

# PROPULSE



[www.provet.in](http://www.provet.in)

f provetppl | t provetppl | in provetppl

# BAMBERCIN® PLUS

The Novel & Potent **TRIBIOTIC**

- Healthy birds
- Optimal gut microflora
- Reduction in FCR
- Better immunity & disease resistance
- Wholesome meat & eggs
- Improvement in profits



# Gumboro (IBD): Ignorance, Attitude, Economic Effect and Looking Forward

Infectious Bursal Disease (IBD) or Gumboro disease is the most important and highly contagious viral disease of poultry; the clinical form is common but sub-clinical form is the real menace.

IBD is major problem in concentrated poultry production areas throughout the world; open farming integrated contract broiler farms became the cultivation ground for the virus. IBD is often not recognized due to its sub-clinical form, which is most common in populated poultry areas.

The virus is resistant to many disinfectants & environmental factors, and remains infectious up to 122 days in the poultry farm environment.



Fig. 1. Enlarged Bursa of 11-day age chick

Because of the resistant nature of the IBD virus, once a poultry farm becomes contaminated, the disease tends to recur in subsequent flocks.

The virus is a non-enveloped (naked) Birnavirus that afflicts the immune system. IBD is characterized by destruction of lymphocytes in the Bursa of Fabricius and other lymphoid organs. If the IBD virus damages the Bursa in young chicken, the Bursa will not be capable of producing sufficient number of lymphocytes,

and thus the birds will experience reduced immune system capabilities (immuno-suppression) permanently.

Earlier the damage to the Bursa, fewer will be the production of lymphocytes with antibody producing capabilities and the degree of immuno-suppression will be accordingly pronounced.



Fig. 2. Exudate in Bursa of 11-day age chick

Therefore, any IBD control program should attempt to protect the Bursa as long as possible. In practical rearing conditions, if the Bursa can be protected until at least 3 weeks of age, adequate number of lymphocytes can be produced, and the immunosuppressive effects of IBD outbreaks will be minimal.

## Clinical IBD

The clinical form usually occurs between 3 - 6 weeks of age; sudden in onset, and the mortality rate in the flock increases rapidly. Clinical signs of disease are dehydration, trembling, ruffled feathers, vent pecking & depression. Affected chickens experience transient immuno-suppression.

Necrosis & depletion of lymphocytes also occur in the secondary lymphoid organs like spleen, thymus, harderian glands & caecal tonsils. Haemorrhage may be present in the thigh and pectoral muscles, because the IBD virus interferes with the normal blood clotting mechanism. The kidneys are swollen in dead birds.



Fig. 3. Breast muscle haemorrhage in Clinical IBD (2012)



Fig. 4. Highly enlarged Bursa of Fabricius



Fig. 5. Normal & enlarged Bursa from same age birds



Fig. 6. Atrophied Thymus



Fig. 7. Breast muscle haemorrhage in Clinical IBD (2020)

### Subclinical IBD

The subclinical form usually occurs before 21 days of age where the affected chicken do not show any clinical symptoms but experience permanent & severe immunosuppression, reduced antibody response to vaccinations, strong post-vaccinal reactions, & increased susceptibility to secondary infections, like E. coli, IBH, etc.

Post mortem of these chicken reveals effect on all immune organs. Bursa shall be mostly atrophied, with or without haemorrhages and with pus inside. Spleen is congested & enlarged. Thymus glands are generally atrophied. Caecal tonsils show haemorrhagic spots. Vaccination failures are very common leading to increased chances of ND/RD, LPAI outbreaks in later stage of life.

The majority of field infections in open farming concentrated poultry areas of this subcontinent are sub-clinical, and this form is more economically important.



Fig. 8. Bursa from 8-day age chicks of same farm

Broiler integration in India commonly has farms described as problem farms. Broiler grown on these farms typically have poor body weights and FCR, high mortality, excessive reactions to respiratory vaccines, and high rates of condemnation at processing.

