

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE (Department)

**FEED INSPECTION ADVISORY BOARD (FIAB)
WEB CONFERENCE MEETING**

**October 27, 2021
9:00 AM – 12:00 PM**

MINUTES

ATTENDING

BOARD MEMBERS

Dan Rice
David Meeker
Jed Asmus
Jeremy Banducci
Kate Horstmann
Marit Arana (Chair)
Michael Koewler
Paul Parreira (Vice Chair)
Shay Rambur

C DFA STAFF

Adriana Avalos
Amadou Ba
Angelia Johnson
Carla Sanchez
Casey Gutenberger
Elizabeth Moseby
Erika Lewis Ortega
Jenna Leal
Joshua Bingham
Maryam Khosravifard
Mike Davidson
Natalie Krout-Greenberg
Samantha Moran-Defty
Theodore Bert

INTERESTED PARTIES

Chris Zanolini
Dave Isen
Ed DePeters
Katherine Lynn Swanson
Maia Zack

INTRODUCTIONS AND ANNOUNCEMENTS

Dr. Marit Arana, Chair, called the meeting to order at 9:05 am. Chair Arana informed the interested parties that per the Bagley-Keene Open Meeting Act, they are not required to identify themselves but were welcome to do so. Self-introductions were made, and a quorum was established.

APPROVE JULY 28, 2021 MEETING MINUTES

Chair Marit Arana requested the Board review the minutes from the July 28, 2021 FIAB meeting.

MOTION: Michael Koewler moved to approve the July 28, 2021 minutes as presented. David Meeker seconded; the motion passed unanimously with a vote of 9-0.

DEPARTMENT / DIVISION / PROGRAM UPDATES

Natalie Krout-Greenberg provided updates for the Department and for the Inspection Services Division (Division). There will be a meeting with the new Undersecretary, Christine Birdsong, on Monday, November 1, 2021, to share critical information related to the Division. Undersecretary Birdsong served as Senior Vice President, General

Counsel, and Director for People & Culture at the Sun Valley Rice Company since 2016; General Counsel to the National Cotton Council, and Counsel for the Committee on Agriculture for the House of Representatives from 2005 through 2010.

The Farm to Fork program received \$75-million to enhance grant programs. The Farm to School was allotted \$30 million, California Nutrition Incentive was allotted \$10 million, Healthy Refrigeration was allotted \$10 million, Urban Agriculture was allotted \$12 million, and the new program from Assembly Bill (AB) 1009 that focuses on food hubs received \$15 million.

The process of creating requests for proposals and hiring staff to fill positions to administer these programs is under way. The new program will elevate California's agriculture products and create a robust market, access points, and business opportunities throughout the state.

In the Salinas Valley, a group of stakeholders that includes leafy green producers, cattle ranchers, composters, and wine grape growers are collaborating regarding the California Agricultural Neighbor initiatives pertaining to food safety. By late December 2021 or early January 2022, the action report will identify opportunities as well as steps being taken that affect food safety concerns.

Low pathogenic avian influenza (LPAI) was identified in Southern California; steps are being taken to introduce protocols for heightened bio-security measures. The Division is working closely with Dr. Annette Jones in the Animal Health and Food Safety Services Division to ensure there is no further transmission of LPAI.

The Almond Board of California (ABC) contacted the Commercial Feed Inspection Program and the Division requesting a letter of support regarding what is included in the laws and regulations specific to almond products. Jenna Leal will go into further details with her report.

Dr. Amadou Ba provided updates for the Feed, Fertilizer, and Livestock Drugs Regulatory Services Branch. Dr. Ba noted that many meetings were occurring concurrently on October 27, 2021. Therefore, several people who were attending this FIAB meeting would also be virtually attending other meetings. The Fertilizer Research and Education Program's (FREP) conference in San Luis Obispo was conducted simultaneously, and Secretary Karen Ross will be speaking in the morning of the conference. Approximately 125 people were attending that conference and they would be following Centers for Disease Control and Prevention (CDC) guidelines and COVID-19 protocols.

FREP worked with the FIAB to help fund a three-year project for approximately \$3 million. The project will address nitrogen in groundwater and improving water quality. The scope of work would include hiring six staff through University of California Agriculture and Natural Resources for advising growers of nitrogen best management practices at farms.

