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he Institute of Veterinarians of Poultry Industry (IVPI) organized a Technical Nutrition Conference to celebrate the 'World Veterinary Day' on Saturday 7th May 2022 at Hilton Convention Centre, Manyata Tech Park, Bengaluru. Raw material challenges such as inadvertent rise in protein and energy sources due to exports / shadow pricing, poor quality and adulteration threats while using unconventional raw materials etc., have significantly dented the financial health of Poultry Industry from the last couple of years. Hence, IVPI made an effort to address raw material issues and alternative resources with the theme "Feed Ingredients: what goes up, won't come down". The Technical Conference was ably supported by Vencobb, Life Line's Tender Chicken, Nandu's, Coastal chicken, Bharath Agrovet, Ideal chicken and Shanthi Feeds Pvt Ltd. The Event was attended by Poultry Entrepreneurs, Veterinarians, Research Scientists, Senior Government officials and Technocrats from across the country. All the dignitaries were welcomed by IVPI Secretary, Dr. Harsha Kumar Shetty and the introductory remark was given by Prof.G.Devegowda, President of IVPI. Emcee of the programme was Dr K L Aravind

An Array of eminent speakers; Shri Kishore Kumar Hegde, MD, Life Line Feeds: Dr.Manju NC, Asst.Vice President, JAPFA Comfeed: Shri. Srinivas BV, MD, Aspartika Biotech Pvt Ltd: Dr. Abhilash, MD, Natani Recyclers India Pvt Ltd :Shri. Ashok Kumar KS, Founder, Maa Integrators and Dr. Anjan Goswami, Co-founder, 'Utpan App' spoke on interesting topics such as, business challenges in tough situations, alternative raw materials, quality issues, processing data & take corrective actions for the benefit of poultry industry. Dr. Aravind Bhat memorial Best Veterinarian award -2022 was conferred on Dr.Jayanth Deshpande for his immense contribution and service to the poultry farmers. The award ceremony was conducted by Dr. G Gopal Reddy. Dr. Swamy gave the vote of thanks. The event received very positive feedback for its professionally organising meeting.













#### MONTHLY POULTRY MAGAZINE

VOL. XX

No. 12

June 2022

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Publisher:

**SUGANDHA VYAS** 

Editorial & Regd. Office

#### **HIND PUBLICATIONS**

# 204, Plot No. 19, Huda Complex,

Saroor Nagar,

Hyderabad - 500 035.

Telangana. INDIA

Phone: 040-40212359

Mobile: 093913 78805

093470 28641

E-mail: hindpoultry@hotmail.com

Website: www.hindpoultry.com

YEARLY SUBSCRIPTION

India Rs. 500/-

OTHER COUNTRY: \$ 60 or Equivalent

Edited, Printed, Published and owned by

M.K. Vyas and Published from

# 204, Plot No. 19, Huda Complex,

Saroor Nagar, Hyderabad - 500 035. INDIA.

Design and Typesetting

Akshaya Graphics, Hyderabad.

Printed at

Akruti Offset Printers, Hyderabad.

A Magazine of

HIND PUBLICATIONS

RNI No. 7030/2002

Subject to Hyderabad Jurisdiction

#### ADVERTISEMENT INTERACTION SECTION



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## **HIND POULTRY JUNE 2022**



















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#### Respite for Around 10,000 Broiler Farms and 3,000 Layer Farms in Telangana

ccording to poultry farmers, prices of sova cakes which are widely used as fillers and source of protein for chicken have fallen drastically. In a major respite for the poultry industry which suffered badly during first and second wave of Covid-19, feed cost has come down considerably in the wake of a good crop after the monsoon. According to poultry farmers, prices of soya cakes which are widely used as source of protein for chicken have fallen by almost 50 per cent. If a kg of soya cakes were sold for Rs 90-Rs 100 a kg a few months back, it has dropped to some extent now. Another imported feed for poultry farms, maize too has plummeted from Rs 2,500 per quintal to some thing over Rs 2,000. Most of the maize is produced and supplied within the State and when there is a shortage, it is brought from Andhra Pradesh. Chakradhar Rao, president of Indian Poultry Equipment Manufacturers Association and Managing Director Chakra Group of Companies, said the cost of soya cakes should come down further to Rs 40 per kg which is a usual price. "Almost 70 per cent of soya cakes fed to birds are supplied from Madhya Pradesh and Maharashtra as its cultivation is less in our State," he said. If we talk about the retail price of Egg and CHicken In Hyderabad, skinless chicken is available for Rs 250 a kg, on, while eggs are sold for Rs 60 per dozen (Rs 5 per egg). There are around 10,000 broiler farms and 3,000 layer farms in Telangana, which produce nearly 4 crore broilers per month and around 3 crore eggs daily, of which close to 2 crore eggs are consumed in the State. Broilers are mostly sold within the State, eggs are transported to UP, Maharashtra, Kolkata and Tamil Nadu. 🚯

### Birgit Horn Appointed Managing Director VIV Worldwide



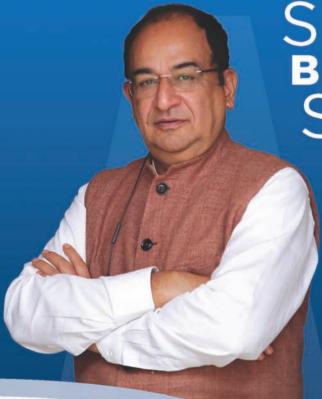
Birgit Horn (49) has been appointed as the new Managing Director of VIV worldwide. Based in the head office in Utrecht, Mrs. Horn will officially start on August 1, 2022. She will contribute to enlarge the VIV worldwide network on all measures with regards to exhibitors, visitors and partner development and alsofurther strengthen the worldwide reach of the VIVshow portfolio. Horn has a vast experience of 25 years working in the exhibition industry. She has worked in

different leadership positions with Messe Düsseldorf GmbH, a key player in the sector. As Director, Hornwas recently responsible for two world leading trade shows with global reach counting a base of around 3.200 exhibitors. In her tenure she has developed new trade fair and conference formats, expending industry segments in Germany, India as well as in Turkey.

As the new Managing Director of VIV worldwide, Brigit Horn will succeed Heiko M. Stutzinger, who recently became COO of Royal Jaarbeurs | VNU Group. "We are thrilled to have Birgit on board. Her focus on industry developments by building strong connections through clear customer-driven event concepts will help VIV worldwide to continue its legacy in thesector." affirms Heiko M. Stutzinger, COO Jaarbeurs. Sharing the sentiment, Horn adds, "I am very excited to join the VNU Group and looking forward to inspiring the whole team in reaching for the best possible services to supply top-quality events. At the same time, I am ready and keen to dive into the world of AgriFood and animal protein production, meet our existing partners and expand the VIV worldwide network in the Feed to Food industry."

In her new role, Horn will be responsible for the entire VIV worldwide portfolio, which is spread across the globe –Asia, Europe, and the MEA region, and consists of VIV trade exhibitions, VIV Connect and the VIV trade forums. She will report to the Group COO Heiko M. Stutzinger.

Welcoming a senior expert from the event industry onboard, Royal Jaarbeurs -VNU Group is excited to announce new leadership with a vision of boostingthe VIV worldwide portfolio.



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Poultry Technical Seminar was organized by Vaksindo Animal Health Pvt. Ltd. on 1st May 2022 at Manjeera Sarovar Premiere. This seminar was organized to discuss "Respiratory Disease Control with special reference to ND, IB and Infectious Coryza" The meeting was attended by 50 progressive poultry farmers of Anaparthy, East Godawari district , Andhra Pradesh. Mr. Subba Reddy-Dhanalxmi poultry farms, Mr. Sachnarayan Reddy-SKR Poultrieswhile Dr. Krishna Reddy and Dr. S.S. Prasad-Srinivasa farms - graced the technical seminar with their special attendance.

Mr. B. Ranga Rao, Director- Vaksindo India and Dr.

Ganesh Darban, Technical Service Manager presented on efforts taken by Vaksindo Animal Health in last two years on disease monitoring in all poultry belts of India with special reference to AndhraPradesh, their disease control strategies and making available the research basedservices and solutions for poultry. Vaksindo's legacy of manufacturing antigenically matching vaccines with high antigen mass would help to -

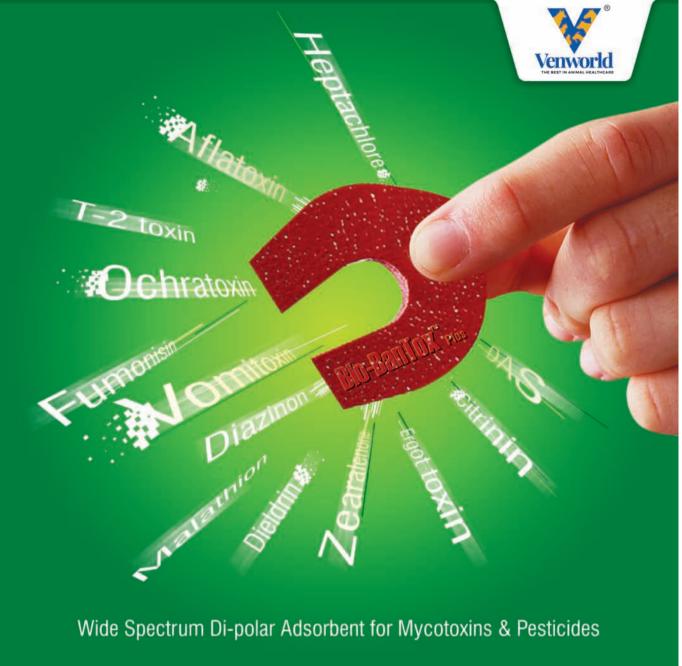
1) minimize cost of disease control in India, 2) minimizing disease threats in the minds of the

farmers, 3) improve the performance of progressive farmers. Expert Speaker was Dr. V. Gowthaman, PhD. from Namakkal presented the importance of disease control strategies for respiratory diseases. He opined that minimizing predisposing factors of various diseases should be prioritized. Indian layer farmers are facing egg production drop which need comprehensive approach for investigation. Infectious Coryza due to variant B serovars, Velogenic Viscerotropic ND caused by either Genotype VII or Genotype XIII, LPAI and variant IBV serotypes are mainly responsible for respiratory diseases in poultry. Better quality vaccines with good vaccination schedule should be the approach towards controlling diseases in poultry. 🔒





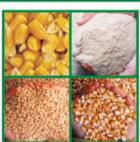




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## The VICTAM Asia and Health & Nutrition Asia Official Launch Animal Feed and Health Event Opening in Bangkok From September 7-9, 2022

VICTAM Asia in co-location with Health & Nutrition Asia is officially opening from September 7-9, 2022, and will be hosted at the IMPACT Halls 9 and 10, in Bangkok, Thailand. The international trade show organizers VICTAM and VIV worldwide, after a couple of postponements due to the pandemic, are finally ready to stage this co-location and present in Bangkok the much-awaited Animal Feed and Health event for Asia. The event program was presented at the official press conference held in Utrecht, the Netherlands where both organizers are currently hostingtheir first joint partnership, with the co-location of VIV Europe and VICTAM International already proving the powerful synergy of this cooperation.



