

Agro Veterinary News

Pakistan's First Independent Agro Veterinary Periodical

Vol. 32 No. 7 / October 2020 -

Published Monthly Reg. No. MC-1209 ISSN 17228-1512 Rs 100



Inside

>>> PRI celebrates World Egg Day 2020 04



>>> Pakistan's first lady 06 urges women to ...



>> SHC expresses resentment over ...



A potential threat to poultry industry 10



THE HAUNTING WHEAT CRISIS

PM Imran calls delay in import as an 'administrative failure'

AVN Report

ISLAMABAD - Prime Minister Imran Khan on Tuesday reprimanded the relevant

authorities for delaying the import of wheat which led to flour shortage in the country.

Presiding over a meeting of the federal cabinet, Prime Minister Khan said

the situation could have been averted if at least 1.5 tonnes of wheat had been imported in July this year.

A participant of the meeting, quoted the prime minister as

saying, "I had foreseen the crisis and ordered the import responsibility ultimately fell on of wheat in April but it was not the government.



He agreed that the bureaucracy did not take the decision on the import of wheat out of fear of the National Accountability Bureau (NAB), but also

; accepted that the

Another source said Adviser

to the Prime Minister on Finance Dr Hafeez Shaikh also complained that the bureaucracy was not signing files as it was scared of NAB. At a function, the

prime minister had

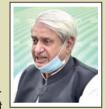
said that unexpected rains this year, especially during the wheat harvesting season, had resulted in less yield of the crop, which caused shortage

Continued on Page 15

'COVID-19 put negative impact on poultry, livestock sectors'

AVN Report

ISLAMABAD - Federal Minister for National food Security and Research Syed Fakhar Imam recently said that COVID-19 had put negative impact



on livestock and poultry sectors as their output was reduced significantly. However, he said, the local poultry industry was recovering and measures would be taken to boost the local poultry Industry. Addressing virtual meeting of Minister of Agriculture of Shanghai Cooperation Organisation (SCO) Member States, the minister mentioned that the menace of desert locusts has now been completely brought under control in the country.

He apprised the forum about the measures being taken by the government for capacity

Continued on Page 15

Editorial Board

Ayaz Mahmood

Publisher & Managing Editor
M Hassan Mahmood

Syed Hashim A Hasan

Dr Aamir Ismail Rizvi Dr Hammad A Hashmi Dr Adil Rasheed

luction & Coordination Manager Produ M Irfan Ali

Advertising Manager SM Shakil (0300-2559344)

Graphic Designer & Layout Sh M Sadiq Ali

Karachi : Mahmood Centre BC-11, Block-9 Clifton Phone : 021-35872289, 35834932, 35833172

Haroon Rashid (Islamabad) 0300-9710774

Fax: 021-35836940
E-mail: irfan@medicalnewsgroup.com.pk
mkt.dn@medicalnewsgroup.com.pk

Lahore: 1485 C-5/4 Alluddin Road, Cantt. Phone: 042-36676296 Fax: +92-42-36673518 Email: g.hassni@gmail.com

Islamabad : Phone : 0300-9710774

{Disclaimer}

The menace of locust swarms under control in Pakistan: NLCC

AVN Report

ISLAMABAD - The menace of the desert locust has now been completely brought under control in the country and the Food and Agriculture Organisation (FAO) of the United Nations has lauded Pakistan's



massive control operation by terming it 'ideal.' Pakistani officials have claimed the country has eradicated swarms of desert locust, months after declaring a national emergency to battle the infestation. "By the grace of God and efforts of all, we can declare today there is no locust in Pakistan," said Lieutenant General Moazzam Ejaz, head of the National Locust Control Centre (NLCC).

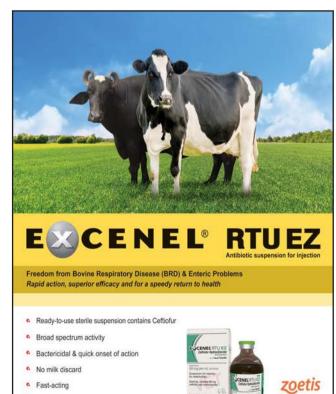
"The swarm started declining from August and we

Continued on Page 15

Fast-acting

Powerful

Wide safety margin



Ghazi House, D-35, KDA Scheme No. 1, Miran Muhammad Shah Road, Karachi-75350, Pakisto Tel: +92 21 111 250 365 | Fax: +92 21 3454 3763 | E-mail: mail@ghazibrothers.com.

