



COMMERCIAL FEED  
REGULATORY PROGRAM

California Department of Food and Agriculture  
Feed, Fertilizer, and Livestock Drugs Regulatory Services Branch

# QUARTERLY FEED UPDATE

Issue 15 | Summer 2023

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## Calendar

July 4, 2023  
Independence Day

July 31, 2023  
Commercial Feed  
License Renewals  
and Quarter 2  
Tonnage Tax Due

September 4, 2023  
Labor Day



*Commercial Feed, Livestock Drugs, SAFE, and AUS Program Manager Jenna Leal presenting on a panel at the State of the Science Summit.*

## State of the Science Summit Recap

The California Department of Food and Agriculture (CDFA) and University of California (UC), Davis, College of Agricultural and Environmental Sciences hosted a two-day conference May 2-3, 2023, at UC Davis titled State of the Science Summit: Feed Strategies to Reduce Enteric Emissions. The event was sponsored by the California Grain and Feed Association and the UC Davis Clarity and Leadership for Environmental Awareness and Research (CLEAR) Center. The goal of the summit was to identify opportunities for collaboration in private and government sectors, gaps in research, and strategies that can help the dairy and beef industries meet climate goals related to reducing methane emissions. The summit included informational presentations and panel discussions with leading experts in methane mitigation, animal science, and government policy, to align the goals of the scientific and regulatory aspects of feed strategies to reduce enteric emissions.

The summit was attended in person and virtually by over 300 participants, and included representation from federal and state agencies, including the United States Department of Agriculture (USDA), the United States Food and Drug Administration (FDA), the California Air Resources Board (CARB), Food and

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See **Summit** on page 2

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## *Summit, from page 1*

Agriculture Organization of the United Nations (FAO UN), and CDFA. Additionally, public and private entities were represented from Australia, Belgium, Canada, Denmark, France, Italy, Ireland, Netherlands, Norway, and numerous states across the US. Researchers spanning the globe participated in-person and virtually.

Outcomes from the summit:

- Feed additives can be an important part of an enteric methane mitigation strategy, but several other intervention strategies exist and are being explored.
- There is a need for additional research data and infrastructure to improve understanding of livestock emissions, the fundamental understanding of the rumen microbiome, and large-scale implementation of these feeding strategies.
- Animal and human safety are non-negotiable requirements when evaluating the feasibility of utilizing methane mitigating feed products.
- A better understanding of the existing FDA approval process and why the approval of these feed additives must adhere to this process to maintain feed and food safety. Additionally, the FDA Food, Drug and Cosmetic Act may be able to be amended to include a more expeditious path to approve feed additives with environmental claims.
- Large scale producer adoption and acceptance of feed additives are influenced mostly by productivity benefits and an incentive structure.
- An incentive program or protocol is needed to assist with early producer adoption to ensure additives can count towards California reduction goals.

## VFD Online Training Now Available

The California Department of Food and Agriculture (CDFA) is proud to announce a new online outreach and education resource. The Veterinary Feed Directive (VFD) Online Training is the result of a collaborative effort between the Antimicrobial Use and Stewardship (AUS) program, Safe Animal Feed Education (SAFE) program, and our University of California, Davis, partners at the Food Animal Residue Avoidance Databank (FARAD).

The training has been organized by major species (swine, bovine, and poultry) and is intended to provide an educational resource to California feed distributors and other industry stakeholders to better understand the history, regulations, and verification process of a complete and accurate VFD order.

To register for the course, please click the link and submit your email address:

