.

Call (925) 872-0980

WANTED

Gasoline Memorabilia: Old gas pumps, gas signs, oil signs, car signs, and old cars and pickups.

Call (559) 485-9496

FOR SALE

- Weiss McNair Sweeper - \$60,000
- John Deere 5100ML 4WD w/cab - \$55,000
- 200 Gallon Herb Sprayer - \$3,300
- Rears 13' Flail Mower - \$9,000
- 12' Orchard Leveler - \$2,000
- Rhino 10' offset flail mower - \$2,000
- Randell modified sprayer - \$1,000
- Ferguson Spring Tooth 7' - \$500
- Custom orchard float - \$250
- Vintage Windmill - \$2500

Call Ginger: (323) 842-2799

FOR SALE

(2) Johnson's pickup machines, \$5,500 each or reasonable offer.

Call (559) 485-9496

FOR SALE

- New super strong shaker tires - 10 ply-14.5/75 - 16.1. \$1,350 each.
- Skid steer connect with forks and brush rake attachments (call for prices).
- 350-gallon fuel tank - \$400
- 3-point nut crowder - \$1,500

Call Sam (209) 765-0027 (leave message) Ceres.

FOR SALE

Micro sprinklers: very good Netafim green base sprinklers, stakes, 1/6" tubing, spaced 16' on 3/4 hose. 12-acre orchard removed.

Call to make offer: (209) 667-6895

FOR SALE

Flory 6656 Sweepers:

- 2011 ± 4900 hours \$25,000
- 2014 ± 2400 hours \$35,000

OMC Sprint Shakers:

- 3) 2016 ± 4000 hours \$65,000 each
- 2011 ± 6000 hours \$45,000

Serviced and field ready. Located in Denair.

Call Ed: (209) 874-1268

FOR SALE

Verisimo fail mower Model #SC-100: \$5,000.00

9ft. wide float roller: \$1,000.00

Spring tooth with attached following harrow 8ft wide 3 point hook-up: \$1,000.00

Brush rake rear push 9ft. adjustable spacing: \$1,000.00

Call (209) 505-1731

FOR SALE

Amarillo Irrigation Well Gear Head with PTO shaft. \$850. Used very little.

Call (209) 620-4924

FOR SALE

- Milk cans with lids
- Heavy Duty Ripper (3 shanks), \$2,500 OBO
- 150 gal Water Tank on frame with new tires, paint, and gravity flow. Used one season \$1800 OBO

Call Arby: (209) 505-0555 or text (209) 602-1400. Turlock area.

FOR SALE

Flory 7 ft sweeper head, Series 77. Good condition. \$8,000 OBO.

Call or Text (209) 605-2603. Manteca area.

FOR SALE

Qty 2 6656 Flory Sweepers: 6 1/2 ft head, Kubota diesel. Field ready. \$29,500 each.

Call (209) 599-7108

FOR SALE

Walnut stakes, 3/4", 10' long, used sucker rod, pallets of 10 or 200 up to 5600 available. \$2.50 each, Escalon area.

Contact (209) 652-5164

FOR SALE

Model B Case tractor circa 1946-50, peach trailers, Almond Roller, Brush fork, Lift for bins, Levee maker, Ridger, Propane tank, Long camper shell, hose pull with sled, International Tractor with front end loader, water pressure tanks, almond bottom dump trailer, windows.

Contact Ann at: (209) 632-4346 for more info.

FOR SALE

Tree Stakes for Almonds. 1000's of used steel stakes to keep your almond trees growing straight:

- 3' @ 75 cents each
- 4' @ \$1.00 each
- 5' @ \$1.25 each

Please call (209) 969-0526

FOR SALE

- R & L Easy lift Elevator. 10' Height 12" cups. In pieces. FREE!
- Jessee 500 Air leg 32" belt, no motor. FREE!
- 11ft. Orchard float w/ Hydraulic wheels CALL for pictures & pricing.
- 4 Stage sizer, good condition. \$4,000
- 60 H.P. Sturdavent Shell Fan with motor. Complete. \$1,500

Contact Ron Piazza at: (209) 678-0788

FOR SALE

- OMC Shaker Mono Boom Walnut Pattern. \$350
- Rear end Housing for OMC Shaker Mono Boom Shaker – make offer
- 2 Main Boom Arms to hold up Shaker Head. \$3,000 OBO

For more information call:
(559) 485-9496

FOR SALE

REARS 500 gallon Power Blast sprayer with 33" fan. Purchased in 2016 new. Used 13 times. Maintained per manufactures recommendations. Asking \$20,000 OBO.

