CDFA-F2F Releases Refrigeration Grants, Sponsors Farm Tours, and Participates in Ag Day

On Feb. 28, the California Department of Food and Agriculture Office of Farm to Fork (CDFA-F2F) released a request for proposals for the new Healthy Stores Refrigeration Grant Program. This program will disburse up to $4,500,000 in grants to fund energy efficient refrigeration units in corner stores and small businesses in food deserts throughout the state. Grant-funded refrigeration units must be used to stock California-grown fresh produce, nuts and minimally processed foods. These grants will help improve access to healthy food choices in the small retail environment for underserved communities while promoting California-grown agriculture.

The deadline to submit grant proposals is April 25 and the program anticipates announcing awards in May.

This quarter, CDFA-F2F also kicked off a series of farm tour field trips for students throughout the state. Made possible by Specialty Crop Block Grant funding, these farm tours aim to increase students’ knowledge of and appreciation for California-grown produce through direct interaction with local farmers. A total of four tours were held in February at farms on the North Coast and Northern California; additional tours will be scheduled at Central Valley and Southern California farms in the coming months.

On March 20, CDFA-F2F staff represented the CDFA and the California Farm to School Network at this year’s Ag Day celebration at the Capitol. Staff discussed current farm to school efforts with state legislators and members of the public, while students from the Natomas Student Culinary Program handed out samples of a delicious salad made with fresh, locally grown broccoli.

Students from the Natomas Student Culinary Program offer crisp spring broccoli salad at Ag Day 2019.
Center for Analytical Chemistry to Analyze THC, Progress in GMO Testing, Trains for Courtroom

FOOD SAFETY LAB
Following the passing of the most recent federal Farm Bill and the resultant legalization of industrial hemp, the Food Safety Laboratory at the Center for Analytical Chemistry (CAC) has been tasked with developing a method for analyzing tetrahydrocannabinol (THC) content in hemp. Industrial hemp is defined as “a crop that is limited to types of the plant Cannabis sativa L. having no more than three-tenths of one per cent THC contained in the dried flowering tops.” There have been some challenges with method development. Industrial hemp has dozens of naturally occurring cannabinoids, many of which have the same molecular weight and might interfere with THC detection. Therefore, it is necessary to develop a method with adequate chromatographic separation of these cannabinoids. Scientists at the CAC developed a robust analytical method utilizing Liquid Chromatograph with Tandem Mass Spectrometry (LC-MS/MS) optimized for the detection and quantification of total THC (that is, the sum of delta 9-THC and its acid). The method is ready for the validation process which will be complete within the next couple months.

PESTICIDE RESIDUE LAB TO TEST FOR GENETICALLY ENGINEERED CROP PRODUCE
Genetically modified (GM) Crops were first introduced in the U.S. in the mid-1990s. Most current GM crops grown in the U.S. are engineered for insect resistance or herbicide tolerance. Corn, soybeans, and cotton are the three largest acreage GM crops. GM crops are regulated at the federal level by the USDA, the Environmental Protection Agency and the Food and Drug Administration, each with authority to oversee specific aspects of the crops and their products. CDFA’s State Organic Program (SOP) is committed to holding the integrity of the products sold and/or produced in California as organic. In 2015 the California Organic Products Advisory Committee (COPAC) asked the SOP to begin gathering information on the potential presence of genetically modified organisms (GMOs) in organic products. The National Organic Program prohibits the use of GMOs in organic production and handling. Recently, the SOP requested the CAC’s Pesticide Residue Lab (PRL) start analyzing for genetically engineered produce in limited commodities. In January 2019, six CAC staff participated in training to understand and utilize the Real Time Polymerase Chain Reaction (PCR) instrument when testing food and feed for genetic modification. Currently the staff is working on a robust method that would screen and quantitate for genetic modification in corn and soy samples. The method is ready for the validation process which will be complete within the next few months.

COURTROOM TESTIMONY TRAINING
The CAC labs provide services to help clients meet enforcement and regulatory needs. They provide quality, accurate and defensible data to clients. Over the years multiple staff have been subpoenaed numerous times to provide expert testimony in court regarding the analysis performed within the Environmental Safety and Food Safety labs.
FFLDRS Involved in Conferences, Student Interaction, Training, Workshop Participation

**FREP**

Over the past winter and spring, our Feed, Fertilizer and Livestock Drugs Regulatory Services (FFLDRS) Fertilizer Research and Education Program (FREP) tabled at several important conferences, including the World Ag Expo, Walnut Field Day, Small Farms Conference, Plant and Soil Conference, Irrigation Conference and the Western Nutrient Management Conference. These events allow FREP staff to disseminate important information to practitioners, consultants and growers on previous and current FREP research and engage with the agricultural community on ongoing issues.

For information about upcoming outreach events, check out the FREP Event Calendar. For a full list of FREP outreach materials, visit our Resources page (https://www.cdfa.ca.gov/is/ffldrds/frep/Resources.html).