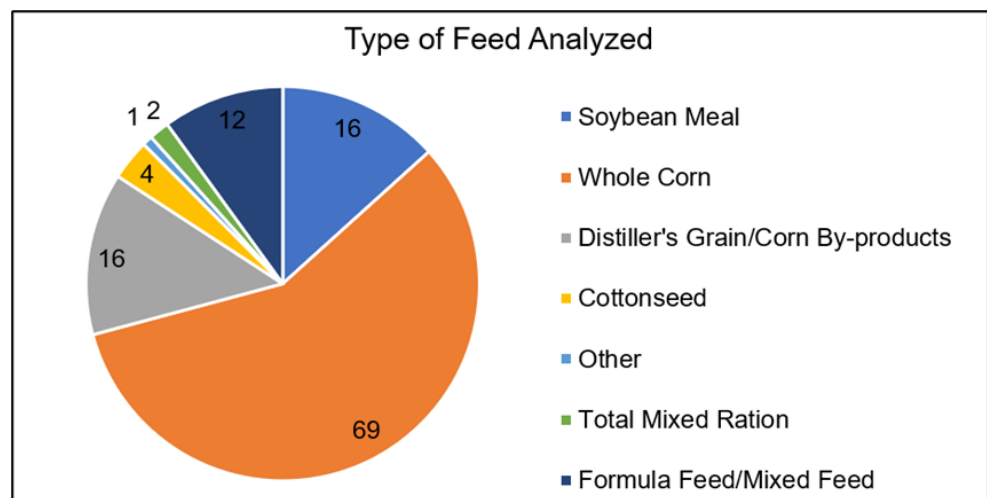
<https://na.eventscloud.com/ereg/newreg.php?eventid=634458&t=9b1f964a98855e97447e85a1fe87a073>

It may take up to seven days to receive login credentials once an email address has been submitted.

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**Figure 1.** Feed type of 120 samples obtained by the CFRP and analyzed for mycotoxins.



## 2022-2023 Full Mycotoxin Report

From September 2022 through May 2023, the Commercial Feed Regulatory Program (CFRP) obtained 120 samples of various feeds for mycotoxin analysis (Figure 1). Of the 120 samples obtained, 115 were routine official samples and 5 were investigative samples (of which, 3 were in response to a complaint). The University of California, Davis, California Animal Health and Food Safety Laboratory conducted 10 mycotoxin analyses on each of the 120 samples, for a total of 1200 analyses. Samples were analyzed for Aflatoxin B1, B2, G1, G2 ppb, HT-2 ppb, Zearalenone (F-2 Toxin) ppm, Fumonisin B1 ppm, Deoxynevalenol (DON) ppm, Ochratoxin ppb, and T2 Toxin ppm.

The US Food and Drug Administration (FDA) has established tolerance levels for aflatoxin, fumonisin and vomitoxin by species and class of livestock<sup>1</sup>. The tolerance level for aflatoxins varies by species from 300 parts per billion

(ppb) for finishing beef cattle to 20 ppb in dairy cattle. Due to California's prominent dairy industry, CFRP requires that all commercial feed in California not exceed 20 ppb total aflatoxin, since it can be transferred into milk and poses a human health concern. Tolerance levels for fumonisins range from 5 parts per million (ppm) for equids and rabbits to 100 ppm for poultry raised for slaughter. Vomitoxin tolerance levels in feed ingredients range from 5 ppm for swine to 30 ppm for beef cattle. FDA has not established guidance for the other mycotoxins tested.

Of the 120 samples analyzed, 96 (80%) resulted in no detectable levels of mycotoxins (Figure 2). There was one sample of nut meal which had detectable levels of aflatoxin B1 and vomitoxin, but neither at a level of safety concern. There were 16 samples of corn with detectable levels of fumonisin B1, which were all under 3 ppm. Of those, 1 also had a