FREP also presented five projects for approval to the Fertilizer Board. The Fertilizer Board approved the funding; these research projects total approximately \$1.4 million. The total project budget is approximately \$4.4 million to be used over the next three years.

The National Organic Standards Board (NOSB) met on October 26, 2021 to address ammonia extract in organic products. Originally called “novel ammonia product”, the term was changed to “ammonia extract”. There is a motion to disallow ammonia extract in organic production. The Fertilizer program staff felt compelled to comment on the topic. In the end, NOSB voted for the motion to disallow ammonia extract in organic production. It will now go through the National Organic Program (NOP) for regulatory discussion and rulemaking.

Manure recycling is also being examined to find ways to use these organic by-products in agriculture. The involved parties include industry, the Department staff, water coalitions, and agricultural community. The group, created by Secretary Ross, is called the “Manure Task Force”.

Currently, there are 1,650 feed licenses that were renewed to-date. This is a decrease from approximately 1,900 licenses that were current during the same period in 2020. There will be letters and outreach to encourage the renewal of feed licenses.

Dr. Ba asked if there were any questions. Dave Isen asked if ammonia products were no longer approved as fertilizer products. Dr. Ba clarified that ammonia-based products are allowed and will continue to be allowed in conventional agricultural. The NOSB discussions are focused on issues pertaining to organic production. The argument of the petitioner is that ammonia extract is chemically identical to the ammonia fertilizers commonly used in conventional growing systems and ammonia extract provides plant-available nitrogen directly to the crop without enhancing soil biology; ammonia extract creates detrimental chemical and biochemical effects on soil structure.

FUND CONDITION / TONNAGE REPORTING

Leal provided updates on the Feed and Safe Animal Feed Education (SAFE) programs' fund condition. For fiscal year 2020/2021 the Feed program had a beginning balance of \$3,561,651 on July 1, 2020. SAFE's beginning balance was \$662,745. The combined beginning balance was \$4,224,396. Feed revenue was \$3,267,176 and SAFE revenue was \$427,123. The combined revenue was \$3,694,299. Feed expenditures were \$3,467,037. SAFE Expenditures were \$297,457. The combined expenditures totaled \$3,764,494. Feed encumbrances came to \$588,337. SAFE encumbrances were \$95,947. Combined, encumbrances totaled \$684,284. Feed's adjusted ending balance was \$2,773,453. SAFE's adjusted ending balance was \$696,464. The combined adjusted balance on June 30, 2021, was \$3,469,917. Leal also noted there were recovery funds from federal grants and contracts. Bovine Spongiform Encephalopathy (BSE)/Feed recovered \$34,871 for Food Safety Modernization Act (FSMA) contract

work. Animal Feed Regulatory Program Standards (AFRPS) recovered \$435,140 on a \$525,000 cooperative agreement. As of June 30, 2021, there was a total recovery of \$470,011.

For information only, Leal shared the adjusted balance for the Livestock Drugs Program was \$466,757 and \$99,507 for the Antimicrobial Use and Stewardship (AUS) Program. The recovery in Livestock Drugs was from an agreement with the Food and Drug Administration for tissue recovery; the agreement will not be renewed. That amount was \$30,163.

Feed Tonnage rate was set at \$0.12 in October 2019 and decreased to \$0.10 in January 2021. Fiscal Year (FY)2019/2020 revenue was \$2,717,563 for 23,643,307 tons. FY 2020/2021 revenue was \$2,689,377 for 24,491,697 tons.

Personnel updates include Ted Bert is now acting as the Compliance Officer for the Feed Program's field activities. Amber Hayter was newly hired as an Environmental Scientist (ES) and will be part of the team who covers Fresno, Tulare, and southern areas of the Central Valley. Kelly Mammen was hired in Southern California as an ES. Mammen will do traditional feed inspection and by-products work in Southern California. Shelly King will continue to execute all Livestock Drugs desk work and AUS activities for Southern California. Casey Guttenberger (formerly Dykier) left the Northern California regulatory Feed Program and has joined the SAFE Program as an ES with Cathryn McCandless. The vacant Northern California position for the Feed Program is currently being advertised.