In most cases, investigations show that these farms are heavily contaminated with the IBD virus. The poor performance of the broilers is due to immuno-suppression caused by sub-clinical IBD.

Normally young chicks are resistant to early infection due to presence of maternal antibody (MAB). But if MAB drops, then the young chicks become susceptible to infection. Recently some more powerful & harmful strains which the mother might not have come across (by vaccination or infection) are causing early infections breaking the barrier of MAB.

## Transmission

The most common route of infection is by mouth, but eye & respiratory tract may be important. Bird to bird horizontal transmission is through contact & through fomites, like saliva, faeces. Farm to farm transmission is through mechanical vectors like wild birds, humans & vermin (insect, rats, mice) carrying fomites. The human, mostly farm workers, supervisors act as carrier from one farm to other in contract farming system.

The incubation period is only 2-3 days when symptoms appear. Mortality begins on 3<sup>rd</sup> day following infection, reaches its peak and decreases within 5-7 days. The 1<sup>st</sup> outbreak in a farm is usually very severe and recurrent outbreaks in subsequent flocks are less severe & go unnoticed.

## Symptoms & PM findings

Subclinical Gumboro below 21 days of age has no visible symptoms. But post mortem examinations reveal different stage of bursal atrophy with haemorrhages & pus on mucosa. Affected flocks show more secondary complications like E. coli, Coccidiosis, NE, IBH & Hydropericardium, ND, etc. Clinical IBD, which appears after 21 days age, is diagnosed easily from symptoms (depression, white diarrhoea, soiled vents, ruffled feathers, lack of movement, closed eyes, trembling, lying down and finally death). Mortality can be up to 20% though morbidity can be 10 - 100%.

Post mortem examinations show dehydrated carcass, dark colour breast muscles, haemorrhages on thigh & breast muscles, swollen & white kidneys due to urate deposition.

Bursa are of different size which speaks about the entry of viruses. Bursa shows necrotic foci and cheesy mass in the lumen. Haemorrhagic spots are almost common on mucosal surface. Spleen is usually enlarged with small grey spots. Sometimes haemorrhages may be seen at the junction of proventriculus & gizzard. Thymus & caecal tonsils are affected in case of very virulent strain infections.

## Diagnosis

The history, symptoms & post mortem findings are sufficient for diagnosis. Changes in Bursa are characteristic & help confirming IBD.

Subclinical Gumboro is difficult to diagnose due to absence of visible symptoms. Clinical IBD is diagnosed easily from symptoms, clinical lesions and mortality which usually subsides after 5 days.

Confirmatory diagnosis can be made by ELISA and isolation & identification of causative virus from bursal tissue.

## Treatment

There is no treatment available to change the course of Gumboro disease.

## Prevention & control of ibd

### Control of IBD is virtually impossible because:

- » Virus remains infectious in the poultry house environment for up to 122 days
- » Virus is stable in pH range of 2 - 12
- » Heavy viral shedding from infected birds
- » Can be destroyed by boiling for 30 minutes at 70°C
- » Virus is infectious in feed, water & poultry house droppings for up to 52 days
- » Disinfectants need a long contact time to kill the virus

## Successful IBD control program

### involves:

- » Scientific breeder vaccination program
- » Strict & practical bio-security program
- » Effective broiler vaccination program

### To control Gumboro, one needs to address:

- » All in - All Out system is a must

- » Immunization of breeders is most important in IBD control program. Antibodies produced by the hen after vaccination are passed through the egg to the broiler chick. These MAb (Maternal Antibodies), if present in adequate levels, protect the chicks against early sub-clinical IBD. Two killed IBD vaccinations at 18 weeks and 38 weeks age to breeders shall take care of MAb issue.
- » Proper clean-up and disinfection of farm between flocks.
- » Poultry traffic control (people, equipment & vehicles) onto the farm.
- » The development & enforcement of a comprehensive bio-security program mainly includes disposal of dead birds.
- » Restriction on sale of infected birds
- » Use of good terminal disinfectants to sanitize contaminated poultry premises & equipment
- » Scientific Vaccination Program considering the Disease history of the area and field challenge strain.
- » Efforts at bio-security (cleaning, disinfection, traffic control) practice must be continuous, as improvement is gradual and often only seen after 3 or 4 flocks



Fig. 12. Entry point biosecurity



Fig. 13. Disposal of dead birds in death Pit



Fig. 9.

