FIAAP Animal Nutrition Conference: Feed industry experts explore gut health, alternative proteins


The 9th edition of the FIAAP Animal Nutrition Conference aims to address the most pressing issues facing today’s nutritionists and animal feed producers. The one-day event, held on March 27 in Bangkok, Thailand, will circle around several key topics: monogastric gut health, antibiotic elimination strategies, animal feed additives and alternative ingredients.

**Antibiotic elimination strategies**

Throughout Asia, as in other parts of the world, livestock producers are looking to limit, reduce or eliminate antibiotics used for growth promotion. While farm management is a key element, nutrition and feed additives play an important role in maintaining animal health and performance. During FIAAP’s antibiotic replacement strategy track, three presentations tackle this topic from different angles.

As formulations change, feed producers are faced with the challenge of navigating feed processing with new feed additive products. “Reducing Antibiotics in Livestock Feed Through Feed Processing” will identify how proper manufacturing practices can deliver pathogen-free feed that is fortified with probiotics, prebiotics and other nutritional additives to promote gut health. Wenger Manufacturing UP/C technology manager Spencer Lawson will focus on the essential feed-processing steps for maximizing antibiotic-free feeds, animal health, pellet quality, feed conversion and palatability.

Eubiotic Nutrition combines modern nutritional principles with the use of non-antibiotic feed additives to create a status of Eubiosis, a well-balanced microflora in the gastrointestinal tract. Consultant and nutritionist André Meeusen’s presentation, “Eubiotic Nutrition in Antibiotic-free Animal Production,” explains the three key principles of the Eubiotic Nutrition concept. Meeusen will discuss how nutritionists can maximize nutrient utilization with multiple enzymes; improve fat digestion and nutrient absorption with lysolecithins; and how to obtain a healthy intestinal microflora using alpha-monoglycerides.

While there is already significant scientific data on the efficacy of bacteriophage therapy as a treatment of drug resistant bacterial infections, the use of bacteriophages to prevent illness in food animals requires more research to further reduce antibiotic usage on farms. Proteon Pharmaceuticals production director Arkadiusz Wojtasik’s presentation, “Bacteriophage: Antibiotic-free Solution Against Salmonella in Poultry,” will outline the practical challenges and issues raised by the development and testing of a bacteriophage-based solution to prevent and/or treat salmonellosis in poultry. He will discuss development of a bacteriophage-based technology platform, which could be used to selectively eliminate most dangerous pathogenic bacterial strains in poultry, aquaculture and dairy, using a mixture of carefully selected and genotypically characterized phages that inhibit the growth of targeted bacterial serovars.

**Monogastric gut health examined**

Three sessions will address the application of feed additive solutions for improved gut health and intestinal development.

With the never-ending genetic quest for a bird that grows at the lowest possible feed conversion ratio, hyperphagic birds must always be able to digest and absorb high feed intake. Taking into account the diverse challenges that are common under field conditions, almost all birds raised will at some point encounter a moment that the physiologic capacities are surpassed by their hyperphagic nature, which causes microbiota disruptions and enteritis. In the past, the industry has focused on coping with these changes by using antimicrobial growth promoters (AGPs) and/or therapeutic antimicrobials to literally “close the gap,” but today there is a huge pressure, at least in some areas, to limit or ban those AGP and/or antimicrobials.

Vetworks founder and poultry consultant Dr. Maarten De Gussem will explore what is needed to achieve high performance in poultry production during his talk, “Poultry Gut Health in 2018: A Holistic View.” While it has become clear that several classes of feed additives have the potential to exert beneficial effects in terms of gut health and animal performance, many questions regarding their optimal use remain unexplored. Nutriad’s business

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**FIAAP Exclusive! 2018 Nutrition & Feed Survey**

For nearly a decade, WATT Global Media has reached out to its global feed and poultry audience to highlight the industry trends influencing animal nutrition and feed formulations. Kicking off the FIAAP Conference, Feed Strategy editor Jackie Roembke will reveal the results of the 2018 edition of the Poultry Nutrition and Feed Survey and offer insight into the feeding shifts and challenges identified by survey respondents.
development manager Daniel Ramirez will discuss recent developments in this area. The use of plant-derived bioactive compounds, or phytogentics, such as herbs and spices, essential oils, polyphenols, saponins and tannins, can provide a first line of defense against disease in an animal's gastrointestinal tract. Phytogentics have been shown to reduce the pathogenicity of the intestinal microbiota; stimulate intestinal integrity and immunity; and limit oxidation and inflammation in the intestinal epithelial cells – therefore, they resemble the effects of antibiotic growth promoters (AGPs). Delacon's director of products and innovation Dr. Jan Dirk van der Klis's presentation, “How Phytogenics Support Resilience Against Intestinal Infections,” will examine phytogenic feed additives, their physiological functions and the modes of action that enables nutritionists to maximize their synergies to improve resilience against intestinal disorders, e.g. necrotic enteritis, dysbacteriosis and coccidiosis.

Ingredient solutions
Beyond additives, nutritionists are always looking for new research and formulation insights regarding the use of alternative proteins and feed ingredients. As global fish stocks decrease, fishmeal will become difficult to source and cost prohibitive. As a result, the animal feed industry needs to find a fishmeal alternative – excluding soybean meal because of the allergic reaction it causes in piglets. The session, “The Use of Pea Protein as a Functional Ingredient in Southeast Asian Piglet Feed,” will explore a recent 35-day nursery trial at the Bangkok Animal Research Center Co. Ltd. (BARC) to test fishmeal alternatives using diet formulations and ingredients typically used in Southeast Asia. Dr. Bob Thaler, a swine professor at South Dakota State University, will highlight how pea protein in nursery diets allowed for the successful decrease of fishmeal inclusions.

In 2017, U.S. dried distillers grains with solubles (DDGS) imports to Southeast Asia grew by nearly 20 percent. As U.S. ethanol producers continue to develop new technologies or improve on current practices to increase ethanol yields, changes to ethanol production can have significant effects on the nutritional value of the DDGS. Accurately describing these characteristics and identifying how different ethanol production practices affect distillers nutrition can help nutritionists more accurately formulate diets when using DDGS. Distillers grains represents a cost-competitive, consistent, and nutrient-dense feedstuff which can be fed to all species of livestock. POET Nutrition’s director of technical service Dr. Kevin Herrick’s will explore, “Opportunities for DDGS in Southeast Asian Livestock Diets,” in his presentation. He will provide an overview of how DDGS differ in nutritional value as well as introduce formulation and management strategies to optimize DDGS inclusion in livestock diets for Southeast Asian producers. Dietary fiber for piglets – especially at weaning – is essential to maintain the health of the gastrointestinal system and to promote GIT development. The beneficial effects of fibers in piglet nutrition are closely related to the functional properties of the fibers provided to the animal. Lignocellulose consisting of fermentable and non-fermentable insoluble fibers can serve as a functional and prebiotic insoluble ingredient to reduce diarrhea in piglets while improving performance. Dr. Christine Potthast, director of R&D with Agromed Austria, will explore how increasing amounts of insoluble and fermentable fibers from lignocellulose can have a positive effect on growth performance and promote GIT development in weaners during “Evaluating Fiber Sources for Piglet Gut Health Management.”