**REQUEST FOR PROPOSALS**

On Dec. 3, 2018, FREP released the program’s annual Request for Proposals (RFP), and the concept proposals were due on January 31, 2019. FREP received 43 proposals. After review by FREP’s Technical Advisory Subcommittee, 16 of those submissions advanced to the full proposal phase. The full proposals are due to FREP by May 16, 2019.

**CULTIVATING THE NEXT GENERATION OF AGRICULTURALISTS**

As the next generation is called upon by the agriculture industry, it is important to share with them the role that CDFA plays in California agriculture and job opportunities available in the industry. This quarter, the next generation heard from FREP about staff experiences working for CDFA and the intersections that CDFA makes with other career paths.

Natalie Jacuzzi, FREP’s senior environmental scientist, was invited to speak to the soil chemistry graduate course at UC Davis. The students were eager to learn about the important services that CDFA performs to protect our food supply and support the agricultural industry while maintaining a commitment to environmental stewardship.

Nicole Crouch, FREP’s environmental scientist, had the opportunity to speak to a group of Future Farmers of America (FFA) at River City High School. She discussed the essential role that FFA plays in providing the next generation with the technical knowledge and leadership skills they will need to be successful in the agricultural industry. Nicole also advised about the available education and career paths if students pursue agriculture. To wrap up the day, they visited the school garden where Crouch addressed their questions on fertilizer and irrigation management.

**TECHNICAL TRAININGS**

Through the FREP Grower Training Program, growers learn essential aspects of agricultural nitrogen management and the information required to complete Nitrogen Management Plans (NMPs) as required by Central Valley water quality regulations. Growers may self-certify their own NMPs if they participate in this CDFA training program and pass the exam. Since fall 2015, over 70 grower training sessions have been held, with over 4,000 growers participating.

Additionally, the Certified Crop Advisor (CCA) nitrogen management training program continued in 2019, when the CCA training was held on March 12 and 13. This training brought the total CCA participants to more than 1,000 people over the last five years.

**FREP CONFERENCE**

The 27th annual Nutrient Management Conference, hosted by FREP and the Western Plant Health Association (WPHA), will be held in Fresno, California, Oct. 28–30, 2019. The conference will address the application of fertilizing materials for crop production and the environmental issues associated with their use. Early registration opens in August 2019.

FFLDRS continued on Page 4
A few of the Fertilizing Materials Inspection Program (FMIP) team scientists (Kris Gulliver, Evelyne Ndiaye, Patrick Barbree and Martin Burger) attended the 2019 California Plant & Soil Conference in Fresno, CA, Feb. 5–6, 2019. During these two days, the scientists attended several concurrent sessions ranging from Sustainable Water Management and Climate Smart Agriculture to Managing Nitrogen Fertilizer Inputs for Efficiency. Some of the main takeaways from the latter session were the importance for growers to measure residual nitrogen in their field prior to planting subsequent crop, and the benefits of using controlled-release fertilizers. For more information, presentations and proceedings can be found at http://calasa.ucdavis.edu/2019_Presentations_and_Proceedings

A poster session also was held from 5–8 p.m. on Feb. 5. This was a great opportunity for undergraduate and graduate students from California State University (CSU) Chico, CSU Fresno, University of California (UC) Davis and California Polytechnic University, San Luis Obispo, to name a few, as well as for professionals to present results or preliminary results of their research. There were some interesting posters with topics such as “Can Biochar Conserve Water in Agricultural Soils?” and “A Seat at the Table: California Farmers Speak Up on SGMA.” The conference is valuable for the team to attend, as it helps members keep abreast of agricultural research and innovation in the fertilizer industry.

**BIOSTIMULANTS WORKSHOP**

Kimber Collins, senior environmental scientist, along with senior environmental scientists (supervisors) Nick Young and Martin Burger, participated in a Biostimulant Industry Workshop held January 29–30, 2019, in Sacramento. During the workshop, primarily biostimulant industry representatives discussed proposed language for the Farm Bill report, the possibility of adopting the Process Verified Program—a United States Department of Agriculture (USDA) program administered by the Agricultural Marketing Service—verification/certification of product efficacy claims and standards to be developed for biostimulant products.

At the workshop, the CDFA representatives participated in the Regulatory and Legal, the State Coordination and the Terms and Definitions Workgroups. CDFA staff informed the workshop participants about California’s regulation of fertilizing materials and the role of the Association of American Plant Food Control Officials (AAPFCO) regarding definitions.

The goal of the “USDA Biostimulant Stakeholder Workgroup” that met in Sacramento is to provide input to USDA in a coordinated fashion. The FMIP, as well as AAPFCO members, consider the term “biostimulant” as too broad to be acceptable for defining individual products.

CDFA will participate in future meetings of the Biostimulant Stakeholder Workgroup and other events targeted for the biostimulant industry to keep abreast of developments, provide input to the industry and keep track of decisions made by stakeholders.