White washing of mud floor



Fig. 10.

White washing of breeding farm



Fig. 14. Disposal of dead birds by burial



Fig. 11. Farm entry foot bath with KMnO4

## IBD Control in Indian Broiler farm is a huge task because:

- » Most broiler producers have insufficient or zero breeder capacity and doing business through outsourcing of hatching eggs from breeders who don't do commercial broiler farming. One broiler integrator has many hatching egg sources. MAb of DOC (Day Old Chick) is too variable as seen after serum analysis. The author has noticed MAb from 700 to 7200 in DOC of same flock with CV (Coefficient of Variation) of 45%. DOC titre of 500 to 8000 is common in serum analysis from outsourced eggs.
- » In India, most broiler operators don't have their own hatchery and do hatching in 3rd party hatcheries. Most hatcheries are only concerned with number of chicks rather than the quality of chicks, missing commitment. These hatcheries who are arranging hatching of many integrators (even 3 batches of hatching eggs from 3 different producers in a single multi stage hatchery setter) are running under the grace of the almighty and viral infections are spreading to everyone.
- » Ignorance, negligence & attitude are playing spoilsport to invite viral infections. I have seen hatcheries who have stopped compulsory egg fumigation before setting, 3 years before.
- » This situation suggests live IBD intermediate vaccination between 6-8 days to protect the chicks from early immunosuppression followed by Intermediate Plus Vaccine on 16th day in broiler. Field trial reports in High Disease Challenge zone of 24 Parganas (S) during Mar-Apr 2018 with an integrator involving chicks from same breeder & hatchery confirms the benefit.
- » During last decade there is immense improvement in Vaccine technology for poultry. New concept of Immune Complex Live Vaccines against IBD from Ceva, Zoetis are already in Indian market which are quite satisfactory & some others are in pipeline.

Vaccination	No. of Farms	Chicks	Mortality %	Body Weight (Kg)	FCR	Mean Age	Av. Daily Gain	EEF	CFCR
Day 6 IBD Intermediate followed by Day 16 IBD Plus Vaccine	19	33,240	11.86	2.071	1.810	41.92	49.41	241	1.792
Only Day 12 IBD Plus Vaccine	10	18,519	13.48	2.062	1.819	41.99	49.11	233	1.804

### IBD Immune Complex Live Hatchery Vaccine - Broiler Performance Field Trial in 24 Parg (N), WB

Hatch Date	IBD VACCINE	No of Farms	Chicks	Mortality %	Body Wt (Kg)	FCR	M Age	Av Day Gain	EEF	C FCR
20/04/19 - 30/04/19	Immune Complex Live at Hatchery	12	18,210	9.87	2.020	1.676	39.32	51.37	276	1.671
	IBD Intermediate followed by Plus at Farm	14	27,008	11.47	2.048	1.727	39.93	51.29	263	1.715

20/04/19 - 30/04/19	Immune Complex Live at Hatchery	12	18,210	9.87						
	IBD Intermediate followed by Plus at Farm	14	27,008	11.47						

## Conclusion

IBD is the major issue in broiler farms of the subcontinent causing huge economic losses as seen during last 15 years. Before the Immune Complex IBD Vaccine, normal Bursa of Fabricius in dead birds was rarely seen. I strongly feel that the Immune Complex IBD vaccination at hatchery will help us controlling early immunosuppression and minimize secondary infections which will ultimately reduce mortality and improve broiler performance and help ensuring profit. Yes, it involves cost and time, but one need looks at the ROI (Return on Investment) rather than investment only.

Poultry fraternity is losing huge due to IBD which is very much overlooked & neglected because of ignorance & attitude. To control LPAI, ND, IB, IBH, E. coli, CRD, Coccidiosis, Poultry Industry needs to control Gumboro first.