Thailand: relaxed entry measures for travelers and expanding animal feedadditives& health market. The Press Conference was honored by the presence of H.E. Mr. ChatriArchjananun, Ambassador, Royal Thai Embassy, Hague, the Netherlands who showed his unfeigned support to this first inperson animal health and feed event for Asia and wished for it to run smoothly and contribute to the MICE Industry in Thailand. H.E. Mr. ChatriArchjananunreassured on Thailand's relaxed Covid-19 measures fortravelers. Fully vaccinated travelers willno longer need to book a quarantine hotel or show a pre-post departure PCR test. For non-vaccinated travelers, PCR test 72 hours before arrival is mandatory, but no quarantine required.



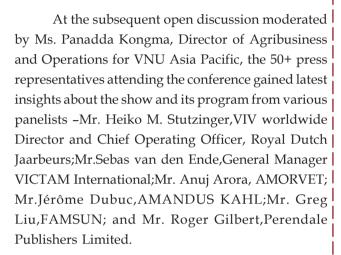
The Ambassador also focused on a few key industry insights andhighlighted that statistically for Thailand, the feed additives market is projected to reach 2.56 billion USD by 2025, with the poultry market and compound feed industry as the major growth drivers."There are many international as well as local companies in the Thai feed additive market, which are adopting various strategies, like expansions and partnershipsto



Visit: www.hindpoultry.com June 2022 | 11

increase their market presence" he said Concluding, he addressedboththe event organizers and added: "To sum up, you have made the right choice choosing Thailand to host this event."

#### Gateway to the Total Animal Health and Feed Solution for ASEAN



"We are finally ready to present to the Asian markets, a completeAnimal Feed and Health event that we have been working on for the last couple of years. Booth confirmations are well underway and we will be able to jointly present a total of 300 exhibitors at the modern IMPACT venue in Bangkok. We expect professional visitors from the whole ASEAN region and the rest of Asia with the main profiles being CEOs, feed formulators, mill managers, nutritionists, operation directors, transportation managers, and veterinarians," said Mr.Sebas van den Ende. "VIV and VICTAM are committed in serving Asia's feed and animal protein industries by jointly

developing business opportunities within the feed ingredients and additives segments, which is the fastest growing sectorof the Feed to Food supply chain. After more than 2 years without a dedicated show in the region, the market needs a face-to-face show to get back to action," said Mr. Heiko M. Stutzinger.



Nutrition-related illnesses that affect livestock animals are daily struggles for the industry. Deficiencies and malnutrition severely impact animal growth, development, and production. The tropical environment of many regions in Asia, represents a

high-risk element for pathogen growth in livestock. At the same time, drug residue & bacteria resistance in animals are concerning issues that requireattention. VICTAM Asia in co-location with Health & Nutrition Asia, want to serve as the business stage where top supplier solutions, innovations and expert knowledge are presented to this booming and growing market.

An elaborate conference &technical seminar program is being organized alongside the exhibition halls. A wide range of topics will be discussed including feed milling and formulation, feed safety, aquafeed, petfood, grain and rice milling, hightech animal health technology, genetics, pharmaceutical solutions for Asia, veterinary equipment, feed additives, bio-energy & biomass pelleting technology and much more.

As one of the main partners, FAVA, the Federation of Asian Veterinary Associations, will hold the Asian Animal Health Award 2022 during the event with two award categories open for qualified veterinarians – field practitioner and academician/researcher – to recognize their involvement and engagement in animal health. Candidates can apply until August 5<sup>th</sup>. All information about the FAVA application are available on the NEWS section at

www.vivhealthandnutrition.nl.

VICTAM Corporation and VIV worldwide are confident that the co-location in Bangkok will mark another milestone in this win-win cooperation. Registration for professional buyers and visitors is now open on the official websites

www.victamasia.com
www.vivhealthandnutrition.nl.





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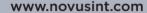
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Technical Service Manager, Novus South Central Asia

n the summer season, as the temperature Lincreases, poultry suffers from the condition called heat stress, also known as summer stress. This is a condition of imbalance between heat generation and heat loss in the body. This condition not only brings poor performance in birds but is also responsible for huge economic losses in terms of poor growth, lowered production, and higher mortality. This condition becomes a greater challenge whencoupled with a high humidity environment, making the birds even more vulnerable. According to research, poultry is most comfortable in an environmental temperature around 22-28°C (known as their thermoneutralzone). Once the temperature rises beyond this point, poultry show symptoms of heat stress: reduction in feed intake, poor growth, poor production, and increased mortality.

In general, birds are susceptible to high environmental temperature due to an absence of sweat glands, their full body of feathers, their higher body temperature, and the fatty nature of the birds. This heat or summer stress not only brings lowered

performance in poultry but also leads to immunosuppression issues, which can result in disease outbreaks and causeheavy mortality. This is mainly due to an absence of sweat glands in poultry making it impossible for them to dissipate heat. In this, males are found to be more prone to heat stress than females.

Ultimately, heat stress causes acid-base disequilibrium, or the inability to cool the body to maintain normal body temperature. Panting allows birds to release heat through an evaporative cooling kind of method, but high humidity coupled with high temperature causes insufficient panting to control body temperature resulting in heat stress.

Behavioural, neuroendocrinal, physiological changes are observed in birds during heat stress. Behavioural changes can include decreased feed intake, increased water intake, panting, less walking, and elevated wings. Physiological changes include oxidative stress, acidbase imbalance, and respiratory alkalosis. Internally the bird may experience decreased protein digestion and absorption, increased metabolic disorders, Increased chances of disease prevalence, and fertility issues. Production challenges can include reduced feed intake, poor feed conversion ratio, reduced body weight, impaired meat, and egg quality, and, as mentioned before, increased mortality.

#### Summer poultry management

The following steps can help birds combat heat stress

- 1. Housing management
- 2. Water management
- 3. Feed management
- 4. General management

Water management is crucial in heat stress management. In summer, water consumption goes up 3-4 times feed intake. So,a good quality water supply is essential. A water hygiene process must be followed because bad bacteria can prevail rapidly under poor conditions, which will lead to disease conditions. Water pipelines must be cleaned well and flushed with acids or hydrogen peroxideperiodically. Treat water with a quality water acidifier and sanitizer. In general, try to make the water pH in acidic conditions (5.5-6). As feed intake is less during times increased temperatures, nutritional water acidifiers should be used to help combat heat stress.

Housing management can be divided into two parts, inside shed management, and outside shed management.

 Thatching of the roof with green grass or agricultural waste can help reduce shed temperature. Paddy straw can be used for this purpose.

- Whitewashing the roof with lime helps mitigate the temperature inside the shed.
- 3. Applyingsprinklers above the shed.
- 4. The use of gunny bags on the side walls (grill) of the shed over which drip water is set.
- 5. Allowing trees to grow near the shed to provide shade on the shed.
- 6. Prohibit wild birds, which can carry diseases like Avian Influenza, from entering the shed.
- 7. Provide 4-6 feet of roof overhang to protect birds from direct sunlight.
- Provide ridge ventilation to help remove hot air from inside the shed.

#### Inside the shed

- 1. Use of fans
- 2. Use of a fogger
- 3. Provide a continuous supply of cool water (if not possible, periodically flush the water to provide cooler water for birds)
- 4. Reduce litter thickness (ideally around 400-450 grams per square foot)

#### Feeding Management

Research shows feed intake is reduced by 1.25% with every 1° rise in temperature. Further, it is observed that there is a decline in feed intake by almost 5% with every degree rise in temperature from 32-38° C. Knowing this it's best practice to feed a good quality feed during times when heat stress can occur.