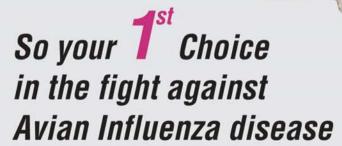
Nobilis® Influenza Vaccines

Complementing an Al eradication strategy



- AI H9
- AI H5 (Oil Emulsion)

Avian
Influenza
a deadly
threat







Head Office

vety-Care (Pvt.) Ltd.

Office: Plot No. 77, Street No. 6, I-10/3, Industrial Area, Islamabad.

Ph: 051-4441081-83 | **HAN**: +92 51 111-103-103

Email: info@vetvcare.com | Website: www.vetvcare.com.pk



High Quality - Our Strength







Broad Spectrum Coverage

Tribrissen

Trimethoprim & Sulphadiazine

Injection 48%

- Rapid absorption & wide distribution in the tissues
- Quick onset of action
- Broad spectrum-control of major bacterial infections
- Bactericidal mode of action

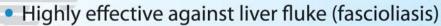


Dual action against external and internal parasites including liver fluke

Unimec

Ivermectin & Clorsulon Plus

Injection



- Effective coverage of all major internal parasites
- Potent eradicator of external parasites (Tick,lice, mites & flies)
- Prevents diseases transmitted by ticks and flies

Now available in 100ml vial



Veterinarians attends National training course on poultry diseases

AVN Report FAISALABAD - The University of Agriculture

Faisalabad (UAF) arranged a second national training course on the diagnosis of poultry diseases for field

Asif Tanveer, Vice-Chancellor, UAF, was the chief guest on occasion. Addressing the participants, Prof. Dr Asif Tanveer said that academia-industry linkages were essential to

linked to the industry. He said that the university was used to hold such events for the human resources capacity as a trained workforce was a guarantee of a bright future.



veterinarians' capacity building. The event was jointly collaborated by the Department of Pathology, Faculty of Veterinary Sciences, UAF, and World Veterinary Poultry Association (WVPA) Pakistan Branch. Prof Dr

advancing the poultry industry. He said that after the textile, the poultry industry had emerged as the second-largest industry in the country. Prof Dr Zafar Iqbal, Dean,

Faculty of Veterinary Sciences, said that hundreds of people were

Dr Hanif Chaudary, President, Pakistan Chapter WVPA, lauded the UAF measures, especially in the agriculture and livestock sector. He said WVPA is a global professional association for poultry veterinarians and other avian health professionals.

Farmers warn of protest if demands not met

AVN Report

LAHORE - Giving a six-point charter of demands, a farmers' group has warned the government of a sit-in in Islamabad if its demands are not accepted within 15

Speaking at a joint press conference recently, Rao Tariq Ashfaq, Chairman, Kisan Ittehad, Abdur Rauf Tatla, President, Punjab President and others said if the government

didn't accept € demands, they

would be forced to stage a sit-in in Islamabad from Nov 10.

Their demands included sugarcane support price at Rs 250 per 40 kg and wheat at Rs 2,000 per 40 kg, cut in farm tube-well power tariff down to Rs 4 per unit, subsidy on

fertilisers and implementation of the amended sugarcane law.

The farmers' leaders said 70 pc of the country had been completely ignored and they were fleeced by the government in the procurement of wheat and by the private sector in the purchase of

> sugarcane crops. Rejecting the support price of Rs 200 per 40 kg for sugarcane announced by the Punjab government for this season. they argued that

it was Rs 189 per 40 kg when sugar retail price was Rs 60 per kg while the sweetener was now being sold at Rs 110 per kg so the government should fix the sugarcane support price at Rs 250 per 40 kg. They

Continued on Page 15

PRI celebrates World Egg Day 2020

AVN Report

KARACHI - World Egg Day was celebrated at Poultry Research Institute (PRI) Karachi. Chief quest was Honorable Minister of Livestock & Fisheries. Engr. Abdul Bari Patafi.









PMAS-AAUR celebrates World Egg Day

AVN Report

RAWALPINDI - A seminar titled 'Importance of Egg for Human Health' was recently organised here by Pir Mehr Ali Shah Arid Agriculture University

Rawalpindi (PMAS-AAUR). The event was held to commemorate World Egg Day.

The seminar was arranged to create awareness among the public about the nutritional value and importance of eggs for human health. The chief guest of the event was Prof. Dr Qamar uz Zaman, Vice-Chancellor, PMAS-AAUR. Dr Hassan Sarosh,

Continued on Page 15

MEDICINE BUSINESS OPPORTUNITY



EU/Singapore Imported Health & OTC, good quality medicines are available for exclusive distribution country wide with Form 7 on indent or LC cost, including poultry/dairy farm level products like multivitamins, electrolytes, disinfectants, organic acids, immunity booster, emulsifier and feed additives like prebiotics, enzymes, toxin binder, gut health, vitamin/mineral premix. Interested importer/marketing personals looking for long term partnership may contact at

"jawadimpexint@gmail.com" with their business profile & requirements.