Science & Technology has extended the hand. We need to hold that, look forward, change our mindset to accept new technology. IBD can be controlled if we wish to do it.

## Are you stuck in a cycle of failure?

Discover why you may never be able to rise up again

Developing a Resilient mindset is crucial for overcoming challenges and bouncing back from failure.

### Here are some tips:

#### **Embrace failure as an opportunity:**

Rather than viewing failure as a negative experience, reframe it as a chance to learn and grow. Understand that failure is a natural part of life and an essential stepping stone towards success

#### **Cultivate a positive mindset:**

Train your mind to focus on the positive aspects of any situation. Look for opportunities, lessons, and silver linings even in difficult times. Adopting a positive mindset helps you maintain optimism and resilience

#### **Set realistic expectations:**

Understand that setbacks and obstacles are a part of any journey. Set realistic expectations for yourself and acknowledge that progress often comes with ups and downs. By managing your expectations, you'll be better prepared to face challenge

#### **Practice self-compassion:**

Treat yourself with kindness and understanding, especially when you face failures or setbacks. Avoid self-criticism and negative self-talk. Instead, practice self-compassion by reminding yourself that everyone makes mistakes, and it's okay to stumble along the way.

#### **Build a support network:**

Surround yourself with supportive and positive individuals who can provide encouragement, guidance,

and empathy when you face challenges. Having a strong support network can make a significant difference in your ability to bounce back.

#### **Develop problem-solving skills:**

Enhance your problem-solving skills by focusing on solutions rather than dwelling on the problem itself. Break down complex challenges into smaller, manageable tasks and brainstorm potential solutions. This proactive approach helps you take control and find a way forward.

#### **Practice gratitude:**

Cultivate a sense of gratitude by regularly acknowledging and appreciating the positive aspects of your life. Gratitude helps shift your perspective, reminding you of the abundance and opportunities available to you, even during difficult times

#### **Take care of your well-being:**

Prioritize self-care activities that support your physical, mental, and emotional well-being. Engage in activities such as exercise, proper sleep, healthy eating, and relaxation techniques to build your resilience

#### **Seek learning opportunities:**

Approach every experience, whether it's a success or failure, as an opportunity to learn and grow. Reflect on what worked well and what you could do differently next time. By continuously seeking learning opportunities, you build resilience and improve your chances of success.

#### **Maintain a long-term perspective:**

Keep in mind that setbacks are temporary and do not define your overall journey. Maintain a long-term perspective, focusing on your ultimate goals and aspirations. Remind yourself that each setback is just a small part of your larger story.



# National Seminar and Workshop on Disease Mitigation and Farm Productivity

Indian Federation of Animal Health Companies (INFAH) organised a National Seminar and workshop on Disease Mitigation and Farm Productivity at India Habitat Centre, New Delhi on 14<sup>th</sup> of July, 2023.

Eminent Speakers and Delegates from the Ministry of Fisheries, Animal Husbandry, and Dairy (MoFAHD), the Central Drugs Standard Control Organisation (CDSCO), MoHFW, the Indian Council of Agricultural Research (ICAR), MoAFW, the Food Safety and Standards Authority of India (FSSAI), MoHFW, the Indian Pharmacopoeia Commission (IPC), MoHFW, the Ministry Of Finance (MoF), the Ministry of Ayurveda, Yoga, Unani, Siddha, and Homoeopathy (AYUSH), Health for Animals, and the Animal Health Industry attended the one-day programme.



Dr. Shirish Nigam (GS, INFAH), Dr. Vijay Makhija (President, INFAH), Mr. Vijay Teng (Imm. Past president, INFAH), Carel du Marchie (Dir. Health for Animals)



Innauguration Ceremony



Dr. Vinod Bhatt (Chairman, VCI) and Dr. Mrinal Sharma (Neogen)



INFAH Team

Representing Provet Pharma Private Limited, Dr. Sulav Chetia (AGM-BD) attended the aforementioned session.