1. Feeding should be done during the cooler hours of the morning

- or evening but too much gap in feeding time is not advisable.
- Increase the number of feeders and drinkers during feeding time to reduce competition among birds.
- 3. Adding antioxidants is shown to be helpfulto reduce stress and improve feed consumption while maintaining or improving body weight gain.(Vitamin E, Vitamin C, Selenium).
- 4. A high-energy diet should be provided during summer because birds lose more energy while panting.
- 5. Energy in feed should be supplemented with oil rather than grain because fat has the lowest heat increment value compared to carbohydrates and protein.
- 6. Feed consumption is reduced in summer. To overcome nutritional and productive losses it is suggested to supplement the diet with 10-15% more amino acids, vitamins, and minerals rather than increasing the protein level directly.
- Increase calcium and phosphorus levels to overcome thin eggshells more often seen during summer due to respiratory alkalosis (more carbon dioxide is lost due to panting).
- 8. Instances of viral challenges increase during this time as immunosuppression is common. Fumaric acid is shown to have good antiviral properties and can help to reduce viral challenges. A combination of coated benzoic acid and fumaric acid as an acidifier (as AVIMATRIX® feed

- supplement) can help to reduce stress and improve performance of the flock.
- 9. MINTREX® chelated trace minerals, a supplement of organic trace minerals zinc, copper, or manganese, and methionine source HMTBa are shown to help heat stress conditions. HMTBa molecules undergo absorption through diffusion, which doesn't require energy. Thus, using minerals with HMTBa can reduce heat stress during summer and help improve performance.
- 10. Essential oils have a broad range action from being immunomodulators performance enhancers. Adding essential oils - especially thymol and carvacrol - to the diet can help mitigate summer stress challenges and improve meat yield and overall performance.
- 11.Use of MOS and B Glucans during heat stress conditions is convincing due to the possibility to reverse or compensate physiological alterations induced by heat stress and by restoring immune functionand promoting robust inflammatory responses.
- 12. The addition of ammonium chloride, potassium chloride, and/or sodium bicarbonate has shown improved performance in broilers by improving water quality and feed intake.
- 13. Probiotics can be used to help control the corticosterone level and the excessive release of proinflammatory agents. Lactobacillus-based probiotics enhance goblet cell count in the duodenum and jejunum of heatstressed broilers thereby

- ratio.
- 14. Since a hot humid climate favors the growth of mould/fungi in feed the consistent use of an antifungal is recommended.

#### **General Management**

- 1. The depth of litter should be 2-3 incheson the floor.
- 2. 10% extra floor space should be provided in summer. Bird overcrowding only contributed to heat stress and must be avoided.
- 3. Shifting, transportation, debeaking, and vaccination should take place during the night or cool hours in the morning.

- improving the feed conversion | 4. Birds severely heat stressed may be dipped in cold water for 2-3 minutes to provide relief. Be sure to keep their head and neck above the water level.
  - 5. Use foggers in the shed, which can reduce the shed temperature up to 5-10°C depending on the quality of the fogger.

The house should be situated away from other buildings to facilitate the free movement of air.

"Summer management is crucial not only to improve the performance but to gain profit in adverse conditions. So, effective use of feeding, Water, shed management brings the good health of birds and thereby profit to the farmer". 🛕

## So long, dad

Khoram Zorabian was born on May 5, 1946. All his life, he believed five was his lucky number. On June 5, the founder of Zorabian Chicken died of a cardiac arrest at the age of 76. Daughter Perizaad remembers him as a visionary with a heart of gold. "He was fearless as an entrepreneur, a great mentor to his team and a person who bettered every life he met. An absolute romantic at heart, my mom was his world, his darling Firoza," Perizaad told this diarist, calling him a "bindaas father" who egged her on to take risks and give the business her all.

He started as a baker, became a restaurateur with Gondola, and followed this by starting Cheron, a catering business that retailed food under Bawa Zest. Khoram founded Zorabian Chicken 38 years ago because he was unhappy with the quality of chicken available in Mumbai. "He wanted the best meat for his restaurant and catering business," recalled Perizaad, who worked with him for 12 years and was his "warrior princess".

"He loved his chicken dhansak and butter chicken with crispy naan but ate only Zorabian Chicken, and would not eat a chicken dish if the restaurant didn't stock Zorabian," she added. He passed on his legacy to his children — brothers



(From left) Sohrab, Khoram, Shazaad and Perizaad Zorabian

Shazaad, who oversees farming, and Sohrab who helms finance, and Perizaad, who heads and leads sales, marketing, distribution and operations. "My brothers believe I have dad's madness; they teasingly call me his junior," she added.

Zorabian senior uplifted the lives of villagers around their chicken farms in Khopoli by building temples, gyms, wells and washing areas, and even offered medical facilities. He worked every single day of his life. "Dad would always say: Come hail, come storm, Zorabian will serve you chicken 365 days of the year. It would be unfair on our part to shut business on the day he died. He would have been livid."

## Sustainable Specialty Chemicals Provider Perstorp Group to be Acquired by PETRONAS Chemicals Group

Jan Secher, President and CEO of Perstorp

**Perstorp Group,** a leading sustainability-driven

global specialty chemicals company, today said that it is to be acquired by PETRONAS Chemicals Group Berhad (PCG). PCG announced today that it has signed a Securities Purchase Agreement on 14 May 2022 to acquire the entire equity interest in Perstorp Holding AB. The agreement was signed with Financière Forêt S.à.r.l, a company under PAI Partners, a European private equity firm.

Jan Secher, President and CEO of Perstorp said, "We are excited to become part of the PETRONAS family. I see a strong commonality in values and priorities for how to take our respective businesses forward, meeting the challenges and opportunities of the future. By tapping into PCG's strength andmarket leading position in the Asia Pacific region, we are confident that Perstorp can continue to develop into its next phase of growth. Being part of PCG means Perstorp gets the scale to increase the pace of innovation and accelerateour sustainable transformation, which is at the forefront of the chemical industry. PCG's and Perstorp's businesses complement each other very well."

"Perstorp is an outstanding strategic fit for PCG and enables us to participate in attractive end-markets such as paintsand coatings, construction, plastic additives, personal care and food, feed & nutrition, paints and coatings that share a robust growth outlook. This acquisition will also provide us critical talent, know-how, technological platforms and proven customer channels to address the pressing needs of the market for more eco-friendly and sustainable solutions," said PCG Managing Director and CEO, Ir. Mohd Yusri Mohamed Yusof. Established more than 140 years ago, Perstorp is a leading niche specialty chemicals player that develops sustainable solutions with focus on the Resins & Coatings, Engineered Fluids and Animal Nutrition markets. The company has global sales presence, seven state-of-the art manufacturing sites in Europe, US and China (the 8th plant will be ready in India in 2023) and three research and development (R&D) centres worldwide with approximately 1,500 employees serving more than 2,600 customers globally. Perstorp is highly regarded among its customers for its product quality and application expertise, supply reliability, customer centricity and Pro-Environment products and solutions.

"We find Perstorp attractive for their expansive range of products, established customer base as well as their market leadership in selected chemicals, which are complementary to PCG.It is our intention to make Perstorp our growth platform into the Specialty chemicals field. With Perstorp's holistic and innovative approach to reduce environmental impact in line with PCG's aim for positive environmental and social contribution, we are confident that together we can accelerate our sustainability journey towards circular economy and carbon neutrality by 2050", concluded Ir. Mohd Yusri. PCG's journey to achieve its vision of becoming the preferred chemical company providing innovative customer solutions is based on a clear strategy; to strengthen its basic petrochemicals portfolio, and to selectively diversify into derivatives, specialty chemicals and solutions. In the execution of this strategy, the acquisition of Perstorp group marks the creation of a significant specialty chemicals portfolio, while enhancing PCG's overall earnings. This transaction follows the acquisition of BRB Group in 2019, a leading global independent producer and formulator of silicones, lube oil additives and chemicals, which launched PCG into new areas aligned with its long-term growth ambitions.

"I am convinced that Perstorp and PCG can learn from each other's capabilities to ensure we bring the best of our two companies to our customers and our employees. I am confident that PCG will provide the best possible ownership for Perstorp in the years to come" concluded Jan Secher. The acquisition values Perstorp Group at an enterprise value of EUR 2,300.0 million. The completion of the acquisition is subject to relevant regulatory and shareholders' approvals.

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2	HOUSE TYPE-2	45'x270'	17,654	528/-	93,21,312	2	13	6	27,54,024	3.4 yrs
3	HOUSE TYPE-3	45'x220'	14,192	576/-	81,74,592	2	13	6	22,13,952	3.7 yrs

- Prices are valid until 30<sup>th</sup> of September 2022 and exclusive of taxes, erection, installation, transportation charges, subject to any revision from the company.
- \*\* ABW- ( Average Body Weight) as per industry average norms .
- \*\*\* GC- (Growing Charges) will be revised post completion of every 8 batch based on the electricity charges and labour charges.

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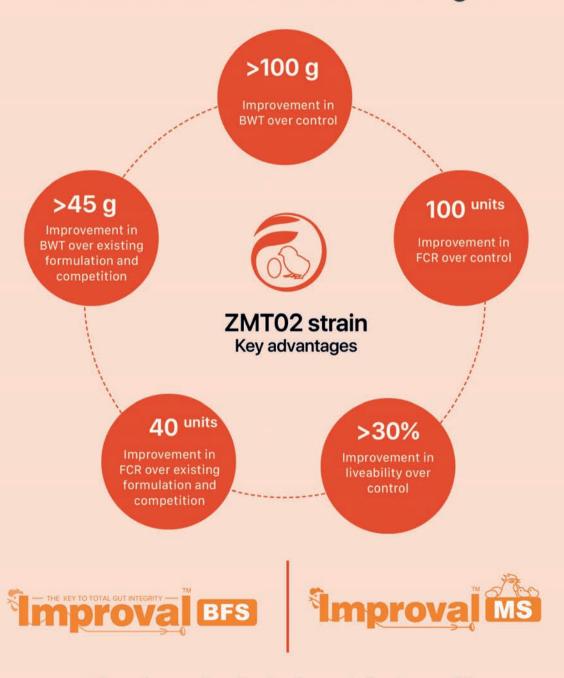
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## The powerful probiotic strain screened and isolated from the chicken gut



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Zenex AH was formerly Zydus AH







Based on an article by Alfred Blanch, DVM. PhD, Poultry Consultant, Chr. Hansen

poultry in the EU

With proven performance, economic and welfare benefits, probiotics have major market potential in the European poultry industry. But in a recent article in International Poultry Production, Chr. Hansen poultry consultant Alfred Blanch wrote that to realize this potential, it is first necessary to understand the unique challenges facing the poultry and probiotic sectors in the EU.

Interest in probiotic feed additives has grown steadily since they first appeared in the EU in the 1980s, Blanch wrote, Today, online databases such as PubMed include more than 13,000 publications on probiotics, with over 400 related to poultry.