See ***Mycotoxin Report*** on page 4

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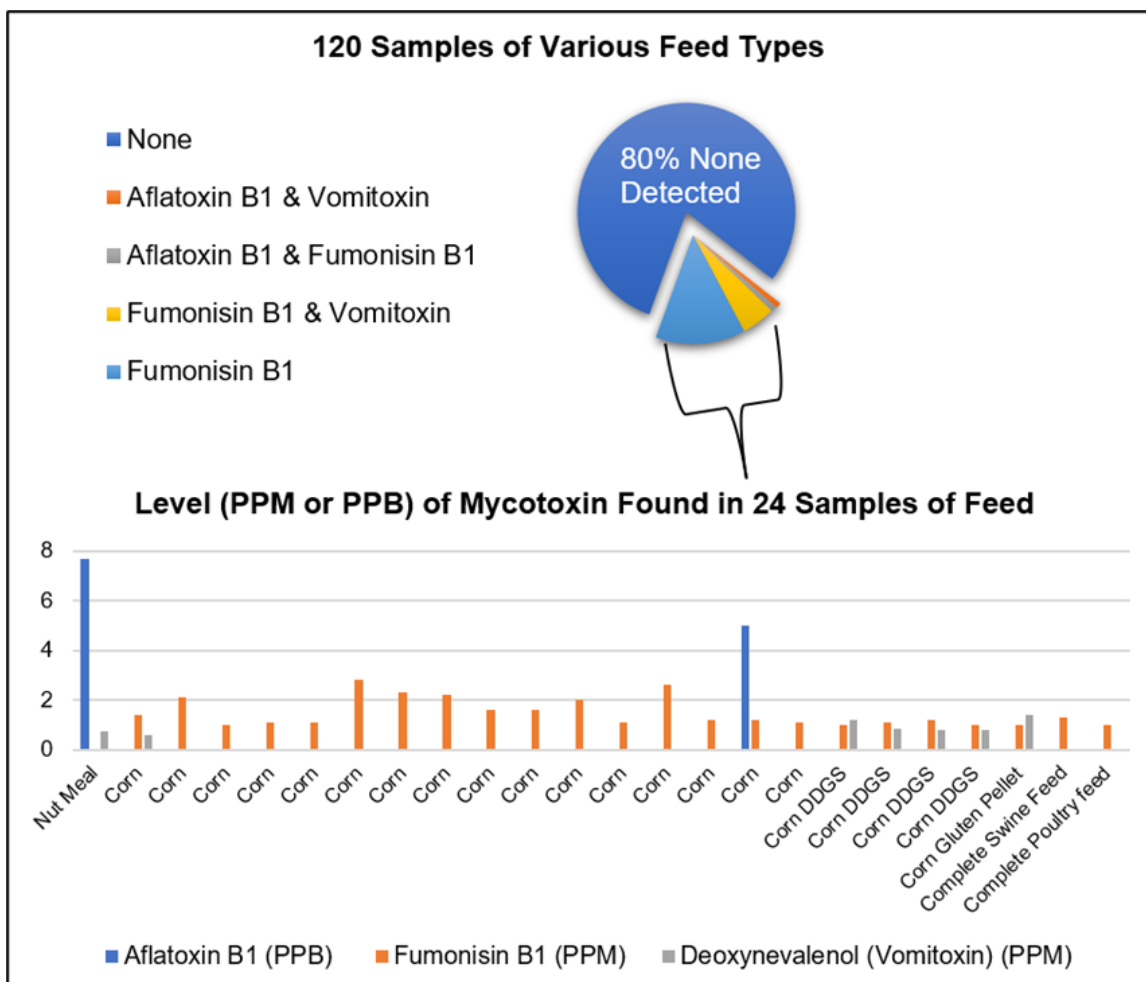
## *Mycotoxin Report, from page 3*

detectable level of vomitoxin (0.6 ppm), and 1 also had a detectable level of aflatoxin B1 (5 ppb) which was under the maximum limit of 20 ppb. Five samples of corn by-products, including dried distiller's grain with solubles and corn gluten pellets, had detectable levels of fumonisin B1 and vomitoxin, all under 2 ppm. There were 2 samples of complete feed which had detectable levels of fumonisin B1,

both under 2 ppm. No samples contained any detectable levels of aflatoxin B2, aflatoxin G1, aflatoxin G2, Zearalenone (F-2 toxin), T-2 toxin, H-T2, or ochratoxin. None of the samples contained levels of a mycotoxin considered to be a safety concern and no regulatory action was necessary.

1: FDA Center for Veterinary Medicine (2016). *CVM Annual Report on Mycotoxins in Animal*

**Figure 2.** Mycotoxins detected in 24 of 120 samples of various feeds from the 2022 crop year and level detected. Fumonisin and vomitoxin are reported in PPM; aflatoxin B1 is reported in PPB. FDA tolerances vary by species, with a maximum tolerance of 20 ppb for aflatoxin and 5 ppm for fumonisin and vomitoxin.