Dr. Deepak Bhatia, Dr. Brajesh K Singh, Dr. Mrinal Sharma, Alumini from CVSc, Khanapara

# Statue Unveiling Ceremony of Late Chairman of Phoenix Group

Phoenix Group organized the unveiling ceremony of the statue of late Chairman Pdt. Vishwanath Dubey on 17<sup>th</sup> July, 2023 at Nehru Garden, Jabalpur. The event was attended by around 2500 guests from the poultry industry, other industries, politicians etc. The event, organized on the commemoration of his birth anniversary, was thoughtfully planned to honour his years of selfless service and the measures he took to improve the society and the general welfare of the populace. The programme was attended by a sizable number of local poultry producers, consultants, farmers, feed millers, and those working in the animal healthcare sector.

**Provet** was represented by Dr. Sulav Chetia, AGM-Business Development and Mr. Amit Gautam, Sales Executive, Jabalpur.



Provet Team at the Statue Unveiling Ceremony



Mr. Kamlesh Bundela (Owner Shubh Marketing),  
Dr. RK Jaiswal (President-IB Group) and Dr. Mahendra Singh  
(Poultry Consultant)



Statue of Lt. Pdt. Vishwanath Dubey  
(Chairman-Phoenix Group)



Dr. Sunil Bhindwale (Director-Technical, Phoenix Group)

# Vets In Poultry (VIP) NATIONAL SYMPOSIUM 2023

Vets In Poultry (VIP) organised the National Poultry Symposium 2023 at Hotel Taj Deccan, Banjara Hills, Hyderabad, on 28<sup>th</sup> June, 2023.

The event brought together more than 650 esteemed poultry professionals across India from various sectors, such as Poultry Farmers, Veterinarians, Integrators, Feed Millers, Broiler and Breeder State Associations, Academicians, Scientists, Media Partners, Pharmaceutical Companies, and other segments. The theme of the event was Exploring the Poultry Paradigm: A Holistic Approach by Professionals".

Provet was the Diamond sponsor of the event. Dr. Senthil, Director, Dr. Sulav Chetia, Mr. Praveen Kumar & Dr. Ravi Sudhakar from Provet participated in the symposium.



# Provet Celebrates National Fish Farmers Day

National Fish Farmer's Day is an annual celebration held on July 10<sup>th</sup> to honor and appreciate the vital role played by fish farmers, aquaculture industry professionals and other stakeholder in developing a sustainable and successful fisheries sector. Fish farming is a major source of employment in India, and it provides a sustainable source of protein for the country's people.

National Fish Farmers Day is celebrated in India to commemorate the successful induced breeding of Indian Major Carps on this day in 1957. The scientists who achieved this feat were Professor Dr. Hiralal Chaudhury and his colleague Dr. Alikunhi.

Fish farming is a major source of employment in India and it provides a sustainable source of protein for the country's people.

The day is also used to raise awareness about the importance of aquaculture and to encourage people to eat more fish. Fish is a healthy and nutritious food, and it is a good source of omega-3 fatty acids.

Provet Pharma Private Limited has celebrated National Fish Farmers Day by organizing farmer group meetings at different headquarters Bhimavaram, Machilipatnam & Contai to create the awareness among the aqua farmers.

Midhun (TSM, Bhimavaram), Vasantha Raju (Sr. SE, Machilipattinam) & Atanoo (Sr. SE, Contai) has welcomed the respective gathering followed with a brief note on the organisation. The programme was attended by 20-25 farmers of that areas.



Satya Narayana (RSM - South) & Kundan Kumar (RSM - East) has explained on the national importance of the fish farmers day and urged the farmers to adopt scientific farming practices and incorporate quality seeds & Best Management Practices in their ponds for higher productivity.



The technical sessions were delivered under different theme areas to identify the key issues for sustainable development to fisheries sector.

Provet showcased the entire product range with a special focus innovative formulation like Bacitox Plus, Envipro Gold, Nagrowall, Mintroplex Ultra etc. On this occasion, promotional inputs like Product catalogues, Pens & Gifts, etc., were distributed to the farmers.