Until recently, the use of probiotics in EU poultry production has been limited, but times are changing, Blanch stated. Currently there are 14 probiotics that are either registered or undergoing registration in the

Figure 1 - Indexed global probiotic market potential by region 1.0 0.8 0.6 0.4 0.2

Europe

EU targeting various segments of the poultry industry, including broilers, layers and turkeys. Although actual market data are hard to come by, he said, probiotic use is increasing globally, with the EU and US representing the largest markets in the near term.

While probiotic

adoption has been relatively high in EU swine production, Blanch noted that it has been slower in the EU poultry sector - especially compared to the US, where probiotics are used by an estimated 70 to 80 percent of poultry producers.

South

Asia

"Following the EU ban of antibiotic growth promoters (AGP) in 2006, one would have expected to see a high adoption rate of probiotics and other feed additives by poultry producers. However, market conditions in the US are very different to those in the EU," he wrote.

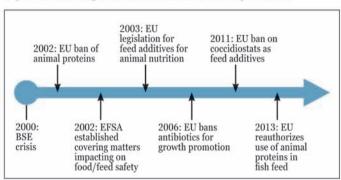
#### Different market conditions

North

0.0

A number of factors contribute to the relatively low use of probiotics in the EU compared to the US. One is regulatory: according to Blanch, the European Food Safety Authority has particularly stringent standards for registering probiotic feed additives, a process that can take between three and four years to complete. In the US, the registration process is less complicated. If the bacterial species is already a listed feed ingredient, there is no formal registration required on the federal level, although the product label or manufacturing facilities must be registered by state.

Figure 2 - Development of EU feed additive regulations



Another factor is the common US practice of reusing litter, which contributes to early intestinal challenge. However, Blanch reported, the major driver of probiotic use in the US was the introduction of coccidiosis vaccines, which cannot be used with coccidiostats or ionophores. These market conditions, combined with increased scrutiny of antibiotic use and the move toward antibiotic-free production, have driven wide acceptance of probiotics in US poultry.

#### Slow adoption

In the EU, by contrast, poultry producers have been slow to adopt probiotics, despite their well-documented performance and efficiency benefits. According to Blanch, one important reason for this is that some companies may have "overpromised" the efficacy of their products. "End user expectations were poorly managed and consequently this perception exists today," he wrote.

Second, following the AGP ban, many EU producers sought to improve hygiene, housing and overall management. This resulted in improved performance, and according to Blanch, it is more difficult to demonstrate the benefits of feed additives in high-performing flocks.

"Birds performing to their potential are typically healthy, management is good and hygiene is high," he wrote. "However, if high-performing birds suffer poor health via, for example, intestinal disturbance, the drop in performance can be dramatic.'

#### Drivers of probiotic usage in EU

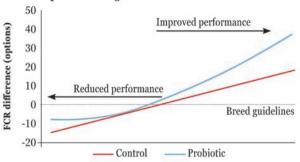
Still, Blanch believes that probiotics have important roles to play in the EU poultry industry, including:

- · Reducing reliance on therapeutic antibiotics to maintain antibiotic efficacy
- · Meeting consumer demand and regulatory pressure to reduce or eliminate antibiotic use
- •Providing "insurance" against sudden performance drops due to intestinal challenges
- · Promoting animal welfare to comply with current standards and increase profits

However, Blanch wrote, return on investment must ultimately determine whether to include probiotics or any other feed additive in a poultry management program. To accurately calculate ROI, Blanch said the overall financial analysis should include not just feed costs and money earned from the sale of birds, but also the costs of litter, vaccines, labor and treatments.



Figure 3 - Relationship of probiotic efficacy versus poultry breed performance guidelines



"This is because the other benefits of probiotics and their mode of action can still directly impact upon overall positive financial outcome, for example improving litter quality or contributing to a reduction in antibiotic usage," he explained.

Also, Blanch emphasized, producers looking to maximize returns from probiotics must be mindful of application.

**66** We know probiotics work well; the challenge...is to convince the poultry industry that probiotics are part of the solution.

"Typically only Bacillus and Clostridium survive the heat treatment of feed pelleting, although some preparations of

Enterococcus are also suggested to survive the feed manufacturing process," he stated. "If an end user applies a probiotic via an inappropriate route or incorrectly, the bacteria will not survive and therefore no efficacy will be demonstrated."

#### Challenges and opportunities

A final challenge to probiotic adoption in the EU, Blanch observed, is the structure of the industry: although there is a high level of integration, many feed mills are independent. This makes customer targeting difficult for probiotic suppliers, as the needs of each customer segment can vary widely.

"Probiotic companies are beginning to develop more complete strategies," Blanch stated. "The introduction of matrix values for swine probiotics was pioneered by Chr. Hansen, which is now doing the same for poultry probiotics. In the EU market, where performance as well as feed cost is high, the ability to offset probiotic cost is extremely important."

According to Blanch, probiotics are not a "magic bullet" and it must be understood that they cannot provide a complete solution. But despite the regulatory, structural and performance challenges facing the probiotics market in the EU, probiotic use is still growing and its benefits are clear.

"We know probiotics work well; the challenge in the EU, and globally, is to convince the poultry industry that probiotics are part of the solution for poultry management that brings real value and a return on investment," Blanch concluded.

The full article, "European experiences with probiotics in poultry production," appears in the November 2015 issue of *International Poultry Production*, pp. 7-9. To subscribe and access the digital issue, click here.



## Closer Notice to Poultry Farms in Haryana - Time to Adopt the Robust waste management system for Indian Poultry Producers- Writes M. K. Vyas

ecently few poultry farms in Haryana were issued notices and will be shut down within the next sixty days for government following guidelines on waste management. Special teams were also formed to check all poultry farms situated in the Barwala-Raipur Rani belt of Haryana. Regional officer of Haryana Pollution Control Board (HPCB) stated that few poultry farms have been served closure notices for not properly managing the waste produced within their premises. The officer confirmed that within 60 days of the notice, all the five farms will be shut. Panchkula district has close to 100



poultry farms in the Barwala-Raipur Rani belt. On the other hand, deputy commissioner Mahavir Kaushik also called a meeting with poultry farms association members, and directed them to regularly conduct medicinal spray on bird dropping and on dead birds. The deputy commissioner said, "The officers told me that this problem crops up during the rainy season, and poultry farm owners

have been directed to follow instructions given to them Hind Poultry feels that Poultry farmers, not only in Haryana but from across the country must adopt the robust waste management system which will help them not only in keeping diseases away from their poultry farms but also to help them in keeping the environment clean., There are so many experts in waste management in India and can well be contacted to install waste management systems like poultry waste rendering plants which can convert poultry wastes like farm mortality, Layer and Breeder manure, Hatchery waste etc in to wealth.

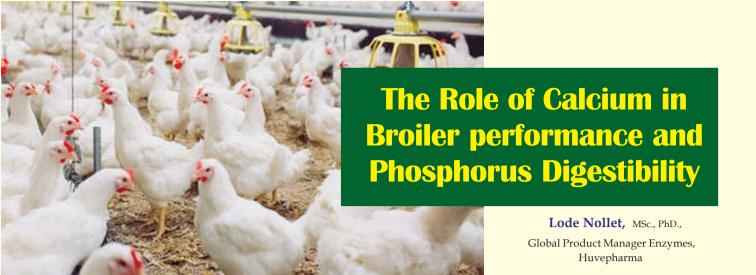
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In the past, there was little interest in the assessment of calcium (Ca) requirements in poultry diets. This was due to the availability of cheap limestone, which accounts for 80-85% of the total Ca in feed. However, driven by the numerous studies of the effect of Ca on phosphorus (P) digestibility and phytase efficacy, the impact of Ca on performance has gained increasing interest.

Research from recent years has indicated that oversupplying Ca can negatively affect animal performance:

- Limestone is a buffering substance and hinders sufficient acidification of the feed in the gizzard.
- An excess of dietary limestone reduces feed intake.
- Ca exerts a negative effect on the tight junctions, reducing gut integrity.
- Excess Ca inhibits P digestibility of feeds.

#### Inhibition of phytase on phytate degradation due to Ca

Dietary Ca forms complexes with phytate and these complexes can remain insoluble at a high pH (Fig. 1).

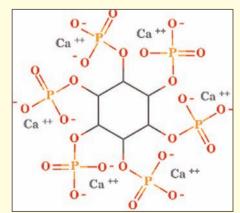
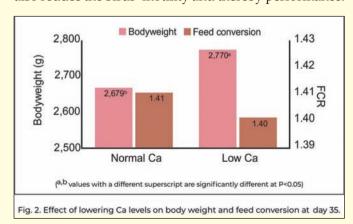


Fig. 1. Calcium chelates phytate, making it less accessible for phytase.

These precipitated phytate-Ca complexes are not accessible for hydrolysis by a phytase and this reduces the amount of P released. Therefore, an excess of Ca will reduce the P digestibility. Moreover, the speed of the limestone solubilisation will dictate the concentration of Ca available to chelate with the phytate. Fine limestone is in general more soluble than coarse limestone, meaning it will bind faster to phytate. As a result, it has a stronger negative impact on P digestibility compared to a coarse limestone.

#### Ca and P need to be in balance

Lowering the Ca levels in feed would be advisable to improve P digestibility, besides the choice of a coarser limestone. However, absorbed P can only be retained in the bones when enough Ca is present at blood level to form hydroxyapatite (bone mineral). Lowering the Ca level will improve the P digestibility, but due to the lack of Ca to retain the absorbed P, the P level in the bones can still be low. Deficiency of Ca can therefore cause poor bone quality, even when P digestibility is improved by lowering the Ca level. This indicates that an uncontrolled lowering of the Ca levels in the feed can also reduce the birds' motility and thereby performance.