The Almond Board of California (ABC) contacted the Department seeking a letter of support for the exportation of almond hull products as a feed ingredient to the Ministry of China. The three defined almond products categories the Department regulates are almond hulls, almond hull and shell, and almond hull and dirt. These are covered within California Code of Regulations (CCR) Section (§) 2773.5. ABC is working with the Ministry of China for a feed ingredient approval of these products. They were looking for historical data and have also spoken to the American Association of Food Control Officials. Krout-Greenberg and Leal spoke with ABC in a call on October 26, 2021.

Krout-Greenberg stated that ABC specifically wanted a letter of support, which can only address what is in the current scope of influence and regulatory oversight for the State of California. The Feed Board has the option to guide Division. However, there are some very specific definitions of what the Department can speak to as well as parameters of what can be done and what is in the law, especially for adulteration of ingredients, nutrient guarantees, and label requirements. Krout-Greenberg asked the FIAB for their guidance on the topic.

Chair Arana's concerns included almond hull availability and costs for current consumers that might arise if exporting is excessive. Chair Arana acknowledged shipments to Texas are slightly impacting California but shipping out of the country creates a whole new scenario.

Jed Asmus stated that he understands there is a move to discuss pellets and cubes and quantity of fiber. Almond hulls that involve more than 27% hulls and fiber would cause domestic and local supply to evaporate. In addition, too much fiber creates nutritional deficiencies. Shipping overseas is not the highest and best use of these materials. Shell shipments to distant geographical locations is not environmentally healthy so from the perspective of feed consumption, there are a lot of negatives.

Krout-Greenberg stated that there are existing laws and regulations to carry out specific functions for the State of California. The decision for exporting products is not one of these functions. When market opportunities present themselves, it is critical to rely on the Division's position and use its statutory authority. Krout-Greenberg requested input and guidance that speaks directly to the process. The letter being requested must go to the Department's Executive Office, through Secretary Ross, where Division can communicate input from the board.

Chair Arana acknowledged the big picture is to support the almond industry but not to the detriment of the California livestock industry. Krout-Greenberg replied stating the way to move forward is to use defined laws and regulations to draft a statement. However, trade agreements are outside of the scope of this Division but could be addressed through other Divisions. The board could also request this as a future topic for more discussion.

Vice-Chair Paul Parreira addressed the Board. He first noted there is a lot of money in exporting agricultural commodities. Vice-Chair Parreira noted there are arguments for and against exporting almond hulls as animal feed. One aspect could be to let the market be the market. On the other hand, it is important to understand and address the concerns about domestic availability and costs to local industry. Vice-Chair Parreira suggested a letter of clarity would be more appropriate than a letter of support. Chair Arana added that it is important to give industry the benefit of the doubt but also watch to see effects on domestic users. Jeremy Banducci agreed a letter of clarity is a good idea.

The concern about what ingredients go into pellets and cubes in addition to product availability was also discussed. Ingredients for pellets and cubes have no clear definitions, which could become a huge problem regarding livestock nutrition. If the opportunity to adulterate products is present, unscrupulous actions could take place. It would then be inconsistent with what is used in California.

Krout-Greenberg informed the Board that the Division will provide a letter of clarity defining roles as determined in CCR § 2373.5. Because it is important to provide clear intentions to the Executive Office, Krout-Greenberg will also carry the sentiment of the Board to Secretary Ross.

Leal continued with Program updates. The Straus Farms study was released on BusinessWire.com. The press release was about the red seaweed trial the Feed

Program oversight. Samples were obtained and the work was done through the Feed Technical Advisory Subcommittee (TASC).

Leal shared information that was updated on October 25, 2021. Out of 13 complaints, eight were almond hull quality, two for livestock drugs, one for feed quality, one for hay, and one for moldy feed. There were 139 violations that required follow up. Out of these, 122 were completed. Standard Operating Procedures for the Feed Program require addressing complaints within 30 days. There have been 24 completed routine inspections and 15 inspections remaining.

There were 581 samples obtained for laboratory analysis. The average turnaround time for both the University of California (UC) Davis Analytical Laboratory (An Lab) and California Animal Health and Food Safety (CAHFS) lab was 11 days. There were no issues noted.

Bert said there were three compliance interviews that were held with three separate farms for repeat violators. The interviews addressed selenium, fat, and protein violations. Bert is reviewing all routine inspections, violation follow-ups, and field activities to ensure consistency throughout the State. There is a focus on corrective actions and timelines to ensure the corrections are made.