Queries raised by the farmers were solved by the team. Positive remarks were received from the farmers as feedback of the programme.



**FGM at Yanamaduru, Bhimavaram-H.Q, AP - 10<sup>th</sup> July, 2023**

Mr. Midhun Bhargav & Mr. Satya Narayana organised this meeting with the help of our dealer Mr. Manoj, M/s Orcas Aqua Bioscience.

**FGM at Pedakallepalli, Machilipatnam-H.Q, AP - 10<sup>th</sup> July, 2023**

Mr. Vasantha Raju & Mr. Satya Narayana conducted this meeting with the support of our local farmer Mr. Sunkara Nageswara Rao.



**FGM at Contai, West Bengal-H.Q, 10<sup>th</sup> July, 2023**

This meeting was conducted by Mr. Atanoo Sahoo, Mr. Koushik Das & Mr. Kundan Kumar with the help of our dealer Latika Seafood.



Excellence through Innovation

# General Biosecurity Measures in Shrimp Farms

## Management practices to reduce the risk of introduction of pathogens



Use Specific Pathogen Free (SPF) seeds.



Use fencing for birds, crabs and animals to prevent transmission of diseases from one pond to another pond or from one facility to another facility.



Disinfect wheels of delivery vehicles during entry & exit. Maintain a separate parking area for visitors' vehicles area at the periphery of parking ground.



Sample the animals at regular intervals for growth and survivals as per standards.



Disinfect footwear, hands, and equipment before entering the pond.



Monitor water quality parameters at regular intervals.



Monitor feed trays regularly. Use separate trays for each pond to prevent the contamination between ponds.



Manage proper feeding to prevent issues associated with over-feeding.



Check the health of shrimps at regular intervals to identify problems at the early stage.



Treat/disinfect source water in before using in culture ponds.

**BACITOX® PLUS**

**PROFECT® PLUS**

**ENVIPRO® GOLD**

**VIBROCID™**

**MINTROPLEX® ULTRA**



# PREETI AGHALAYAM

## First ever women IIT director

Recently, the Indian Institute of Technology in Madras made news for two different reasons. One for announcing the start of its first overseas campus in Tanzania's Zanzibar, and the other for naming a woman as the institute's head. Dr. Preeti Aghalayam who will be the first woman to ever serve as an IIT director. This choice supports the sustainable development objectives of IIT and highlights gender parity as a key component of those objectives.

Currently a professor in the Chemical Engineering department at IIT Madras, Aghalayam has had a stellar academic career. She did her BTech in Chemical Engineering from IIT Madras in 1995 and went on to the University of Rochester, New York, where she pursued an MS in Chemical Engineering. After completing her MS, she went to the University of Massachusetts for her Ph.D.

Aghalayam, who has worked as a postdoctoral researcher at reputed institutes like MIT and Cambridge, has also served as a faculty member at IIT Bombay. She joined IIT Madras in 2010 and has since been associated with the institute.

The IIT Zanzibar will start functioning on October 24, which is also observed as United Nations Day. The permanent campus of the new institute in Zanzibar will be spread across 200 acres, and the infrastructure plan is being developed by experts from IIT Madras. It was being planned as a "unique and game-changing educational partnership" between India and Zanzibar-Tanzania.

Being the first woman to lead an IIT was a great privilege, according to Dr. Preeti Aghalayam. She is proud to have accomplished something so significant for the university and the nation as an IIT Madras alumna.

She mentioned that they always observed how significantly more women were represented on their side when they travelled to Zanzibar as part of the IIT Madras team. She said it was crucial that they take their time with this.



Dr. Aghalayam wears many hats. She is also a marathon runner and a blogger. She has authored several articles with other professors as well. She extensively wrote about modelling the effects of non-uniformities from urea injection on SCR performance using CFD, modelling the effects of inlet manifold design on diesel oxidation catalytic converter performance, and more.