#### A broiler study

A practical example has been demonstrated in a recent 35-day broiler trial at the University of Warmia and Mazury, Poland. Feed was reformulated with 1,000 FTU/kg of a novel intrinsic heat stable phytase (OptiPhos Plus) only using its corresponding P matrix value, while an NSPase complex (Hostazym X) was added on top. Two different Ca treatments were imposed:

- Normal Ca level: formulated at: formulated at 8.5, 7.0 and 6.0g/kg in starter, grower and finisher diets respectively.
- Low Caleavel: formulated at 6.5, 5.0 and 4.0g/kg in starter, grower and finisher diets respectively. The overall technical performance was very good (EPEF >500) showing the impact of the enzymes on securing a high broiler performance.
- The following effect of Ca could be noted:
- The low Ca level gave a significantly higher end weight vs when feeding normal Ca levels. Feed conversion was not impacted despite the higher bird weight at low Ca levels (Fig. 2).
- Ca and P digestibility (at day 35) were highest at the low Ca inclusion level.

Treatment	Ileal digestibility (%)		Tibia ash	Ca in tibia	P in tibia
Treatment	Ca	Р	(% of DM)	DM (%)	DM (%)
Normal Ca	50.2 <sup>b</sup>	54.5	48.4ª	18.6ª	10.1 a
Low Ca	64.1 a	60.6	46.8b	17.8b	9.8b

Bone ash analysis (at day 21) showed that tibia ash and Ca and P level in tibia ash were lower at the low Ca level. The impact was small, but significant (Table 1).

The fact that low Ca levels optimised technical performance and improved P digestibility, but reduced bone ash, demonstrates that too low Ca levels will lead to too low Ca levels at blood level, and therefore result in inefficient bone formation. This also indicates that there is a higher Ca requirement for optimal bone growth compared to what is required to optimise performance.

#### Conclusion

- · Reducing the Ca levels had a large positive impact, not only on animal performance, but also on Ca and P digestibility.
- Reducing Ca levels impacts the bone formation, showing that the Ca requirements for bone formation are higher compared to the Ca requirement for optimal animal performance.

### Poultry farmers showing the sign of recovery as the prices of both Eggs and Chicken are seeing the upward trend

fter suffering heavy losses for months together, there seems to be something to rejoice for the poultry farmers as the prices of both Eggs and Chicken are now seeing the upward trend. Eggs are sold at over Rs. 5 per piece whereas Broiler chicken is now being sold at close to Rs 280 per kg. forcing consumers to reduce consumption of their favourite non-vegetarian items. Increase in chicken feed and wholesale price, rise in demand due to the wedding season and drop in supply has led to the rise in chicken prices. Some varieties like Vanaraj and other country chicken are even selling at Rs 300 per kg. We feel that the price of broiler chicken will touch Rs 300 and egg to somewhere Rs. 6 a piece in the next few days. "Mutton was already out of bounds as the prices have crossed Rs 800 per kg long ago. Chicken is the

main source of protein. In the last week of April, broiler chicken was being sold at Rs 200 to 220 per kg, but the price has increased to Rs 250 to 280 per kg. Eggs were sold at as low as Rs. 4 per piece. "Prices have increased steadily in the past few weeks mainly due to the steep rise in chicken feed, high petrol and diesel prices, shortage in production during summer. Demand for chicken has increased due to the wedding season also but short supply has also contributed to rise in prices," Poultry farmers says that the prices of chicken feed and medicines, soya meal, corn, vitamins and amino acids have increased substantially overburdening them, especially small farmers. Many small farmers are selling out chicks before they are fully grown leading to shortage and price rise. 🔒





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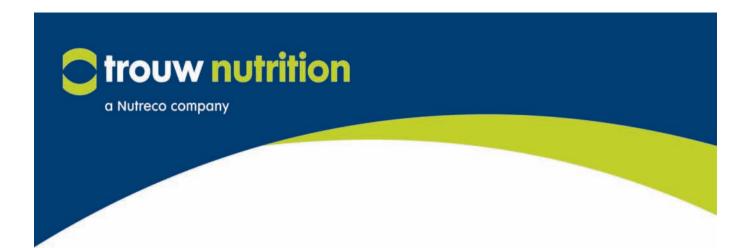




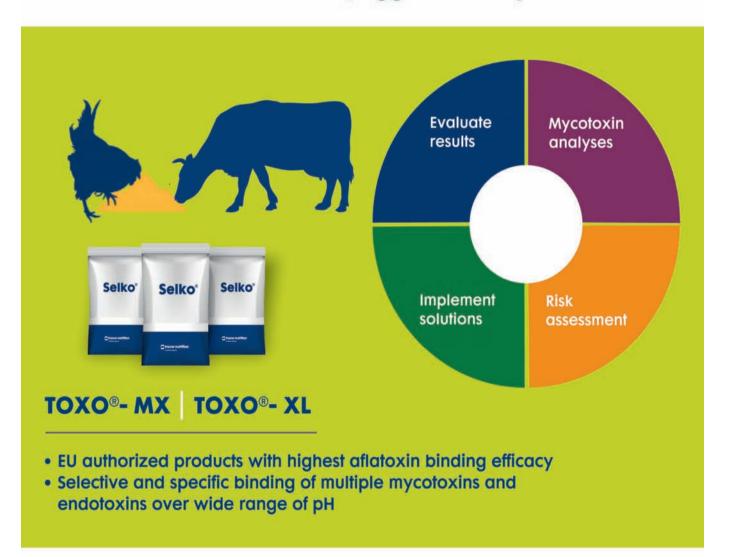




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## Integrated Approach for Mycotoxin Risk Management for Safe feed and meat, egg and milk production







#### Trouw Nutrition India Pvt. Ltd.

Hyderabad, June 2022

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# Ensuring Feed Mill Profitability by Effective Moisture Management and Mould Control Program

By - Dr. Stuti Baruah, Dr. Sabiha Kadari & Kadhiravan K, Trouw Nutrition India

limatic challenges, variability in material quality and technical constraints have traditionally posed a challenge for feed manufacturers with managingmoisture content in poultry feed. Moisture management requires monitoring of certain parameters. First parameter is the moisture content which measures the total amount of water contained in a substance, usually expressed as a percentage of the total weight (%). Feed manufacturers track the moisture contents of raw materials, mash feed, and pellets during all processing stages to optimize quality, yields, and profitability.

For curbing mould growth, another indicator is even more critical: water activity (a<sub>w</sub>) which is defined as the ratio of partial vapor pressure of water in a substance to the partial vapor pressure of pure water under the same temperature and pressure conditions. Basically, it is the energy state of water in a

substance, i.e., its potential for (bio)chemical activity, including the growth of bacteria, yeasts, and moulds. Lesser the water activity (aW), better the feed quality as less chances of microbial growth.

Moisture management programs are implemented across globe and Indian subcontinent by the poultry feed manufacturers to tackle this issue. High temperatures combined with too much moisture in feed can speed up the growth of mould. Moulds cause spoilage of feed by depleting energy and

nutrients and rendering the feed unpalatable. Above that, some moulds release toxins that harms animals' health and performance. On the other hand, too little moisture in feed has a negative impact on feed digestibility and pellet durability, increasing the level of fines, process loss and energy consumption, while decreasing press yield.

MMP (Moisture Management Program) must be implemented keeping the following points in consideration:

- Enhancing and retaining the moisture content of final feed
- Prevent mould growth in the feed
- Save operational costs of feed production by increasing the throughput and reducing electricity consumption

	Competitor	Fylax Forte HCL	Gain
Shelf life in days	65	85	20
Crumble Fines % <1MM	30	27.43	-2.57
Bagging Fines % < 1MM	19.09	11.29	-7.8
Bagging Fines Powder %	6.28	3.99	2.29
Bagging Fines Powder kg	60	40	20
Feed cost (INR)	2100	1400	700
Electricity cost/MT	65.1	60.83	4.27

Table 1 - Fylax Forte HCL treated group has increased shelf life, reduced fines%, Less electricity consumption in feed mill

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Enhance feed quality in terms of less fines, better PDI etc.

Trouw Nutrition's' FFHCL contains a patent pending technology, called ActiProp; a blend of buffered and non-buffered organic acids combined with surfactants and emulsifiers to guarantee mold reduction, milling efficiency increase, nutrient value preservation and feed shelf-life prolongation.

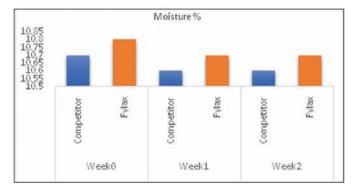


Fig. 1 shows that on an average Fylax group had 1% better moistureretention than the Competitor group. This clearly indicates that Fylax is more efficient in retaining the moisture than the competitor group.

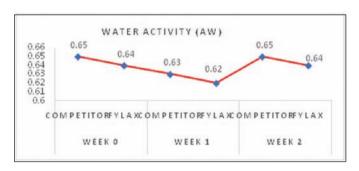


Fig. 2 Water Activity (aW) is better for the Fylax group as compared with the Competitor group

Shelf-life management: Spoilage organisms, such as moulds, negatively affect the shelf life of feed. Fylax Forte HCL's ActiProptechnology ensuresguarantee in fine % reduction, milling efficiency increase, nutrient value preservation and feed shelf-life prolongation. Since feed raw materials are often contaminated with several mould species, a combination of organic acids is more

efficient than mould inhibitors consisting of a single organic acid. ActiProp enables acids to be more efficient in penetrating the moulds' cytoplasm to dissociate, thereby reducing the moulds' pH-environment into suboptimal conditions and leads to cell death.

Microbiological status of feed assessed:Measuring risk is an important step in ensuring feed safety. Measuring Colony Forming unit (CFU) of feed is one of the most precise and reliable measure to assess the microbiological load in feed.

Parameter	Good corn	Mouldy corn	Loss in nutrient	% Loss in Nutrient
ME (Koal/kg)	3410	3252	158	4.6
CP (%)	8.9	8.3	0.6	6.7
Fat (%)	4	1.5%	7.5	62.5

Table 2 -Effect of moulds in nutrient profile of raw materials

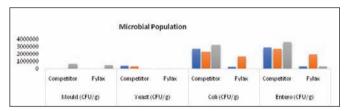


Fig. 3 shows the relative mould control in Fylax Forte HCL group vs competitor product in broiler feed

PDI was higher in Fylax-treated feeds as compared to Competitor feed. This may be due to the better surfactant quality in Fylax. Better PDI means less fines, optimum nutrient availability and lower FCR.