Cosumix Plus®



- Parallel Peak Plasma Concentration (SCP+TMP) is achieved resulting in lower MIC
- High air sac tissue penetration
- Shortest withdrawal period (4 days) & low development of resistance
- Excellent water solubility, palatability and stability

Composition:

Sulfachlorpyridazine sodium 10%





Pakistan's first lady urges women to engage in forest conservation

ISLAMABAD - The first lady of Pakistan, Samina Arif Alvi, recently stressed the need to engage women in conservation and protection of forest resources for its sustainable management. She was speaking as chief guest at an event held to plant trees by women parliamentarians at Parliament House. She inaugurated the tree plantation event by planting a sapling. Ms Alvi remarked that in most of the developing countries, including Pakistan, women bore the crucial responsibilities for supplying food for their families and households. Women were also involved in collecting, processing, cooking, and rationing and storing food.

AVN Report

"However, there is a pressing need to understand that women, who constitute now more than half of the country's population, can undoubtedly play a vital role in conservation of the rapidly shrinking forest resources of the country," she said.

She said forest dependent communities most of ten only have customary and no legal land rights, often the role of women still remained a secondary one in the struggles for recognition of these rights. However, they now deserved more attention and support under the incumbent government's flagship initiative of the Ten Billion Tree Tsunami Programme, which was geared towards conservation and

protection of the forest and wildlife resources in the country. She said in a world dominated by patriarchal societies and cultures. forest destruction caused by unsustainable development activities have resulted in severe and differentiated impacts on women. Most of those impacts are graver than those affecting men, disempowering and impoverishing women. Minister of State for Climate Change Zartaj Gul said the government had assigned importance to

tree plantation programmes and sustainable management of the forest resources. She said various studies showed that greater presence of women in community-based forestry institutions had a number of benefits

"It boosts women's effective participation in decision-making, influences the nature of decisions made, especially the rules of forest use and their implementation and improves forest

conservation outcomes.' She said hundreds of nurseries had been established across the country under the 10 Billion Tree Tsunami Programme, many of which were being owned and run independently by women groups.

'Their involvement in such activities is now helping them build up their socioeconomic lives but also motivating them to play their part in promotion of forestry among women community members," Ms Gul said.



UAF VC case: Court issues notice to CM Punjab and others

AVN Report

LAHORE - The Lahore High Court recently issued notices to Chief Minister Usman Buzdar and other government functionaries on a petition seeking contempt proceedings against them for not initiating the process for the appointment of the Vice-Chancellor (VC) of University of Agriculture Faisalabad (UAF).

Dr Igrar Ahmad Khan filed a contempt petition through Advocate Bilal Hassan Minto pleading that a single bench had on Feb 4, 2020 set aside the appointment of Dr Ashraf as the VC of the university with a direction to the government to notify the candidate highest in the merit list strictly in accordance with law

The counsel said a division bench later set aside the single bench's decision and the matter went to the Supreme Court. However, he said, the apex court suspended the judgment of the division bench and the decision of the single bench became operative.

He argued that the respondents including the chief minister failed to initiate the process for the appointment of new VC of the university in terms of the single bench's judgment. He said the act of the respondents amounted to the contempt of court. Continued on Page 15

Fishermen in danger of losing livelihood as Chinese boats line up in Karachi

AVN Report

KARACHI - Pakistan is recently planning to allow Chinese companies to carry out deep-sea fishing in the country's territorial waters. But a pressure group representing Pakistani fishermen has said the move could threaten the livelihoods of at least 3 million people.

A dozen Chinese deepsea trawlers docked at the port of Karachi last month, worrying local fishermen who said that commercial fishing vessels and bottom trawling would deplete fish stocks in the exclusive federal sea zones off the provinces of Sindh and Baluchistan.



involves dragging nets across the seafloor to scoop up fish, stirs up the sediment lying on the seabed, displaces or harms some marine species, causes pollutants to mix into plankton and move into the food chain, and creates harmful algae blooms or oxygendeficient dead zones. The coastal line of Sindh and Baluchistan is 1,050 kilometers long, said chairman of the Pakistan Fisherfolk Bottom trawling, which Forum Mohammad Ali

