

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

**December 16, 2020  
10:00 AM to 12:00 PM**

**MINUTES**

**TASC Members**

Dr. Marit Arana  
Dr. Carl Old  
Dr. Xixi Chen

**CDFA Staff**

Jenna Leal  
Rachelle Kennedy  
Cathryn McCandless  
Samantha Moran-Defty  
Valerie Brott

**Public**

Albert Straus  
Joseph Button  
Dr. Robert Poppenga  
Joan Salwen  
Breanna Roque

**INTRODUCTIONS AND ANNOUNCEMENTS**

Dr. Marit Arana, Chair, called the meeting to order at 10:00 a.m. and welcomed members of the subcommittee. Self-introductions were made, and a quorum was established.

**PROGRAM UPDATES**

Jenna Leal updated the subcommittee on current work of the Feed Program and briefed the members on the process of making a recommendation to the Feed Inspection Advisory Board (FIAB).

**TASC VACANCIES AND APPLICANTS**

Cathryn McCandless updated the TASC that there are two new membership applications for the TASC that would be presented to the FIAB at the January 2021 meeting.

**TASC REVISED BYLAWS**

McCandless stated that the TASC Bylaws were recently updated to reflect the purpose of the TASC. McCandless stated that the new Bylaws would be reviewed by the FIAB for approval at the January 2021 meeting.

**ASPARAGOPSIS FEEDING TRIAL**

Leal briefed the TASC membership on the purpose of the meeting is to evaluate the use of Asparagopsis for use in a feeding trial.

Joan Salwen gave an overview of the team which had been working on the Asparagopsis research. Salwen stated that there was research conducted at the University of California (UC) Davis by Breanna Roque which supported the safe use of Asparagopsis as a feed ingredient in feeding trials. Salwen introduced Albert Straus who stated his company, Straus Family Farms, has a goal to be carbon neutral in the

coming years and would like to use Asparagopsis as a feed input to assist with methane reduction to assist Straus Family Farms to achieve their goal.

Salwen provided the TASC members with an overview of research previously conducted with Asparagopsis, stating it has been used as a feed additive in research trials where it was shown to lead to a decrease in methane emissions from cattle when supplemented at low levels in a dairy cow diet. Salwen went on to discuss the proposed commercial feeding trial, stating that the Asparagopsis additive would be incorporated at a low level into the diet of the lactating dairy cattle. Salwen reviewed the process of collecting methane emission as well as milk component data during the proposed commercial dairy feeding trial. Roque stated the commercial feeding trial would help confirm findings of previously conducted research but in a more applicable setting on a commercial farm.

Dr. Arana invited Dr. Robert Poppenga to provide his perspective on the data provided. Dr. Poppenga requested more information from Salwen about the Asparagopsis feed product. Salwen stated Asparagopsis is similar to other forages in nutrient composition; however, would be used as a feed additive fed at low levels to assist with decreasing methane emissions. Salwen continued to share, that in previous research, extensive testing was conducted to evaluate safety, monitoring bromoform and heavy metals by testing for copper, iron, and iodine and found that this variety of seaweed is not known to accumulate heavy metals. Dr. Poppenga stated that salmonella has been shown to be a microbiological issue with seaweed when consumed by humans. Salwen noted that she was unaware that salmonella was a risk with this specific seaweed. Discussion ensued.

Dr. Carl Old requested more information about the Iodine content of the Asparagopsis feed, noting that if levels are too high, Iodine toxicity is a concern. Discussion ensued.

Dr. Xixi Chen requested information about the continuity of the feed product relative to its nutritional composition. Salwen noted when the Asparagopsis is ready for a feed ingredient definition with Association of American Feed Control Officials (AAFCO) and United States Food and Drug Administration (FDA), it will be harvested in a controlled environment in order to control for all inputs in the waters where Asparagopsis will be harvested. Discussion ensued.

Dr. Chen requested additional information about feeding specifications of the feed product when used for methane reduction, including information on the specific species of Asparagopsis proposed to be used in the commercial feeding trial.

Roque stated that the level of Iodine and Bromoform for the proposed commercial dairy feeding trial would be half the level of the levels which were used in previous research. Dr. Old followed-up with further questions regarding Iodine and Bromoform. Discussion ensued.

Dr. Old voiced his concern stating further research is warranted to learn more about the mechanism of action in the rumen which occurs with the use of Asparagopsis to decrease methane emissions.

Dr. Chen asked if the milk would be tested prior to product sale. Salwen noted that milk samples will be evaluated for Iodine and Bromoform. Discussion ensued.

Leal stated the Feed Inspection Program would be working with the trial operators to obtain samples of the feed additive and total mixed ration (TMR) throughout the trial to monitor components of the feed. Dr. Arana stated that the TMR would be best to sample. Leal stated the program could test for Iodine, Heavy Metals, and Bromoform to ensure the safety of the feed.

**MOTION:** Dr. Xixi Chen moved to recommend the Asparagopsis commercial feeding trial to the FIAB. Dr. Marit Arana seconded the motion. The TASC voted 2-1 in favor of recommending the Asparagopsis commercial feeding trial to the FIAB.

**PUBLIC COMMENT**

No public comments were made.

**FUTURE MEETING AGENDA ITEMS**

McCandless stated that the next meeting may evaluate the use of SAFE funding for research projects. Dr. Arana stated that the TASC may move to an *ad hoc* working subcommittee. Leal stated this may occur in the future. Discussion ensued.

**NEXT MEETING**

No future meetings are scheduled at this time.

**ADJOURNMENT**

**MOTION:** Dr. Carl Old moved to adjourn the meeting, seconded by Dr. Marit Arana.

Meeting was adjourned at 11:48am.

Respectfully Submitted By

**ORIGINAL SIGNED BY JENNA LEAL**

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

12/16/2020

Date