There was an update of the Genetically Modified Organism (GMO) Sampling with the State Organic Program (SOP). Kate Horstmann, Samantha Moran-Defty, and Leal, represented the Feed Program. They met with SOP to discuss revising follow-up process for nonconformance. Industry concerns were voiced at the meeting. Turnaround times and notification times will be shortened, and the focus will be on suppliers rather than purchasers. There will be a risk mitigation piece included. Sampling will be reduced from 35 samples to 20 because that is more manageable. Horstmann noted the meeting felt successful and the SOP understood what was being presented. Revisions on the scope of work from that meeting have not yet been received from the SOP.

SAFE AND TASC UPDATES

Gutenberger presented the SAFE updates. The mycotoxin report from 2020/2021 for corn and cottonseed was published in the quarterly newsletter. The report will be uploaded to the Department's website. Training on medicated feed labels is scheduled. Preventive Controls Qualified Individual (PCQI) training will take place in December 2021.

There are food facility outreach visits being conducted addressing information about by-products. SAFE is also doing Veterinary Feed Directive (VFD) outreach visits with specific manufacturers and suppliers. They are also working with Food Animal Residue Avoidance Databank (FARAD) to develop VFD training.

Leal reported Dr. Amanda Murray, who gave a presentation on the secure food supply program at a previous meeting, wants to start supplying outreach materials to feed mills

and the feed industry. The food supply program tour scheduled for October 28, 2021 will focus on what occurs in a multi-feed facility. The question of whether a facility should be designated a biohazard zone will be considered in a quarantine situation. It is important to understand how a feed mill operates before writing up an outreach and guidance document.

Dan Rice asked when PCQI training will be offered. Gutenberger must go through lead instructor training, and the course is not being offered at this time. Once the lead instructor course is completed, virtual training can be offered. Horstmann said even though PCQI training is essential for new hires and the feed industry, it is expensive at \$1,000 per person.

Chair Arana asked if Moran-Defty could get a course scheduled in the near future. Moran-Defty will be going on leave at the beginning of February 2022 so training soon would be best. Moran-Defty said a virtual training could be offered, but it is a difficult format. When asked how many people needed PMQI training, there was a total of eight: five for Horstmann, two for Rice, and one for Chair Arana.

Moran-Defty reported on the Animal Feed Regulatory Program Standards (AFRPS). There was a virtual audit October 18-19, 2021. Deliverables were submitted to Food and Drug Administration (FDA) in September 2021. The audit lasted two days instead of a whole week. All standards were marked as fully implemented except laboratory standard. That will be corrected once the UC Davis An Lab is accredited through the International Organization for Standardization (ISO).

Current contracts include the FDA FSMA compliance contract and the UC Davis An Lab and CAHFS contracts. A contract amendment for An Lab to reallocate funds to work toward ISO accreditation process was mentioned. Contracts with FARAD include development of a VFD distributor online training as well as a maintenance contract for the qualified individual (QI) training with AUS.

The Animal Food contract with FDA was finalized on September 23, 2021. That contract was for \$193,426.52. There were 24 preventive controls for animal food inspections (PCAF) with 19 completed. Five licensed medicated and PCAF inspections were conducted and completed. Ten current good manufacturing practice (CGMP) inspections were conducted; four of these were completed and two became PCAF inspections. There was a maximum of nine visits with four of these being out of business. Due to COVID-19 and a lack of trained personnel, the remaining inspections are being de-obligated. Horstmann asked about the 24 PCAF inspections that only had 19 completed. Historically they use to roll over, but due to structure changes only three will roll over.

The 2021/2022 Animal Food contract will run from September 24, 2021 through September 23, 2022. The contract includes 12 PCAF inspections, three comprehensive licensed medicated feed mill inspections, five comprehensive non-licensed medicated feed mill inspections, and 10 VFD/BSE inspections at distributor sites. The two staff that

need the preventive control training will receive it. There will be a total of 20 FSMA inspections.

UC Davis An Lab experienced VELP® machine equipment glitches while running almond hull samples, but the issues were being resolved. Leal confirmed that the transitions to the new laboratory caused concern, but An Lab is addressing these concerns.