Call (209) 604-7444

FOR SALE

- 500 Gallon Rears Power Blast Sprayer. Rebuilt and field ready; \$7,500.
- 10' Wide Laikam Orchard Float. Excellent condition; \$7,500.
- Above Ground Fuel Tanks. 200-500 Gallons. \$200-500 each.
- 2 New Tires On Rims. 8-Ply 27 x 9.5 x 15. \$125 each.
- 2 New Tires On Rims. 8-Ply 31 x 13.5 x 15. \$200 each. They fit a 480 Flory Harvester
- Rodex 4000 Plus Rodent Blaster. \$200
- Dripline Unroller. \$100

Contact Jeff at (559) 696-6466

FOR SALE

2200 lb./hr. almond hulling plant. Two lines, Fadie huller and separator deck with three air-legs. Pre-cleaner 15 ton/hr. with midstate pre-cleaner, H8 Foresberg de-stoner, and Agsco de-twigger. Complete with pit, elevators, cyclones, and 190 ft. hull auger. Sell all or part. Open to offers.

Contact Gale Langum at:
(209) 612-4830

FOR SALE

Beautifully restored to original 1931 Ford Roadster Pickup, \$18,000 or best offer.

Call (925) 872-0980

FOR SALE

- Tractor trailer, 10'x6'-6". 22.5 tires. Crank up ramps. \$4,500
- Enviromist Sprayer. 6'-6" spray band. Brand new. Never used. Cost \$2,500. Sell \$1,250.

Call (209) 537-9491. Ceres.

FOR SALE

Used Precleaner. \$150,000. Items include: pit liner and auger; pit elevator; cross conveyor; stick reel; 2 sand screen elevators; 2 sand screens; 2 foresberg P8 destoners; 2 detwiggers; bottom auger flighting; bin elevator; cross bin auger; misc air ducting; misc steel spouting. Does not include: mac baghouse and all connected items; mac baghouse blower; mac baghouse clean air pump.

Contact (209) 358-1759

FOR SALE

- Rears Orchard Sprayer
- Disc, Springtooth
- Rainbird and Toro Low Impact Sprinklers

Call (559) 268-3087

Free listings in this section are for the exclusive use of Blue Diamond members.

Classified ads for personal use — not as an additional means of advertising commercial ventures members may own. Ads are limited to a maximum of 10 lines and may be submitted to Blue Diamond regional manager or the editor at:

Editor: Blue Diamond Growers
P.O. Box 1768, Sacramento, CA 95812

Or contact BDG Communications
Email: communications@bdgrowers.com

Unless advised otherwise, ads will run two consecutive issues. To guarantee placement, classified listings must be submitted by the 10th of: January, March, May, July, September & November.

FOR SALE

- John Deere low profile 5100ML with exact cab tractor
- 12' V Risimo flail mower
- 8' V Risimo flail mower
- PBM 500 gallon weed sprayer with electric valves (new, never used)
- Durand Wallon 500 gallon tree sprayer
- 12' Domries orchard leveler float

Contact Joe at (209) 404-3326

FOR SALE

2008 8 Channel Satake Ultrascan. \$60,000

- Includes platform, Infeed dump hopper, Anex C-style bucket elevator with 50/50 split buckets
- Stainless steel hopper over chutes has been modified to prevent plugging and bridging of product
- Machine is currently set for 2 passes (4 channels each) and can be run as a single pass (8 channels)
- Walnut Setting (can be converted to Almonds)

Please contact Nina at:
(209) 609-6689



BLUE DIAMOND GROWERS

1802 C Street
Sacramento, CA 95811

PRESORT
STANDARD
U.S. POSTAGE
PAID
SACRAMENTO, CA
PERMIT NO. 694

OMC
STRONG ON PARTS AND SERVICE

ORCHARD MACHINERY CORPORATION
www.shakermaker.com

Shockwave Sprint
SIDE-MOUNT SHAKER

TREESEEKER
PAT. # 6,656,834 7,757,471 9,465,912

Aftershock CC-350LP
LOW PROFILE CONVEYOR CART

Aftershock AR-500
REAR-DISCHARGE SHUTTLE

Shockwave 3WMB
FRONT-MOUNT SHAKER

Aftershock AR-400
SIDE-DUMP SHUTTLE

Aftershock SD-36
SIDE-DUMP FIELD ELEVATOR

Hedgehog
3000-Series HEDGER

HEDGEHOG
A CUT ABOVE

Brush Hog
HYDRAULIC RAKE

E-LIMB-INATOR
SHREDDER

Yuba City 2700 Colusa Hwy Yuba City, CA 530-673-2822	Orland 6480-A Road 27 Orland, CA 530-865-1006	Modesto 4207 E. Ceres Rd Ceres, CA 209-669-2522	Firebaugh 1529 N Street, Ste B Firebaugh, CA 559-659-0200	Tulare 5200 Tex Dr Tulare, CA 559-688-2081	Shafter 30715 San Diego St. Shafter, CA 661-746-7232
---	--	--	--	---	---

Follow us!
@OMCshakermaker