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## 2022-2023 LFFM Sampling Project Complete

The Commercial Feed Regulatory Program (CFRP) partnered with the California Animal Health and Food Safety Laboratory System (CAHFS) to obtain samples in support of their 2022-2023 Laboratory Flexible Funding Model (LFFM) cooperative agreement with the US Food and Drug Administration (FDA). CFRP was awarded supplementary funding from FDA to obtain the 100 feed samples needed for CAHFS' LFFM cooperative agreement.

Sampling began on October 26, 2022, and the project was completed on June 1, 2023. Out of the 100 samples obtained, 60 were whole corn, 15 soybean meal, 15 dry distiller's grains, 5 complete poultry feed, and 5 complete swine feed samples (Table 1). Samples were obtained of incoming ingredients from out of state suppliers via rail, as well as feed distributed in California via truck or bags.

Samples were tested for mycotoxins at the CAHFS laboratory at the University of California, Davis, to ensure all feed ingredients/complete feed are within the approved levels for the intended species. The CAHFS Mycotoxin Screen assay includes Aflatoxin B1, B2, G1, G2 ppb, HT-2 ppb, Zearalenone (F-2 Toxin) ppm, Fumonisin B1 ppm, Deoxynevalenol (DON) ppm, Ochratoxin ppb, and T2 Toxin ppm. No mycotoxins were found in the 100 samples obtained throughout California.

**Table 1.** 2022-2023 LFFM samples obtained.

Sample Type	Quantity
Whole Corn	60
Soybean Meal	15
Dry Distillers	15
Complete Poultry Feed	5
Complete Swine Feed	5

## Washington State Training Visit

From June 5-9, 2023, the Commercial Feed Regulatory Program (CFRP) hosted two animal food inspectors from the Washington State Department of Agriculture for training on how to conduct Food Safety Modernization Act Preventive Controls (PC) inspections, as well as how to obtain feed samples. On day two, the trainee inspectors accompanied a CFRP Environmental Scientist, Special Investigator, and Supervising Special Investigator on a California state PC inspection to learn the process of performing a PC inspection. On day three, the Washington inspectors learned how to write up an inspection using the federal Establishment Inspection Report template. On day four, the visiting inspectors went to two local feed mills and were trained in various sampling techniques. The inspectors then reviewed the sample collection information and some medicated feed calculations before returning home to Washington state on day five.



*Animal feed inspectors from Washington state training with CFRP Environmental Scientist Alejandro Ramirez.*

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## STAFF SPOTLIGHT: Alejandro Ramirez



### ***What is your name?***

My name is Alejandro Ramirez.

### ***How long have you worked for CDFA?***

Four years and three months.

### ***What is your job title and what do you do?***

I am an Environmental Scientist for both the Commercial Feed Regulatory Program (CFRP) and the Antimicrobial Use and Stewardship (AUS) program. My responsibilities as an Environmental Scientist are to conduct routine inspections at feed manufacturing facilities, enforce state laws and regulations pertinent to the labeling, manufacturing, and distribution of livestock feed, registration of livestock drugs, and their proper use. I also obtain feed samples at firms and on farms to ensure product specifications, including medicated feed, meets the label guarantees. The end goal is to bring the firm in compliance with the department's laws and regulations, and ensure safe feed is being produced throughout California.

### ***How do you work for the California food supply?***

I work for the California food supply by inspecting feed manufacturers, obtaining routine samples, and enforcing state laws and regulations pertinent to the labeling, manufacturing, distribution of livestock feed, and its proper use. By doing so, we are ensuring farms producing meat, milk, and eggs are safe for human consumption.

### ***What do you enjoy most about your job?***

What I enjoy the most about my job is being able to travel to various locations and see how feed is being manufactured. It is fascinating how the manufacturing process can turn simple ingredients into complete feed for various species. On the other hand, I also enjoy traveling to various farms, communicating with the farmers, responding to complaints, and taking samples to ensure product specifications meet the label guarantees. I love to network and be a resource to help the industry when needed.