Table 4. The effects of MOP products on PDI

Sample	PDI (%)
Competitor	58
Fylax	69.4

#### Bag Weight loss up to 2 weeks

		0 Day	1st week	1st week wt loss	2nd week	2nd week wt loss
Competitor	Avg Bag Wt	80.14	79.932	0.212	79.8	0.344
Fylax	Avg Bag Wt	79.97	79.948	0.026	79.945	0.029

Table 3. The effect of MOP on bag weight loss of broiler feed

PDI improvements: The pellet durability index (PDI) is the difference between pellet weight before and after the test recorded as a percentage (average PDI >80%).

'1 Holmen unit improvement in pellet quality

= 200 kg less dust per truck'

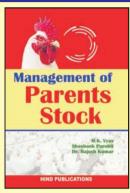
#### Stepping Up the Feed Milling **Process:**

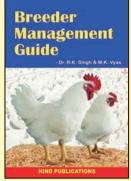
Achieving optimal moisture levels in compound feed involves complex balancing oftechnical constraints, raw material variability, microbial challenges, and the price pressures of competitive feed markets. Due credits to Fylax Forte HCL- blend of organic acids, surfactants, phytochemicals and ActiProp technology helps in ensuring feed mill efficiency and mould control enhancing shelf life, better PDI. To summarize from an economic point of view, the improved surfactant activity enhances the mill performance levels by increasing throughput, lower electricity consumption. From a feed quality angle, effective mould prevention and improved pellet quality allows for safer, more palatable feed, better FCR and improved bird performance thereby ensuring feed mill profitability by effective Moisture Management Program with emphasis on Feed Safety by Mould Control.

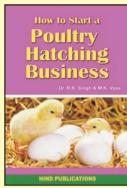
References: Trouw Nutrition India Pvt ltd trials in Feed Mill Efficiency across different feed mills in India - Dr Sabiha K, Kadhiravan, Dr. Stuti 📵

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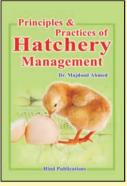


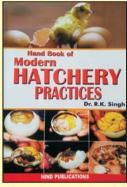


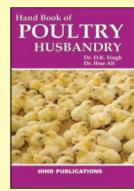
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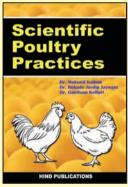


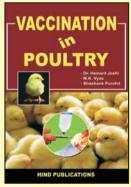


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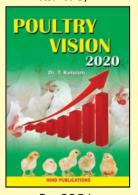


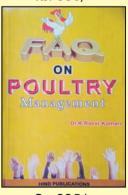
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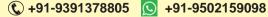
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## Directorate of Poultry Research, Hyderabad organized a **National Seminar** in collaboration with IPSA



ICAR-Directorate of Poultry Research, Hyderabad organized a one-day National Seminar in collaboration with Indian Poultry Science Association- Telangana and Andhra Pradesh Chapter on the topic "Revisiting poultry production and marketing systems for addressing the fast changing consumer preferences" on 6th May 2022. Dr. G. Ranjith Reddy, Member of Parliament (Lok Sabha), Chevella, Telangana has graced the Seminar as the Chief Guest.

Dr. R.N. Chatterjee, Director, ICAR-DPR welcomed the dignitaries and the participants to the Seminar. He said that it is very delightful to organize the Seminar in the offline mode after a very long gap. He highlighted the role of Poultry industry and its contribution to the national economy. Dr. S.V. Rama Rao, Principal Scientist elaborated on the theme of the National Seminar and its high relevance during this pandemic era. Dr. V. Ravinder Reddy, Vice Chancellor, P.V. Narsimha Rao Telangana Veterinary University, Hyderabad, the Guest of Honour for the Seminar, emphasised the need to support the poultry farmers by providing the feed ingredients in time at a reasonable cost. He also opined that proper biosecurity and health measures should be taken to control the emerging and remerging poultry diseases.





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The Chief Guest of the programme, Dr. G. Ranjith Reddy appreciated the efforts of the Directorate in organizing the Seminar at this crucial time when feed prices are skyrocketing and creating havoc for the poultry industry in the country. He said that the deliberations should focus on highlighting the health benefits of egg and chicken meat, and also convince the consumers about the myths circulating in the social media about chicken and eggs. He advocated that the industry should stay strong in marketing, publicizing and advertising their products. He also encouraged the young Veterinary graduates to venture into the poultry sector as there are lot of opportunities. The dignitaries released a book on "Poultry Feed: Region specific" authored by Dr. S.V. Rama Rao, Dr. A. Kannan and Dr. M.V.L.N. Raju of theDirectorate. They also released the Vermicompost "Vermipoul" developed by Dr. R.K. Mahapatra from poultry litter under the programme "Wealth from waste". Dr.M.V.L.N. Raju, Principal Scientist proposed vote of thanks for the inaugural program.

Subsequently, invited lectures were delivered by eminent speakers in the field of poultry. In the forenoon, Shri K.G. Anand, General Manager, Venkateswara Hatcheries, Hyderabad spoke on the current status of poultry industry, challenges and opportunities. Dr. P.S. Mahesh, JC (Poultry), Govt. of India and Director, CPDO

& TI, Bengaluru delivered a talk on human protein mission through poultry. Dr. A.S. Ranade, Assoc. Dean, Mumbai Veterinary College President, Indian Poultry Science Association (IPSA) talked about the issues concerning poultry welfare and the current challenges.

In the afternoon, Dr. U.C. Patel, Proprietor, PCS, Ahmadabad spoke on the importance of precision feeding for reducing feed cost.

Shri Suresh Rayudu Ch., CEO, Srinivasa Poultry Farms, Hyderabad and Chairman, International Egg Commission has highlighted the relevance of branding and appropriate strategies for effective marketing of eggs and meat in the country. Dr. M.M. Chawak, General Manager, PDRC, Pune dealt the topic on current scenario of poultry diseases in the country and the ways for their prevention and control. Dr.MujeebAther, Deputy Director (Retd.), VBRI, Hyderabad gave a talk on the notifiable diseases and the way forward to minimize their incidence in the country. In the last talk, Shri Tommy Lim, Product Manager, Big Dutchman shared his experiences on EC housing in the Indian context.

This was followed by the Plenary Session, which was chaired by Dr. R.N. Chatterjee, Director, ICAR-DPR and Co-chaired by Dr. T. Kotaiah, MD, IndBro Research & Breeding Farms Pvt. Ltd., Hyderabad; Dr. V. R. Reddy, Retired Professor, Hyderabad, and Dr. A.S. Ranade, Associate Dean, Mumbai Veterinary College. The Seminar was attended by Scientists from DPR, Officials, staff and students from the Telangana Veterinary University, Poultry entrepreneurs and industry representatives from AP and Telangana (TS), officials from the AH Department and members of IPSA-TS and AP chapter. At the end of the Seminar, Dr. U. Rajkumar, Principal Scientist and Organizing Secretary proposed the vote of thanks. 🔒













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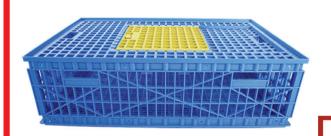
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# Srinivasa Farms Adopts 'Soy Fed', India's First-ever Feed Label, To Help Consumers Identify High-quality Protein Products

Following other leading poultry producers, Srinivasa Farms joins the list of supporters of the 'Soy Fed' labelthatenables Indian consumers to make better protein choices.

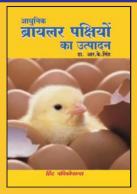
Right to Protein, a nationwide public health initiative, welcomes another renowned industry leader, Srinivasa Farms, to the league of Soy Fed adopters. 'Soy Fed' label is India's first-ever voluntary feed label, launched in 2021 to raise awareness about the role of animal feed in determining the quality of protein consumed. The voluntary label will feature on Srinivasa Farm's processed chicken portfolio and 'HelloEggs' brand products soon. Since its inception last year, the 'Soy Fed Label' has received widespread support from industry stakeholders like SnehaFarms and Shalimar Group, owing to its ability to distinguish soy as a high-quality protein source for animal feed and empowering consumers to make informed decisions while differentiating packaged poultry,meat, and fish fed with soy.

Mr. Suresh Chitturi, Managing Director, Srinivasa Farms said, "As a leading player in building the Indian poultry industry, we are extremely passionate about food and strongly believe it to be a vehicle for good health and nourishment. While soy feed plays a significant role in the growth and development of animals and helps define the quality of protein consumed by humans, awareness about it remains limited. Hence, introducing the 'Soy Fed' label was imperative to bridge the knowledge gap and set a benchmark for quality, and we wanted to play a role in it. We believe that adopting the label further reinforces our commitment to provide quality and affordable nutrition to consumers, which has always been at the core of our existence."

"The introduction of the label was a necessary step undertaken to drive awareness about Soy as a complete protein source for animal, as well as human consumption. It is encouraging to witness the overwhelming support we are receiving from our industry partners for the 'Soy Fed' label and are happy to have champions like Srinivasa Group helm the cause with us. With this, we are indeed progressing on our journey to further the protein knowledge beyond just the immediate source – going from food to feed", stated Jaison John, Lead - India, US Soybean Export Council (USSEC) and Right To Protein supporter.

Surging ahead in its mission to drive protein sufficiency in the country through awareness, advocacy, and action, Right to Protein, continues to reachout to multiple brands in India for voluntary inclusion of the 'Soy Fed' label on their packaged protein products - meat, poultry, and fish - and helping citizens learn that We Are What Our Food Is Fed!

