

**CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE (CDFA)
FEED AND LIVESTOCK DRUGS INSPECTION PROGRAM (FLDIP)
TECHNICAL ADVISORY SUBCOMMITTEE (TASC) WEB CONFERENCE MEETING**

**July 19, 2021
9:00 AM - 12:00 PM**

MINUTES

ATTENDING

TASC Members

Dr. Marit Arana
John Martin
Dr. Xixi Chen

CDFA Staff

Jenna Leal
Rachelle Kennedy
Cathryn McCandless
Casey Dykier

Interested Parties

Dr. Ed DePeters
Dr. Katherine Swanson
Maia Zack
Joel Vasquez

ROLL CALL/INTRODUCTIONS

Dr. Marit Arana, Chair, called the meeting to order at 9:00 am. and welcomed members of the TASC. Self-introductions were made, and a quorum was established.

GOAT HEMP BYPRODUCT FEEDING TRIAL FOR LACTATING DAIRY GOATS

Dr. Katherine Swanson updated the TASC on the status of the Goat Hemp Byproduct Feeding Trial. Dr. Swanson stated that feed intake was initially a concern as the goats would not eat the hemp byproduct. However, when mixed with alfalfa and pelleted, the goats did eat the hemp byproduct.

Dr. Swanson stated that all treatments included cannabinoid (CBD) in the hemp byproduct in varying amounts depending on which treatment group the goats were in. The study was 28 days in length and samples were taken from blood, milk, adipose tissue, feces and urine. Results are still pending for CBD and tetrahydrocannabinol (THC) content of the milk, adipose, feces and urine.

Dr. Swanson further stated that blood sample data showed CBD in the goats that were fed the hemp byproduct diet. Some THC was also found in the blood of the goats. More data will become available within the next few months as the methodology to quantify the amount of CBD and THC within blood, milk, feces and urine is developed.

John Martin questioned the current regulations associated with feeding hemp to livestock. Discussion ensued.

ASPARAGOPSIS FEEDING TRIAL FOR LACTATING DAIRY CATTLE

Cathryn McCandless provided an update on the Asparagopsis feeding trial that would begin in August 2021 with Blue Oceans. McCandless stated that per the last TASC

meeting recommendations, the Safe Animal Feed Education (SAFE) Program has developed a sampling plan and requested that the TASC members provide input on the plan.

Dr. Xixi Chen suggested that in addition to the animal health testing of heavy metals, iodine, and bromoform, the SAFE Program should also evaluate the feed for protein, fat and fiber. Chair Arana requested testing be conducted for Acid Detergent Fiber (ADF) and Neutral Detergent Fiber (NDF), instead of Crude Fiber.

McCandless stated that Blue Oceans will be testing the milk and will be sharing the data with the SAFE Program. Discussion ensued.

CAMELINA FEEDING TRIAL FOR LACTATING DAIRY CATTLE

Joel Vasquez is a dairy cattle feed consultant to Sustainable Oils and introduced the Camelina Feeding Trial to the TASC.

McCandless stated that the current Association of American Feed Control Officials (AAFCO) Feed Ingredient Definition does not allow Camelina Meal to be fed to lactating dairy cattle. McCandless stated the current AAFCO definition of Camelina Meal specifies the amount of glucosinolates allowed and identifies which species are allowed to be fed Camelina Meal.

Chair Arana noted that Camelina Meal currently has strict feeding guidelines and that research suggests that Camelina Meal is considered to be moderate in its toxicity level with the potential to cause thyroid problems in cattle. Therefore, the Food and Drug Administration has restricted its feeding levels to less than 10 percent in beef feedlot cattle. Chair Arana noted the proposal submitted was to feed lactating dairy cattle at levels much higher than 10 percent.

Vasquez pointed out that Camelina Meal is being fed to heifers and that these animals are growing and changing their metabolism as they mature. If heifers are allowed to be fed Camelina Meal, cows should be as well, as cows provide daily milk data which allows monitoring of their real time health. Vasquez noted that Camelina Meal has the potential to be a lower cost protein source in a lactating dairy cow's diet. Continued feeding trials conducted with up to 20 percent Camelina Meal found no negative effects on the cows. Vasquez noted that if not allowed to feed more than 10 percent, the true feeding value of the Camelina Meal could not be determined.

Chair Arana asked where the feeding trial would take place. Vasquez noted the trial would be conducted in California. Discussion ensued.

Chair Arana inquired about the use of a control for the trial. Vasquez noted there would not be a control, that the whole herd would be fed the Camelina Meal. Jenna Leal inquired about milk testing for glucosinolates and Vasquez stated that there is no current glucosinolate testing; however, they would test for butter fat and other milk

components. Leal stated that from a food safety perspective, there is a concern of what would go into the milk. Vasquez noted soybean meal also contains glucosinolates. Discussion ensued.

Martin stated he would like to see a control treatment in the trial as well as glucosinolate concentration in the Camelina Meal compared to Canola Meal. Dr. Chen noted some safety concerns at the current treatment levels and suggested levels be varied across treatment groups instead of feeding all the cattle the same amount during the trial.

Chair Arana noted that the TASC would not be making a recommendation to move forward with the trial as proposed and that it should be re-designed prior to the TASC voting on the proposal. Chair Arana stated that there needs to be a more robust safety and efficacy review to ensure food safety prior to the feeding trial.

CALIFORNIA BYPRODUCT CAPACITY PLANNING RESEARCH PROPOSAL

Dr. Ed DePeters presented a concept idea for a research project which aims to identify byproduct feedstuffs produced in California to determine their ultimate end-use of by-products, determine the total quantity produced, estimate the economic value of the byproducts, and quantify the amount of individual byproducts fed to livestock by species.

Dr. DePeters noted that the approach would require surveys, personal contacts with specific industry groups and obtaining any potential negative aspects of byproduct feeds. Chair Arana noted that in-person contacts and visits would be required to get the information from byproduct producers. Receiving a survey or blank questionnaire often does not go to the correct individual in an organization and an in-person visit would have more power to get the information that the researchers seek. Discussion ensued.

Leal stated that the SAFE program could use the tonnage reported to-date and current byproducts as a starting point for identifying future byproducts. Dr. DePeters agreed that this would help to narrow the scope of the project. Discussion ensued.

McCandless stated that when evaluating byproducts, the state can be broken into jurisdictions to align with Senate Bill 1383, Chapter 395, Statutes of 2016. The research should capture insects that are grown for livestock feed as human food waste that is diverted to insects for use in their feed medium.

MOTION: John Martin moved to recommend presenting the California Capacity Byproducts trial to the Feed Inspection Advisory Board (FIAB). Dr. Xixi Chen seconded the motion. The motion passed with a 3-0 vote, in favor of recommending the California Capacity Byproduct trial to the FIAB.

PUBLIC COMMENTS

No public comments were made.

NEXT MEETING/AGENDA ITEMS

The next meeting will be determined for a date between August and November 2021.

Future agenda items include:

- Hemp By-product Feeding Trial for Cattle
- Hemp Byproduct Feeding Trial for Goats
- Asparagopsis Feeding Trial
- Camelina Revised Proposal
- California Byproduct Capacity Planning

ADJOURNMENT

MOTION: John Martin moved to adjourn the meeting; Dr. Xixi Chen seconded. The motion passed with a 3-0 vote.

The meeting was adjourned at 10:49 am.

Respectfully Submitted By:

ORIGINAL SIGNED BY JENNA LEAL

Jenna Leal, Program Manager
Feed and Livestock Drugs Program

7/19/2021

Date