Dr. Aghalayam has also been honoured as one of the 75 women by the Principal Scientific Advisor's Office in Science, Technology, Engineering, and Mathematics (STEM).

# CARELESS PEOPLE Vs CARING MAN

A heart-wrenching incident unfolded, showcasing both the cruelty and the compassion that exist within humanity. A small, defenceless puppy was callously thrown into a canal, confined within the suffocating confines of a polythene bag.

The innocent creature found itself in a perilous and suffocating situation, helpless and terrified.

But amidst the darkness, a ray of light emerged in the form of a caring and courageous individual. This compassionate soul happened to be nearby and witnessed the heartless act unfold before his eyes. Without a moment's hesitation, he rushed to the puppy's aid, driven by a deep sense of empathy and an unwavering commitment to doing what was right.

As he approached the canal, a mixture of anger and determination welled up inside him. Gently tearing open the restrictive polythene bag, he unveiled the frightened puppy, gasping for breath and trembling with fear. With tender hands, he cradled the trembling creature, instinctively knowing that every moment counted.

Filled with an indescribable mix of emotions, the caring man focused on providing immediate comfort and safety. He carefully wiped away the remnants of fear and offered soothing words, assuring the puppy that it was now in caring hands. The warmth of his touch and the genuine concern in his eyes slowly began to alleviate the puppy's anxiety, allowing a flicker of trust to ignite.

As the days went by, the caring man's dedication knew no bounds. He tirelessly worked to heal both the physical and emotional wounds inflicted on the innocent puppy. With gentle care and patient understanding, he nurtured the little one back to health, showering it with love, kindness, and compassion.

Through the unwavering support of the caring man, the puppy began to thrive; its spirit was rekindled, and its trust in humanity was restored. It grew stronger, both physically and emotionally, transforming into a beacon of resilience and gratitude. The bond between the caring man and the once-vulnerable puppy blossomed, embodying the incredible capacity for love and redemption.

This extraordinary tale serves as a poignant reminder of the power of compassion and the immense potential within each of us to make a difference. In the face of unspeakable cruelty, the caring man's unwavering commitment to saving a life shines brightly, illuminating the inherent goodness that exists in humanity. It is a testament to the triumph of empathy and the incredible impact that a single act of kindness can have.

## Learnings from the story:

May this story inspire us all to be compassionate guardians of life, to extend a helping hand to the helpless, and to nurture the spirit of humanity within ourselves and others. In these acts of selflessness, we discover the true essence of what it means to be human.







Overall, the key differentiators between language models are the size of the model (number of parameters), the type and size of the training data, and the specific fine-tuning tasks used to optimize its performance. These factors significantly impact the capabilities and performance of a language model in various applications.

For the most accurate and up-to-date comparison, it would be best to refer to official sources and research papers or documentation related to the BARD model if it has been released or announced after September 2021.

BARD (Bidirectional Encoder Representations from Transformers Auto-Regressive Decoder) was not a publicly known model. Therefore, one cannot provide a direct comparison between ChatGPT and BARD as we don't have specific information yet.

However, one can describe ChatGPT's characteristics and capabilities, and provide some general insights about what to consider when comparing it with other language models.

- » **Model Architecture:** ChatGPT is based on the GPT (Generative Pre-trained Transformer) architecture, specifically GPT-3.5. It uses a transformer architecture that combines self-attention mechanisms and deep learning techniques. The architecture allows ChatGPT to understand the context of text and generate responses.
- » **Pre-training:** ChatGPT is pre-trained on a vast amount of diverse text data, making it capable of understanding and generating human-like text in multiple languages and domains. Pre-training helps it capture grammar, semantics, and context from the data it is trained on.
- » **Fine-tuning:** ChatGPT can be fine-tuned on specific tasks to tailor its responses to particular applications. Fine-tuning allows for more control over the model's behaviour and enhances its performance on specific use cases.

- » **Fine-tuning:** ChatGPT can be fine-tuned on specific tasks to tailor its responses to particular applications. Fine-tuning allows for more control over the model's behaviour and enhances its performance on specific use cases.