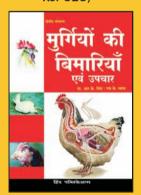
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## Kemin Animal Nutrition & Health -South Asia Launches YePlus™ HD

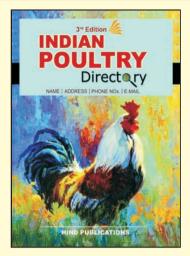


n the 2<sup>nd</sup> of June Kemin Industries South Asia, launched YePlus™ HD (High Density), an innovative solution to improve dry matter digestibility and absorption in ruminants. YePlus<sup>TM</sup> HD is rumen specific live chromium coated yeast. Additional benefits of chromium coating over the yeast makes the product highly concentrated, granular, and free flowing. There are numerous factors affecting the dry matter intake in ruminants, which include the Physical Fill, Metabolic factors and the environmental factors. YePlus™ HD helps to overcome all these causes for low DMI.

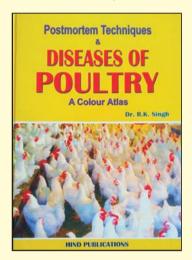
Supplementation of live yeast improves digestive efficiency in dairy animals. Chromium reduces impacts of heat stress by improving utilization of glucose at cellular level. A product having both these ingredients in its composition can alleviate the impact of heat stress and improve DMI in dairy animals. Yeast maintains optimum ruminal environment by regulating the rumen pH and microflora by moderating lactate producing and lactate utilizing bacteria while chromium improves glucose uptake by cells by improving the insulin sensitivity of cell. (1)



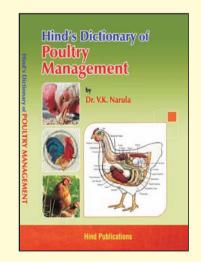
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# Messe Frankfurt and VNU Group join forces to launch a new meat and food processing trade show for the Asian market in March 2023

In a strategic expansion into the growing food technology sector, Messe Frankfurt (HK) Ltd and VNU Group, announced a partnership to jointly organise 'Meat Pro Asia', a new trade show dedicated to meat and food processing and catering to the Asian market. The show will take place on a biennial basis in colocation with VIV Asia – the no.1 international trade show from Feed to Food in Asia. The inaugural edition will open its doors from 8 – 10 March 2023 at IMPACT, Bangkok, Thailand.

Commenting on the new event, Mr. Wolfgang Marzin, President and Chief Executive Officer of Messe Frankfurt Group, said: "Despite a challenging two years, we continue to see the need to establish new trade fairs in emerging markets around the world. With an increasingly wealthy population of 600 million, the ASEAN region is an exciting prospect, with high potential for growth in sectors such as meat and

food processing."

"Adding to an international network of events related to food processing technologies, Meat Pro Asia is Messe Frankfurt's first venture in this sector in South East Asia," noted Mr. Stephan Buurma, Member of the Board Management, Messe Frankfurt Group and Managing Director of the Asia regional head office. "We therefore see great potential to leverage our experience and sector expertise, including the resources of IFFA in Frankfurt, the world's leading meat processing trade fair,

for the benefit of the industry in Asia."

#### **Combining industry resources**

"Working closely with Messe Frankfurt, we aim at attracting the top suppliers and buyers in the processing industry to Meat Pro Asia, establishing this exhibition as a top destination in Asia for meat processing and packaging equipment" said Mr. Igor Palka, Managing Director of VNU Asia Pacific. "VIV Asia has witnessed a consistent growth during the recent editions of the food processing segment. By holding Meat Pro Asia alongside VIV Asia, and leveraging on the experience of Messe Frankfurt in this specific sector, we are going to provide the entire spectrum of food technology to trade buyers. We are confident that this new event will be a great success," Palka added.

"Internationality is a key ingredient of both VIV Asia and the concurrent Meat Pro Asia show," says Ms. Panadda Kongma, Director of Agribusiness and Operations, VNU Asia Pacific. "The new dates in 2023 will benefit all parties by attracting more international buyers and industry luminaries. March has long been the traditional timeslot of



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E-mail: hindpoultry@hotmail.com Website: www.hindpoultry.com VIV Asia and a well-established sourcing period for the industry every two years. We are therefore thrilled to have secured a prime timeslot at the venue for Meat Pro Asia during this period in 2023."

#### A vibrant market

Expected to grow by 4.7% annually until 20231, the market for processed foods in ASEAN has been bolstered by the demands of a rising middle class.

More important contributors to the industry's growth trajectory are government policies which aim to convert Thailand into one of the world's top five food exporters by 20362, thereby fostering a favourable trading and regulatory environment for Meat Pro Asia's participants to benefit from when it opens its doors in March 2023.

# Comprehensive product coverage from farm to table

Meat Pro Asia focuses exclusively on solutions that deliver meat from farm to table. This includes slaughtering, the full processing chain, packaging, labelling, cold chain logistics, quality control, hygiene, IoT and automation, waste water treatment and more.

The inaugural edition of Meat Pro will be held from 8 – 10 March 2023. Together with VIV Asia, the two fairs are set to attract over 1,500 exhibitors, including equipment manufacturers and distributors, as well as around 50,000 trade visitors, professionals and key buyers from around the world.

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# कुक्कुट पालन में शीत तनाव का इंतिजाम

#### डॉ निष्टा यादव

पशु आनुवंशिकी और प्रजनन विभाग पशु चिकित्सा और पशु विज्ञान महाविद्यालय, बीकानेर, राजस्थान

पोल्ट्री में ठंड तनाव क्या है : इसे कोल्ड शॉक, पोल्ट्री में हडिलंग पिलिंग के रूप में भी जाना जाता है । कुक्कुट में ठंड का तनाव एक ऐसी स्थिति के रूप में पिरभाषित किया जाता है जब पोल्ट्री या चिकन की त्वचा का तापमान आंतरिक कोर तापमान के नीचे गिर जाता है जहां शरीर चयापचय द्वारा गर्मी उत्पन्न नहीं कर सकता है । चिकन के शरीर का उच्च तापमान लगभग 41–47 डिग्री सेल्सियस होता है । पसीने की ग्रंथि अनुपस्थिति के कारण पक्षी अत्यधिक वाष्पीकरण द्वारा शरीर को ठंडा रखते हैं इसलिए निर्जलित होते हैं और आर्द्र पिरिस्थितियों में मृत्यु हो जाती है । कुक्कुट में थर्मीरेगुलेटरी सिस्टम को प्रभावित करने वाले मुख्य कारण :

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उपरोक्त प्रणाली कैसे कार्य करती है : जब पर्यावरण के तापमान में धीरे—धीरे और लगातार गिरावट आती है, तो पक्षी अपने शरीर को गर्म करने के लिए मस्तिष्क में स्थित हाइपोथेलेमस द्वारा आंतरिक चयापचय को बढ़ाकर और ऊर्जा को त्वचा की सतह तक रक्त से गरमाहट पहुंचा कर करते हैं । इस प्रकार पक्षी बहिर्जात और अंतर्जात नियमों से गर्मी को संतुलित करते हैं । लेकिन चरम तापमान पर हृदय से रक्त पंप होना और त्वचा की सतह पर रक्त की आपूर्ति सुचारू नहीं रह पाती है । हृदय पर अतिरिक्त रक्त के उत्पादन का दबाव पडता है, लेकिन पक्षी इसमें असमर्थता के कारण ठंड तनाव में आ जाते हैं।

#### विभिन्न प्रतिकूल प्रभाव क्या हो सकते हैं:

- शीत तनाव देश के समशीतोष्ण क्षेत्रों में भारी मृत्यु दर का कारण बनता है।
- ठंडे तापमान से जलोदर संबंधित मृत्यु दर बढ़ जाती है।
- ठंड तनाव के कई अवसादग्रस्तता प्रभाव भी स्पष्ट रूप से दिखाई देते हैं।
- पोल्ट्री में चयापचय और प्रतिरक्षा प्रणाली पर भी विपरीत प्रभाव भी पड़ता है।

- जिगर और अग्न्याशय के कार्य और पाचन एंजाइमों के स्नाव में कमी आ जाती हैं।
- ठंडे तनाव के अधीन ब्रॉयलर में फीड खपत बढ़ने के बावजूद भी शरीर के वजन में कमी आ जाती है।

#### बचाव की क्या महत्वपूर्ण रणनीतियां संभव हैं :

कुक्कुट आवास और आहार प्रबंधन : ठंड सहनशीलता का बेहतर प्रबंधन आनुवंशिक चयन औरध्या पोषण संबंधी रणनीतियों द्वारा फीड दक्षता में सुधार से संभव है ।

स्थानीय रूप से उपलब्ध सामग्री जैसे बांस और लकड़ी का उपयोग करके और ठंडे तनाव की अवधि के दौरान प्रकाश बल्बों की मदद से कुक्कुट—घर में इष्टतम तापमान को बनाए रखने के लिए ब्रूडर हाउस बनाया जाता है ।

ब्रुडिंग प्रबंधन : विभिन्न उपचार जैसे चूजों के लिए प्रारंभिक शीत कंडीशनिंग किया जाना चाहिए ।

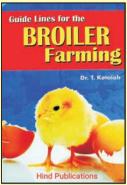
- उत्पादन चक्र के विभिन्न चरणों में मुर्गियों के झुंड के आकार के अनुरूप तापमान की नियमित निगरानी और सावधानीपूर्वक समायोजित करने के लिए पर्याप्त संख्या में ब्रुडर ६ हीटर होना चाहिए ।
- कार्ड बोर्ड से बने चिक गार्ड्स की मदद से ब्रुडर हाउस में गर्मी स्रोत के पास चूजों की आवाजाही को प्रतिबंधित किया जाता है ।
- चूजों को स्थानीय रूप से उपलब्ध अनाज जैसे मक्का और चावल



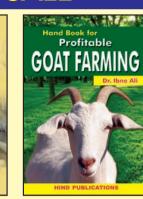
की भूसी के साथ-साथ फ्री रेंज में उप लब्ध फीड सामग्री के साथ खिलाया जाता है ।