Texas Agriculture and Mechanical (A&M) University and the Department are partnering as referee labs and backup for each other. Dr. Herman and Ben Jones from Texas A&M expressed excitement about the partnership. Four protein samples were already sent to Texas A&M.

Moran-Defty reported the CAHFS laboratory work was going well, the work with tetracyclines was completed, and methods for assays on vitamins A, D, and E were in progress. The FDA Food Emergency Response Network (FERN) sampling contract will acquire and test five swine feed samples for vomitoxin, 10 horse feed samples for fumonisin, 12 meat and bone samples for pentobarbital, 20 poultry feed ingredients for aflatoxin, and 53 dairy feed ingredients for aflatoxin. To date, using the new methods under the FDA flexible funding model, three horse feed, 15 dairy feed, and nine poultry feed samples were being finished. November 2021 will have more samples. The FDA FERN contract began July 21, 2021 and will end June 30, 2022. It was noted that the FDA originally wanted dairy feed to be run for aflatoxin on finished product; however, California focuses on feed ingredients rather than finding it after it was already processed and being used on-site at dairies. FDA agreed to these terms.

Laboratories had to apply and receive contracts to work with FDA FERN. CAHFS is testing samples sourced from California. The results are shared with FDA for surveillance purposes. FDA then pays through the lab flexible funding cooperative agreement. The information and the results become part of a national picture.

AUS has two contracts with FARAD. One is a three-year contract in the amount of \$52,940 for QI maintenance. It includes a cooperative agreement for online training to sell California prescription drugs and lasts through December of 2024. Funds were allocated for \$17,003 in the first year, \$17,636 for the second year, and \$18,301 for the third year. The other contract is for maintenance of an online training program in the amount of \$250,000 from May 1, 2021 – June 30, 2023 for VFD manufacturers and distributors. The curriculum, which focuses on the requirements of a VFD order and the regulation's purpose, is still in the editing phase of the deliverables for curriculum content but is very close to being rolled out.

The proposed contract for diversion strategies is \$50,000 and ends in December 2021. It is the contract that was proposed by the Board in January 2021. Its focus is strategic education and outreach for managing organics of human food waste. The contract was returned from the Department of General Services (DGS) on September 14, 2021. Modifications were made and it was resubmitted on September 24, 2021. DGS

turnaround timeframe is approximately 45 days and the program is still waiting for its return.

Leal updated attendees about byproduct tonnage reporting data and proposed regulations. Changes were made to the reporting database to be more specific to human food diversion by-products. There has been a great response from industry in reporting. Errors are being flagged and a significant number of documents for outreach and education is being prepared. There will be resources for industry to navigate the database better, including offering a webinar, to navigate database step-by-step.

The 15-day comment period regarding diversion of human food by-products regulations closed on October 22, 2021 and the final package was routed to the Department's Legal Office the same day for approval and signature. The Feed program has requested that Office of Administrative Law (OAL) make the changes effective upon filing with the Secretary of State, versus the following quarter. The program is hopeful the changes will be instituted in time for 2022 reporting. It was explained that the changes to the database are helpful for data collection. One example of change for this purpose was to include in-flows as well as out-flows. This is intended to give a true picture of actual diversion. A partnership with CalRecycle to aggregate data and make it available to local jurisdictions and governments is being developed. The intent is stakeholders will be able to take advantage of this information.

Rachelle Kennedy presented updates for the TASC. There was a meeting on October 22, 2021. Chair Arana was at the meeting as were the three other TASC members confirmed by Secretary Ross.

TASC project updates focused on the Asparagopsis feeding trial and the Hemp By-product goat feeding trial.

The Asparagopsis feeding trial ended at the end of September 2021. It was a 50-day project. A press release was issued on October 27, 2021. There was a confirmed decrease in methane production. The use of a wild source of the seaweed product had a higher iodine content and there were concerns about iodine accumulation over time. However, the plan moving forward is to use commercially grown seaweed so iodine levels will be better managed. It was also found that there were very low levels of bromoform and bromide which fell below CDC recommendations, but this was not a source of concern. There were no questions regarding the Asparagopsis Feeding trial.

Results of the Hemp By-product feeding trial were presented to the TASC and will be published by UC Davis.