- » **Use Cases:** ChatGPT is widely used for various applications such as customer support, content generation, language translation, text completion, and more. It can be integrated into different platforms and products through APIs.

When comparing ChatGPT with other language models like BARD, some factors to consider are:

- » **Performance:** Compare the quality of responses and how well the model understands context and user intent. Look for evaluations and benchmarks to gauge performance.
- » **Training Data:** Check the data on which the model was trained. A diverse and extensive dataset usually leads to better generalization and performance.
- » **Customizability:** Some models, like ChatGPT, support fine-tuning on custom datasets, allowing adaptation to specific use cases. Evaluate the flexibility and ease of customization.
- » **Deployment and Integration:** Consider how easy it is to deploy the model in your application or platform. API availability and documentation are essential factors.
- » **Ethical Considerations:** Language models can sometimes produce biased or inappropriate responses. Look for models that actively address and mitigate such concerns.

**Courtesy:** ChatGPT

**Compiled by:** Mr. Ganesh Manchi

Corporate Trainer & Management Consultant  
Adhithyaa Consulting & Learning Solutions

# Animal Health & Vaccination Camp

Provet Pharma donated supplies and support to the Animal Health and Vaccination Camp in the Singur Block of the Hoogly District, Kolkata, West Bengal as part of its social duty.

This event was planned by the Progressive Veterinary Doctors Association-Hoogly District Committee on July 29, 2023. Veterinarians from the Hoogly District made their presence known at the medical camp, as did other officials from the PVDA Central Executive Committee.

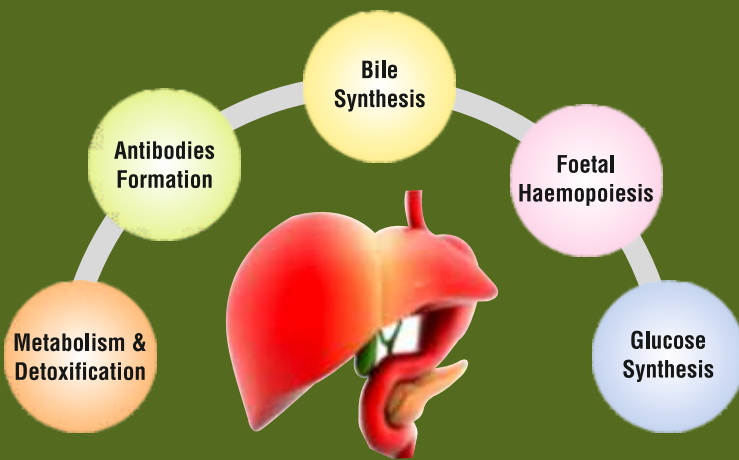




Excellence through Innovation

# HEPAPRIME®

New Generation Liver Tonic,  
Restorative, Hepato-protector & Immunity Enhancer



- Manages anorexia & indigestion
- As adjuvant with Flukicides
- Overcomes stress & debility
- Prevents and treats liver disorders like Jaundice, Hepatitis, Fatty liver, etc.
- For quick restoration after the use of dewormers & other medications

**Iron, Copper & Cobalt salts**

- Help in haemopoiesis
- Provide additional nutritional requirements

**Yeast Extract & Choline chloride**

- Enhance ruminal microflora activity
- Prevent fatty liver syndrome
- Metabolism of fat & protein

Ensures Liver Health, Ensures Total Health

Maximize your ROI...  
Quality you can QUANTIFY



[www.provet.in](http://www.provet.in)

Facebook: provetppl | Twitter: provetppl | LinkedIn: provetppl





*Excellence through Innovation*



For further information, please write to:  
**Provet Pharma Private Limited**

No. 9, 1<sup>st</sup> Floor, Chakrapani Street, 2<sup>nd</sup> Lane,  
Narasingapuram Extension, Maduvankarai, Guindy,

**CHENNAI - 600 032. INDIA**

Telefax: +91 44 2244 2124 / 27 | E-mail: [info@provet.in](mailto:info@provet.in)