- बाँस के बने कुंड में हर समय पौष्टिक ताजा पानी उपलब्ध कराया जाना जरूरी है।
- उन्नत नस्लों का चयन : ग्रामप्रिया और वनराजा जैसी नस्लों का उपयोग नस्ल सधार के लिए किया जाता है।
- वायु प्रवाह का नियंत्रण : पोल्ट्री हाउस में हवा के संचलन के माध्यम से गर्मी को रोकने के लिए सर्दियों में हमेशा साइड पर्दे (आमतौर पर प्लास्टिक के) लगाए जाने चाहिए।
- प्रोटीन पोषण : प्रोटीन पचने पर गर्मी उत्पन्न के कारण आहार में प्रोटीन की आवश्यकता बढ जाती है।
- शरीर को हकने और ठंड से बचाने वाले पंख भी लगभग 85: प्रोटीन से बने होते हैं।
- अधिक प्रोटेनसियस आहार का विपरीत प्रभाव यह होता है कि आंतों की बीमारियों और अमोनिया भार में वृद्धि हो जाती है ।
- खनिज समायोजन : पानी का सेवन, पानी का उत्सर्जन और तुणशैय्या की नमी को कम करने के लिए ठंड के मौसम में कैल्शियम, फास्फोरस और सोडियम के स्तर को कम किया जाना बहुत मददगार होगा । हालांकि, बहुत अधिक कमी से पोल्ट्री का आर्थिक प्रदर्शन भी प्रभावी ढंग कम से हो जाता है ।
- मल्टीविटामिन सप्लीमेंट का उपयोग : चुजों को 1 मिलीध्लीटर पानी की दर से मल्टीविटामिन भी दिए जाने चहिये ।
- विटामिन ई २५० मिलीग्राम प्रति किलोग्राम फीड और क्रोमियम 0.2 ग्राम प्रति किलो फीड के पुरक के रूप में ठंड तनाव को कम करने में मदद कर सकता है । 👔

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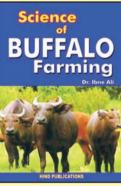




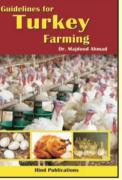
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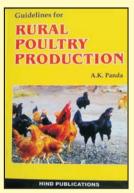
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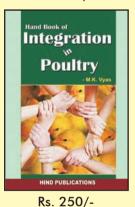




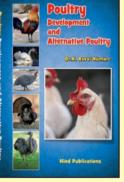
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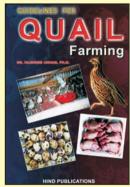
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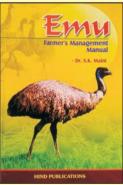




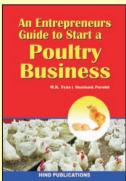


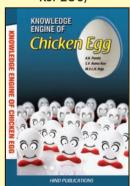
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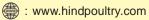


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Multiple Mycotoxin
Syndrome - The
Ever Increasing
Threat

**Dr. S. K. Maini** Vesper Group, Bengaluru.

ajor problem with the Poultry, Livestock and Aqua industries today is the Multiple Mycotoxin Syndrome or MMS, a large variety of mycotoxins, that were not tested earlier, are now being studied, evaluated and recorded on regular basis but by a very few laboratories around the world. A 2017 – 18 Survey (Provimi-India) revealed more than 95 % of the samples tested were contaminated with Multiple Mycotoxins.

There are nearly54 detectable mycotoxins, that can be tested, most of these are not routinely tested by laboratories or regulated by the governments. Their incidence and co-existence is regularly increasing and causing damage to the production and performance of the animals and birds, while the experts in the Industry and Government/ICAR/Universities and private companies look the other way.

These Mycotoxins are here and will stay as long as the grains, their products and their by-products are being used for the feeding of the above mentioned types of animals and birds, in other words for ever.

The fact is more than 90% of the poultry and livestock problems today are directly or indirectly related to the presence of MMS, all other problems like the bacterial, viral, parasitic diseases, nutrition, vaccinations and disease control, management, hygiene and sanitation etc., together come to hardly 10 %, MMS is neither properly understood nor studied, and the market situation will not change for several years to come..

Local Vets, Poultry Advisors, Consultants and Farmers, when told of toxicity in feed as a reason for their problem, think only about the aflatoxins, Farmers are usually heard as saying I personally inspect every lorry of ingredients received and ensure its quality, Nutritionists give well balanced computer feed formulations for economy and efficiency, Vets, Pathologist and laboratory people, who fail to properly diagnose the problem, always think and tell, its some viral infection and no further work is done, taking advantage of the situation the pharma companies keep launching and introducing new products, everyone makes money while the birds and the farmers suffer directly and the consumers of the products produced by these mycotoxin affected birds suffer indirectly.

For several years, mostly and only aflatoxins are being tested and reported, other mycotoxin testing has not been taken up by the laboratories for various reasons. My request to the Farmers and their Associations, and all other Associations connected with the Poultry Farming Business is to impress upon the Central Govt., the State Govts, and private laboratories to start testing the various mycotoxins in the feed and feed ingredients used and detecting their metabolites in the body fluids and blood, that cause damage to the birds and their performance and end up in the human food chain, for the safety of both the birds and the people who consume their products. It is well understood that testing mycotoxins in the feed or the feed ingredients alone is not enough, it needs to be combined with the body fluids and blood analysis for better understanding and covering the total risk of the presence and damaging effects of the multiple mycotoxins present. Today validated and patented biomarkers are available to test 36 different mycotoxins in blood using the FTA cards, enhancing the accuracy and helping the detection of minute quantity of mycotoxins that will escape the normal test procedures or go undected.

It is true aflatoxins and other mycotoxins, alone or in combination cause extensive damage to the GI Tract, liver, kidneys and metabolism of the birds and animals that consume it, by interfering in the nutrients uptake, suppression of the immune system, cause various metabolic disturbances in the body, inhibit protein synthesis, cause inflammation of the gut epithelium, also cause damage to the functioning of the liver and kidneys, and are sometimes neurotoxic, are cytotoxic to cells and cause cell death, some are estrogenic and interfere in reproductive performance.

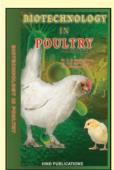
As Aflatoxins never come alone, they always are accompanied by few other type of mycotoxins, they work synergistically and do the damage, hence called MMS, Mycotoxins are secondary metabolites of fungi, mostly produced by the genera like Fusarium, Aspergillus, Penicillium, Alternaria etc., One mold can produce a variety of mycotoxins, that can be classified as Neutral, Acidic or Basic depending upon their physic-chemical properties, hence any one product, chemical or ingredient/item will not be able to give desirable results.

Till the establishment of laboratories with the latest state of the art analysing and detectingfacilities for various mycotoxins, the Farmers, field Vets., and others need not worry, get the aflatoxin tested (these facilities

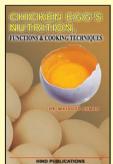
are available in almost all places) and multiply it with a factor 3.5 during dry weather period and with a factor of 5.5 during wet weather period, new grains with higher than normal moistureand for places close to the coast where humidity is high, that will give the approximate mycotoxin load of the feed that needs to be looked into and its remedial methods/products adjusted accordingly.

The strategy that works best in the absence of the elaborate testing for the mycotoxins, considering the above mentioned situation and available facilities, begins with purchase of good quality, dry grains with less than 12 % moisture, the storage area be sprayed with a product containing a mix of organic acids to check the growth of fungus on weekly basis, prevent rodents and insects in the storage and feed milling area as is done in the storage area's of FCI, and in the farms, use products that protect the health and functioning of the GI Tract, Liver and Kidneys of the birds, a good toxin binder, adsorber and absorber to bind the mycotoxins already produced, along with product for the biotransformation or enzymatic degradation of the chemically different toxic molecule, and a good probiotic, also support the immune system of the birds to ensure the vaccines used give the desirable results, simultaneously increase the inclusion level of trace minerals and vitamins by 25 to 30 % during this period, to ensure minimum damage to the flock and its performance and to get maximum returns. 🛕

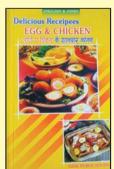
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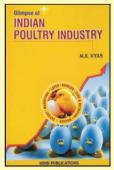
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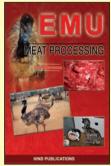
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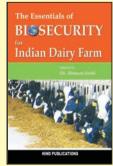
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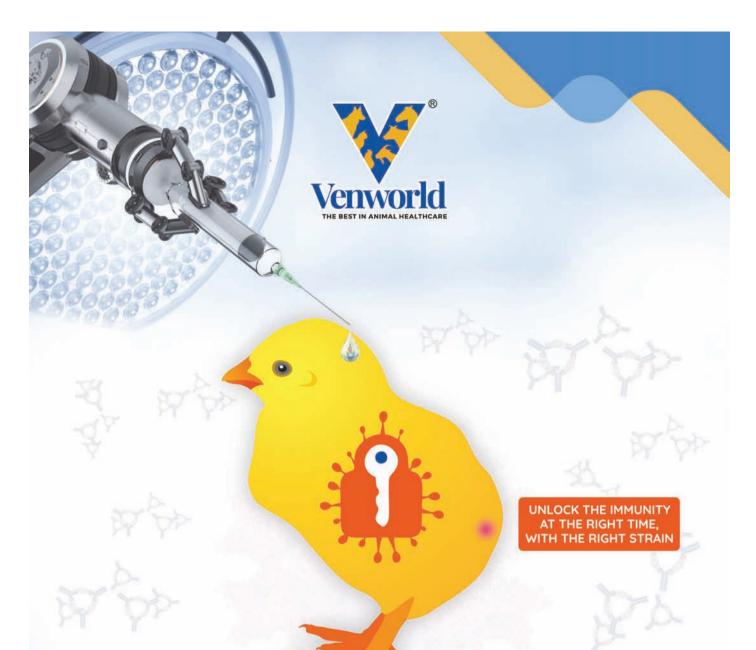
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