### ***What is your definition of success?***

Success is not about how much money you make, it is more about making a positive impact on yourself and others and feeling good about it. Joining the CDFA family has been my greatest milestone. It has given me the opportunity to grow as a person and help others when needed. By working closely with both the feed manufacturer and the consumer, I can ensure safe feed is being manufactured and fed. By doing so, I am making a positive impact by ensuring that only safe and quality food reaches human consumption. To me that is SUCCESS!

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## NOTICE TO INDUSTRY: Damaged Feed ([released April 20, 2023](#))

California has received a high precipitation year and widespread flooding, which creates the potential for damaged feed and high moisture feed. The Commercial Feed Regulatory Program (CFRP) would like to notify all parties involved in the sale or distribution of feed, including transloading, that **you are required to notify the program if you are in possession of damaged feed** per Title 3 of the California Code of Regulations (3 CCR) Section 2760 (b). If the program is not notified and we come across damaged feed in your possession enforcement action will be taken. [See Attachment 1 for regulations.](#)

As a reminder, 3 CCR Section 2694(l) states maximum percentage of **moisture or minimum percentage dry matter shall be guaranteed when moisture exceeds 15.0 percent. The definitions for Whole**

## AAFCO Seminar Highlights

Samantha Moran-Defty, Senior Environmental Scientist Specialist with the Commercial Feed Regulatory Program, and KC Gutenberger, Environmental Scientist with the Safe Animal Feed Education Program, attended the Association of American Feed Control Officials (AAFCO) 57<sup>th</sup> Annual Feed Administrators Seminar, May 15-19, 2023, in Fontana Dam, North Carolina. The Feed Administrators Seminar is a meeting for state regulatory programs and the US Food and Drug Administration (FDA) to discuss current issues. Attendees included 55 people representing 23 different states, as well as representatives from FDA and the National Association of State Departments of Agriculture.

**Cottonseed, Prime Whole Cottonseed, and Almond Hulls further require that moisture shall not exceed 13.0 percent.** If the moisture exceeds the level allowed in the definitions for whole cottonseed and almond hulls, the product must be labeled as “high-moisture whole cottonseed” or “high-moisture almond hulls,” along with the moisture maximum guarantee. See [Attachment 1 for example labels.](#)

The CFRP will follow up on any complaints of damaged feed within the state of California and take regulatory action as needed. To file a complaint, you may use the online form found on our website: <https://www.cdfa.ca.gov/is/fldrs/CommercialFeedComplaints.html>, email your complaint to [feed\\_lvstk@cdfa.ca.gov](mailto:feed_lvstk@cdfa.ca.gov), or contact our field supervisor Mike Davidson at (209) 649-3682 or our compliance officer Ted Bert at (559) 246-0753.



*KC Gutenberger (left) and Samantha Moran-Defty in Fontana Dam, North Carolina.*

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See **Seminar** on page 8

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## *Seminar, from page 7*

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Topics in the agenda included:

- AAFCO new business and updates
- State reports including updates on emerging issues and common concerns
- FDA updates
- Panel discussion on “Leadership Insights”

View the full agenda:

[https://www.aafco.org/wp-content/uploads/2023/04/2023\\_Seminar\\_Agenda\\_For\\_Web-1.pdf](https://www.aafco.org/wp-content/uploads/2023/04/2023_Seminar_Agenda_For_Web-1.pdf)

## **NOTICE TO INDUSTRY: Licensing ([released May 23, 2023](#))**

California Food and Agricultural Code (FAC) Section 15051(a) states each person shall obtain a license from the California Department of Food and Agriculture (CDFA) for each location where commercial feed is manufactured, distributed, sold, or stored for later sale in California. **The person who holds the commercial feed license should be the person who is manufacturing, distributing, selling, or storing commercial feed at that licensed location.** This will ensure the licensee has control of management of the facility to allow CDFA’s Commercial Feed Regulatory Program to conduct inspections, obtain samples, and ensure safety of feed manufactured, distributed, sold, or stored at the facility. “Person” means any individual, corporation, partnership, limited liability company, trust, association, cooperative association, or any other business unit or organization.

Brokers are also required to obtain commercial feed licenses for their place of business (e.g., their office), because they are selling commercial feed. However, a broker should not obtain a commercial feed license on behalf of any location operated by another person or business.