TASC is actively recruiting to fill four vacant positions. The American Registry of Professional Animal Scientists has been contacted and there are other avenues being explored to help with recruiting applicants.

TECHNICAL ADVISORY SUBCOMMITTEE APPLICANTS

Applicants for TASC Board positions were presented. Dr. Robert Poppenga, DVM, Ph.D., qualifications included being a diplomate with the American Board of Veterinary Toxicology, head toxicologist for CAHFS at UC Davis and focus on veterinary clinical and diagnostic toxicology. Jennifer Heguy, MS/BS in Animal Science, was Director of UC Cooperative Extension Dairy Farm Advisory, Chair of the California Nutrition Council 2021 Conference, and published numerous pieces for the field of livestock feed and industry.

MOTION: Jed Asmus moved to recommend the appointment of Dr. Robert Poppenga and Jennifer Heguy to the secretary for the TASC. Shay Rambur seconded; the motion passed unanimously with a vote of 9-0.

Dr. Katherine Swanson presented the results on the hemp by-product feeding of goats. The Hemp Residue Feeding Study was written and conducted by Dr. Ed DePeters, Dr. Katie Swanson, and Hannah Bill with UC Davis.

Lipid extracted hemp residue with no detectable pesticides or mycotoxins was used in the feed study. The three groups, each of which had four goats, consisted of the control group, the low group, and the high group. Pellets of 302 grams of hemp pellets containing 0.561% Cannabidiol (CBD) and no detectable Tetrahydrocannabinol (THC) were fed to the low group. Pellets of 603 grams of hemp pellets containing 0.561% CBD and no detectable THC were fed to the high group. The pellets were blended with alfalfa and grain for palatability. Per day, the low group received 1,129 mg of CBD and the high group received 2,258 mg of CBD. The actual weights of daily food ingested was approximately 1.33 pounds of pellets. Low group received about 0.075 pounds of hemp per day, the high group received about 1.33 pounds of hemp per day.

The goats were monitored daily for 28 days. Samples of blood, urine, and feces were collected weekly on days 0, 7, 14, 21, and 28. Adipose tissue was collected on day 28. Milk weights were recorded twice a day every day to see if there were changes in milk production. All samples were being tested for cannabinoid substances. Milk fat changes were attributed to the coconut oil used in extraction process. CBD was found in blood and milk. It was higher in the milk with 11.78 nanograms per milliliter (ng/mL) in the low group and 26.22 ng/mL in the high group. Cannabidiolic acid (CBDA), the acidic, nonactive form of CBD, was found in the blood but not in the milk. THC was found in the milk with 1.05 ng/mL for the low group and 2.41 ng/mL in the high group. There was no THC in the control group.

Analyses were only conducted at the halfway point and at the end due to budget restraints.

Cannabinoid metabolites and hydroxies (OH-CBD) were also analyzed. The 6-OH-CBD was low and consistent with results from human studies. The 7-OH-CBD was higher in milk compared to blood. The 7-OH-CBD concentrations were similar in the blood and milk. However, 7 carboxy, (COOH-CBD) was prodigiously higher in the blood than in the

milk. The group feeding on lower levels of CBD had higher counts of 7-OH-CBD and 7-COOH-CBD than the high group. This result suggests a toxicity level with ingestion and that CBD ingested at the high group's level was not able to be metabolized.

Overall, there was a high concentration of CBD metabolite 7-COOH-CBD present in plasma, but lower in milk. CBDA that was found in plasma, even though there was none in the pellets, may be a result of the CBD being carboxylated by rumen microbes. Detection could also be due to the sensitivity of the instruments used for assays and preciseness of these devices. THC was not present in the pellets but was present in the samples. It is hypothesized the acidic environment in the abomasum converted CBD to THC. No psychological effects were noted.

Dr. Swanson described the plants used, extraction methods, and conversion to dry matter and digestibility. The Daisy method that measures digestibility of feedstuff was used. Four samples of whole plants, buds, and stems, three samples of leaves, and one sample of hemp residue were pulled, and assays ran. The samples were pulled at different time points to see how much disappeared. The dry matter, neutral detergent fiber (NDF) digestibility, and gas readings were taken every ten minutes and checked for the amount of fermentation over 72 hours. That data is still being examined.