**AAPFCO ANNUAL MEETING**

Two of our senior environmental scientists (supervisors), Nick Young and Martin Burger, along with Maryam Khosravifard and Dinesh Chand from the Center for Analytical Chemistry, attended the Association of American Plant Food Control Officials (AAPFCO) Winter Annual Meeting held Feb. 10–13, 2019, in Albuquerque, NM. The meeting was very productive in introducing FMIP as a prominent regulator in the industry and building ongoing relationships with industry representatives. The plenary session voted on 39 terms and definitions. Only a few attained official status, a few were tabled, while most remained or were voted into “tentative” status. The new definitions for Calcium Ammonium Nitrate, Ammonium Calcium Nitrate Double Salt and Calcium Nitrate, which were jointly proposed by CDFA and Yara to clearly distinguish these products from each other in the future, reached “tentative status” with little discussion and may become “official” at the next AAPFCO Summer Annual Meeting. The CDFA representatives also participated in the Laboratory Group and Environmental Affairs meetings, and in the Uniform Bills Committee.

The AAPFCO meeting provided an opportunity for direct interaction with registrant firms, a chance to address their concerns, as well as to get a few kudos from them.
The imported table grape inspection is wrapping up for this year. Imported table grapes are inspected by state and county personnel at the Port of Long Beach each year to ensure California minimum maturity standards along with all state and federal package/container labeling requirements are met. Port inspections typically start in late December and continue through the first week of April each year.

This year, Inspection and Compliance (I&C) Standardization enforcement staff inspected over 5 million containers of imported table grapes. Violations were the lowest seen in the past several seasons with only 3 lots being rejected for maturity and 26 lots for labeling violations, which is a 63% increase in compliance from the previous year. A total of 36,369 containers were rejected for labeling violations and 1,720 containers for failing maturity standards.

The reduction in labeling violations is a direct result of the continued educational efforts of our enforcement staff regarding container labeling requirements, specifically, the varietal name. Flame Seedless, Princess, Autumn Royal, Crimson Seedless, Sugraone, Thompson Seedless and Perlettes were just a few of the varieties inspected.

The State Organic Program (SOP) continually strives to educate consumers and the agriculture industry of the importance of maintaining the integrity of the organic label. Educational opportunities include informational booths at the annual EcoFarm Conference in Asilomar, World Ag Expo in Tulare and other agricultural-related trade shows throughout the year. The most recent SOP educational opportunity was at the California State University Chico (CSU) Organic Dairy Field Day. The field day is hosted by the CSU Chico Organic Dairy Unit where students who manage the dairy are also responsible for facilitating the bi-annual event.

Inspectors for the Produce Safety Program (PSP) have conducted 11 On Farm Readiness Reviews (OFRR) throughout California since January, bringing the total conducted OFRRs to 53.

In February the PSP sent out over 12,000 Farmer Letters and Questionnaires to all large farmers in California who are covered under the Produce Safety Rule. This Farmer Letter and Questionnaire will gather vital farm information and help the PSP prioritize its inspections. The program, along with Farmers Communication Exchange, continues to produce the PSP blog and newsletter, both posted on the PSP website, along with numerous outreach materials that are focused on helping California farmers understand the Produce Safety Rule and implementation.

With the assistance of the Safe Food Alliance and the Western Institute for Food Safety and Security, the PSP was able to continue to assist in facilitating subsidized Produce Safety Alliance Standardized Grower Training course for California’s produce industry covered under the Produce Safety Rule.

PSP staff attended and presented at several farm conferences, including the World-Ag Expo in Tulare and the Eco-Farm Conference in Monterey.
EMPLOYEE UPDATES

CENTER FOR ANALYTICAL CHEMISTRY

NEW HIRES
Aussma Ali, Scientific Aid
Stephanie Bower, Scientific Aid

FEED, FERTILIZER AND LIVESTOCK DRUGS REGULATORY SERVICES

NEW HIRES
Erika Lewis-Ortega, Associate Governmental Program Analyst
Alejandro Ramirez, Environmental Scientist - Feed Program
Jamie Mack, Agriculture Technician I - BOSS Unit

INSPECTION SERVICES ADMINISTRATION

NEW HIRES
Corey M. Schimeck, Staff Services Analyst

INSPECTION & COMPLIANCE

NEW HIRES
Rodrigo Chipres
Shane Rainey
Aug. 2018 – Rodrigo Chipres, Southern California Region (Region 5) Inspector
Aug. 2018 – Shane Rainey, Northern California Region (Region 1) Inspector

RETIREE
Oct. 2018 – Erik Schwab, Central California Region (Region 3) Inspector

OFFICE OF FARM TO FORK

NEW HIRES
Irene Vera, Associate Governmental Program Analyst

NATALIE, from P.1

internally between FFLDRS and I&C to strengthen the food safety systems. We are also working closely with the produce, livestock and compost industries, as well as the research community, to create a framework that continues to advance food safety in California. Good Read: “Trillion Dollar Coach: The Leadership Playbook of Silicon Valley’s Bill Campbell,” by Eric Schmidt, Jonathan Rosenberg and Alan Eagle.

Quarterly Quote: “As we express our gratitude, we must never forget that the highest appreciation is not to utter the words, but to live by them.” — John F. Kennedy

CDFA Division of Inspection Services
www.cdfa.ca.gov/is

See Quarterly Quips archives under “About Us”