Human food facilities which are manufacturing, distributing, selling, or storing a product intended for animal feed must

obtain a commercial feed license, even if all their product is sold to another licensee. However, human food retail establishments and restaurants which ONLY handle food intended for human consumption AND all their food byproduct is picked up by a commercial feed licensee are exempt from obtaining a commercial feed license. If the retail establishment or restaurant is diverting to animal feed directly to an un-licensed purchaser, then they must obtain a commercial feed license. As a reminder, CDFA has reduced the commercial feed license fee to one hundred dollars (\$100) for facilities that solely divert eligible human food waste and have no other commercial feed operations.

Additional clarification regarding when a commercial feed license is required is provided in a new infographic, “Do I Need a Commercial Feed License”, found at: [https://www.cdfa.ca.gov/is/ffldrs/docs/Do\\_I\\_need\\_a\\_Commercial\\_Feed\\_License.pdf](https://www.cdfa.ca.gov/is/ffldrs/docs/Do_I_need_a_Commercial_Feed_License.pdf)

To learn more about how to obtain a commercial feed license, please contact CDFA's Commercial Feed Regulatory Program at 916-900-5022, [feed\\_lvstkc@cdfa.ca.gov](mailto:feed_lvstkc@cdfa.ca.gov), or visit our website <https://www.cdfa.ca.gov/is/ffldrs/CommercialFeedReg.html>.



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## SAFE Updates

This quarter, the Safe Animal Feed Education (SAFE) Program has focused on improving outreach capabilities through continued upgrades to the Commercial Feed Regulatory Program (CFRP) and SAFE websites, adoption of an email signature campaign by staff to encourage subscription to our listservs, and a new blog!

The new [“Run of the Mill” Blog](#) was named by the talented team members of the CFRP and is crafted to deliver the latest news, updates, and resources relating to the program, industry, and more. With the ability to search for content by keyword, category, and date it will be easier than ever to find updates.

SAFE has also published several new guidance documents related to licensing and tonnage requirements:

- [“Do I Need a Commercial Feed License” Infographic](#)
- [Commercial Feed License Application Guide](#)
- [Inspection Tonnage Tax Reporting Guide](#)
- [How to Report Tonnage of By-products Diverted to Animal Feed](#)

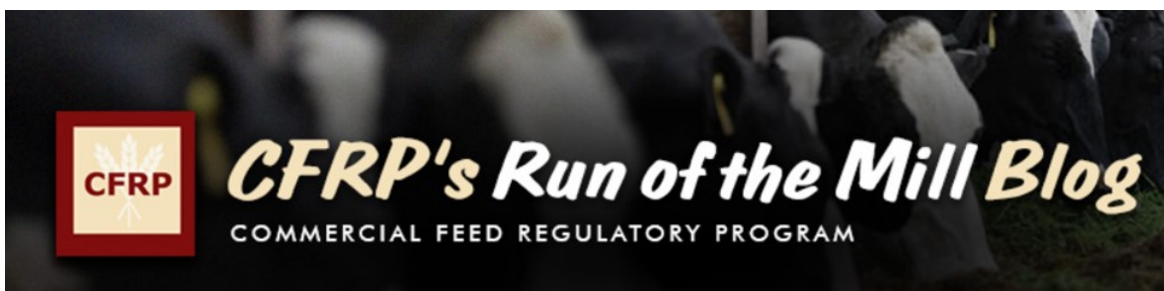
**Coming Soon!** SAFE is working on how-to videos for the ExtraView Database which will walk through the process for applying for a commercial feed license, renewal, tonnage tax, and more.

To receive email updates from the Commercial Feed Regulatory Program, follow the link and subscribe to the Feed and SAFE listserv:

[https://www.cdfa.ca.gov/subscriptions/?cdfa\\_lists\\_isd\\_ffldrs](https://www.cdfa.ca.gov/subscriptions/?cdfa_lists_isd_ffldrs)

Feed, Fertilizer, Livestock Drugs

- Commercial Feed Regulatory Program and Safe Animal Feed Education
- Livestock Drugs
- Antimicrobial Use and Stewardship
- Fertilizer Research and Education Program
- Fertilizer
- Organic Input Materials



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