To summarize, as far as digestibility, hemp residue is very digestible and comparable with leaf digestibility. Goats needed time to acclimate to hemp residue but then ate pellets well with only a slight decrease in milk fat. CBD, THC, and CBD metabolites were found in the milk and blood of study goats. The metabolites were higher in blood than in milk. CBD and THC were higher in milk than blood. Questions arose about why there was THC and CBDA found in samples though not feeding these to the animals.

Rice asked what the next steps were for the hemp by-product goat feeding trial. Dr. Swanson said the study is not complete because they are still waiting for adipose tissue to determine if any is being stored in fat tissues. Leal said at the October 22, 2021 TASC meeting, Dr. Swanson submitted a proposal for a dairy cattle hemp feeding trial. TASC reviewed the proposal and is recommending to the Board to proceed with it. There needs to be more work with ruminants to examine CBD conversion to THC and the role of the abomasum. This research is timely because there have been many requests to add hemp as a feed ingredient.

Rice commented that the slides presented by Dr. Swanson were not presented in the public packet and would like to have the documents for review and to share with members of industry. Leal stated due to time constraints, they were not available for the Board. However, the presentation itself will be made public as the project concludes. Dr. Swanson also said there will be a scientific publication and it will need to be peer-reviewed before being finalized. Parties were requested to wait for completion of all aspects of the study and for upcoming publications.

Kennedy presented project recommendations that came out of TASC.

The first project recommended through TASC was “Hemp Residue as a Lactating Cow Feed”. It will be directed by the department of UC Davis Animal Science. The ask is for \$149,074. Dr. Swanson and Dr. DePeters will lead the study using ethanol extracted hemp vs. lipid extraction and determine if cannabinoids are present in milk, adipose tissue, and blood of lactating dairy cattle being fed hemp by-products.

Rice asked how many animals will be included in this research project. Dr. Swanson said there would be 18 animals total, three groups of six. There will be a control group of six, a low-amount of CBD group of six, and a high-amount of CBD group of six.

MOTION: Jeremy Banducci moved to approve \$149,000 to fund the “Hemp Residue as a Lactating Cow Feed” project. Jed Asmus seconded. The motion passed unanimously with a vote of 9 to 0.

“Assessing the Importance of By-product Feedstuffs to Livestock and Environment in California” project would begin February 2022 and run for 12 to 18 months. It is a byproduct feeding capacity study that examines regional and seasonal by-product production as well as economic value. The goal is to acquire data and determine an estimate for the total quantity of each by-product and quantify the amount fed to livestock groups such as dairy, beef, poultry, swine, etc. The project will cost \$95,900.

Banducci said this project is like tracking being done with industry. Leal clarified this would provide a better baseline data for tonnage because researchers will go out into the field to get true data. Leal said Dr. DePeters has defined 20 by-products, for example, retail waste, wet food waste, bakery, cold food, and others. The focus is on human food diversion and not only plant-based by-products. Koewler would like to see rendering as a priority. Leal said the slide is not representative of the Department’s priorities and rendering will be included. The slide was just an example of some by-products.

Asmus was at UC Davis over 20 years ago and saw research that quantified food by-products produced in California. Asmus asked why food by-products, even food for pets and not just for livestock, was not on the slide. Dr. DePeters explained that there are by-product feedstuffs, such as rendered or almond hulls. But there are also by-products that are not feedstuffs, like rice hull that could be used for the pet food industry. However, pet food was not a part of the study’s focus. Leal confirmed that pet food would not be on the study because the Feed Program has no authority over pet food and there is no budget to include pet food.

The study is relevant and timely because current numbers do not reflect the true values of by-products being used in feed. The combination of a survey by California Grain and Feed Association (CGFA), a Department survey, the rendering industry, and others determined 12.5 million tons of diverted waste. However, it is believed this underreporting. There is a need to discover and determine the true amounts. This research is also valuable as it will help in communicating data when legislation like was AB 2595 is being written and scrutinized.

Clarification of the term “diversion credit” was discussed. It refers to organic food waste products that can be repurposed instead of being sent to landfills. The Feed Program captures reported data that will be shared, but Dr. DePeters’ UC Davis group can get data that is more accurate. Kennedy said at this time, outputs are being reported but material input is not. The final reports reflect mixed ingredients but there is no way of distinguishing the use of recycled ingredients. Chair Arana noted that an email came out from CGFA offering a two-part webinar about traditional organic waste recycling solutions that addresses Senate Bill 1383. That training is for local governments. The first of the two-part series was scheduled for November 4, 2021 and the second part was scheduled for December 9, 2021.

