FFTC-TLRI Symposium on Innovation and Application of Animal Vaccines and Health-Promotion Feed Additives for Antibiotic-Free Era in Livestock Industry

1. Type Online Symposium (Webex System)

2. Date and Venue November 11-12, 2021

3. Organizers TLRI (Taiwan Livestock Research Institute, Council of

Agriculture (COA), Taiwan), and FFTC

4. Partners Department of Science and Technology, COA, Taiwan

AHRI (Animal Health Research Institute, COA, Taiwan)

BAPHIQ (Bureau of Animal and Plant Health Inspection

and Quarantine, COA, Taiwan)

ATRI (Agricultural Technology and Research Institute,

Taiwan)

TIER (Taiwan Institute of Economic Research, Taiwan)

APAARI (Asia-Pacific Association of Agricultural

Research Institutions)

5. Coordinators Dr. Herng-Fu Lee, TLRI

Mr. Kun-Chan Tsai, FFTC

6. Rationale

Global consumption of animal products continues to increase sharply along with the growth of population. In the livestock framing, antibiotics are usually used for growth promotion or better feed efficiency, thus leading to the prolonged dose exposure of animal gut bacteria to these drugs. However, the treatment of antibiotics to animals is approved by FDA¹ only for: (1) diseased animals, (2) disease control, and (3) disease prevention. The antibiotic-resistant bacteria could potentially infect people via routes such as raw/undercooked meat, vegetables/fruits contaminated by livestock wasted waters, or personal contacts without suitable hygiene. Meanwhile due to the increasing consumers' concern on food quality and safety, the trend of an antibiotics-free feeding model of livestock is requested. The innovation of animal vaccines and healthpromotion feed additives for livestock animals becomes an important challenge of the industry. Health-promotion feed additives include probiotics, phytogenics, fungi, micronutrients, and peptides etc. The two-day symposium held in Taiwan will invite local and foreign scientists and experts to share their research achievements regarding animal vaccines and the health-promotion feed additives. It is expected that through this seminar, the utilization of animal vaccines and health-promotion feed additives in

¹ Veterinary Feed Directive (VFD), U.S. Food & Drug Administration. February 4, 2020.

livestock industry will be elevated so as to up-grade the industry for a healthier level. Also, the technology exchanges could stimulate the vigorous development of animal vaccine and health-promotion feed additive industries in the Asia-Pacific region. The export competitiveness of Taiwan's animal vaccine and feed additive industries could be promoted.

7. Objectives

- To exchange knowledge on the development of animal vaccines and healthpromotion feed additives and promote the feed industry
- To share the experiences and application of animal vaccines and health-promotion feed additives in livestock industry and stimulate the farm up-grading
- To increase the food safety and decrease the risk of antimicrobial resistance for human health
- To exchange on the best practices and experiences on the regulations of animal vaccines and health-promotion feed additives as alternatives to antibiotics for the sustainable management of the livestock industry

8. Possible Themes

- The research and exchange of experiences in the development of animal vaccines and health-promotion feed additives
- Exchange and sharing of practical application experiences and challenges on the farm side when adopting the animal vaccines and health-promotion feed additives
- Others

9. Expected Participants

- 6 speakers to include related experts from partner institutes of Taiwan, and 6 speakers from other countries, such as Indonesia, Japan, Korea, Philippines, Thailand, Vietnam, and USA etc.
- Maximum of 200 participants to include university professors, researchers, graduate students, young farmers, professionals on animal vaccine and health-promotion feed additive industries

10. Expected Outputs

- Research and development results of animal vaccines and health-promotion feed additives are in line with international studies
- Increasing the awareness and application of animal vaccines and health-promotion feed additives in livestock industry
- To promote the development of animal vaccine and health-promotion feed additive industries in the Asia-Pacific countries