MOTION: Michael Koewler moved to approve \$95,590 for the “Assessing the Importance of By-product Feedstuffs to Livestock and Environment in California” project. Jeremy Banducci seconded; the motion passed unanimously with a vote of 9-0.

The TASC research grant process is being formalized for future projects. This will be accomplished in three phases and implemented over time. New projects will be presented from October 2022 through January 2023. The research is estimated to begin approximately one year later. The TASC meetings will be calendared in October 2022, January 2023, May 2023, and August 2023. Having this structure will help guide the internal workload. The current TASC deliverables for industry and the Board will be received similarly to the current hemp by-product trial, Asparagopsis trial, and the camelina meal for lactating dairy cattle.

REGULATORY SUB-COMMITTEE MEETING

Bert reported that the regulatory subcommittee had a meeting on September 22, 2021. The policy changes were provided in a packet. The compliance policy that was presented outlines the Feed Program’s direction for future regulatory practice and be used as a foundational tool when issuing administrative penalties in the future. There was a request for a motion to approve the policy changes.

MOTION: Shay Rambur moved to approve the updated compliance policy. Jeremy Banducci seconded; the motion passed unanimously with a vote of 9-0.

BUDGETS – FEED AND SAFE

Leal presented the FY 2021/2022 approved budget and the FY 2022/2023 proposed budget. Communications for FY2021/2022 was budgeted at \$18,000 for Feed and \$1,300 for Safe for a combined communication budget of \$19,300. The FY 2022/2023 proposed budget for communication changed to \$11,000 for Feed and \$2,000 for SAFE for a decrease in the combined proposed communication budget for \$13,000. The greatest increase was the SAFE FY 2021/2022 “Research Contract” line item. This increased from \$75,000 for FY 2021/2022 to a proposed \$200,000 for FY 2022/2023. Final operating expenses for the FY 2022/2023 proposed budget presented was \$2,027,812 for 2022/2023 compared to \$1,896,212 for FY 2021/2022. Because services

with the Center for Analytical Chemistry are no longer being utilized, the line item was eliminated from the FY 2022/2023 budget which resulted in a savings of \$124,514. The total net budget proposed for FY 2022/2023 was \$4,336,609 compared to the FY 2021/2022 approved budget of \$4,207,668.

MOTION: Michael Koewler moved to approve the FY 2022/2023 proposed budget. Shay Rambur seconded; the motion passed unanimously with a vote of 9-0.

CALIFORNIA GRAIN AND FEED ASSOCIATION

The CGFA Board meeting will be held November 4, 2021. The first part of the two-part series for Diversion Strategy would be held that date.

OTHER BUSINESS

Rice asked for clarification as to what materials increased to create the million tons in feed being reported. Leal said that almost 200,000 tons reflects Industry's response to the incentives being given for those who report diverted materials. The second quarter reporting included what is being incentivized; almost 200,000 tons included wet grain, whole fruits and vegetables, dry bakery product, retail and restaurant food waste, wet food processing waste, wet food, hummus, pulp, and whey products. Leal said there would be a more in-depth report at the January 2022 Board meeting.

PUBLIC COMMENTS

There were no public comments.

NEXT MEETING

The next FIAB meeting will be a hybrid meeting on Thursday, January 13, 2022 from 1:00 pm to 4:00 pm at the Embassy Suites in Monterey, California. This is the last day of the Grain & Feed Industry Conference.

AGENDA ITEMS FOR JANUARY 13, 2022.

- Update on feed tonnage increases
- License changes that became effective July 2021
- Update on by-products regulations that industry will be seeing in database

MOTION: Michael Koewler moved to adjourn the meeting. Jeremy Banducci seconded; the motion passed unanimously with a vote of 9-0.

ADJOURN

The meeting was adjourned at 11:42 am.

Respectfully submitted,

ORIGINAL SIGNED BY JENNA LEAL

Jenna Leal, Feed Program Manager
Feed, Fertilizer, and Livestock Drugs Regulatory Services

10/27/2021

Date