Shah, and around three million fishermen relied on the sea to survive. A new fishing policy was expected but had vet to be revealed by the government, he added. "The deep-sea trawler policy has not yet been approved, but before that they (China) have brought these trawlers," Shah told Arab News, describing the arrival of the Chinese vessels as illegal. In 2018, the

government enacted a Continued on Page 23

SHC expresses resentment over zoo's poor condition

AVN Report

KARACHI - The Sindh High Court has expressed serious resentment over the operation and functioning of the city's zoological garden and said that the management was doing nothing to uplift its credibility. The two-judge bench headed by Justice

Mohammad Shafi Siddiqui said it's quite alarming that around 700 animals were left at the mercy of only one veterinarian and constituted a team of experts to examine the overall condition of the zoo as well as the health of a bear being kept at the facility.

The bench also called a detailed report about allocation of yearly budgetary sanction as well as other allocations for the zoo after it was informed that no budgetary allocation under the Annual Development Programme (ADP) was made for last three years.

When a petition about the health of a baby bear being kept at the zoo after alleged forcible separation from her parents came up for hearing, the Karachi Metropolitan Corporation (KMC) filed a report and contended that the bear was an adult contrary to the claim of the petitioners and living in the zoo since March 2017.

The report further contended that it was the property of a private breeding farm and research centre and it had been received through an animal exchange programme in



2017 and maintained that the bear was in good health and fully acclimatized with the weather of Karachi.

The lawyer for petitioners Mohsin Shahwani also brought the president of Society for Protection of Animals Rights Zain Mustafa with him to assist the bench and he contended that the report was misleading in the sense that irrespective of the age of the bear, the related issues concerning the health of the animal were not clarified in the report.

The bench expressed dissatisfaction over the KMC's report and observed that they literally arrested these animals available in the zoo and caged some of them in isolation for visitors to earn at the risk and cost of their lives. It appointed a team of experts to be headed

by Dr Zaheer, recently retired from the

zoological department of University of Karachi, to inspect the zoo and file report within 15 days.

The senior director recreation KMC Ismail Shakir submitted that they have a regular yearly sanctioned budget which was other than ADP scheme and on such basis certain cages and enclaves were being planned including one for the bear in question. However, he added that since last three years no allocation was made under the ADP scheme.

He also filed the detail of staff and the bench came down hard while pointing out that there was only one veterinarian for the entire zoo as rest of them were supporting staff.

"We have been hearing since years that so many animals have been imported and so many have lost their lives yet the management had not made any attempt to find cause of such mortality which is none other than negligence and incompetency," the bench observed.

It also directed the zoo management to install an air-conditioner or cooler in the enclave of the bear within two days and also keep other animals in suitable environment and habitat. The bench said that it will take up the matter for hearing after two weeks and directed the KMC administrator, senior director zoo and secretary wildlife to file comments before the next hearing.

Wheat import from Russia all set to counter shortage

AVN Report

LAHORE - The federal government has recently announced importing wheat from Russian Federation to meet shortage of grain and flour in the local market.

A press release issued by the Pakistan Agriculture Storage and Services Corporation (PASSCO), the federal entity that maintains wheat storage besides provincial food departments, confirms the import of only 180,000 ton grain and also seeks to negate reports about its quality.

"It will have 12.5% protein (minimum), 24% wet gluten, and 13.5% moisture (maximum)," says the press release. It says the wheat will be imported under government-

to-government agreement and both the parties have negotiated and agreed upon the standards, while international

inspecting agencies will be there to watch the shipment until its landing in Pakistan.

Owing to low yield last season because of multiple reasons and botched official attempts to conceal the facts, confidence of local consumers shattered leading to panic buying and thus further complicating the market situation. Experts say the government needs to import at least three million ton grain to meet the short fall in local yield. Flour millers have also been

warning of a severe flour shortage crisis from next month if three million ton wheat is not imported at the earliest, while availability of commodity has already become scarce in many urban centres. The government has allowed the private sector to import 1.5 million

ton wheat while the public sector itself is supposed to make the rest of the buying. So far the government has been dilly-dallying

government has been dilly-dallying on the issue and the time thus lost is not only adding to the panic in

the local market but also making the purchases from foreign market costlier.

The private sector inked its first purchase agreement at \$230 per ton earlier in the year, while the government is now importing it at a rate of \$279 per ton. The experts say the quantity (180,000 ton) is too meagre to meet the shortfall and seems to be only aimed at creating confidence in the local market and assuaging the panic buying.







GUMBORO CATCHER WINTERFIELD-2512







- Early and strong protection against vvIBD and classical IBD.
- Safe & guaranteed immunocompetence





WE ARE PROUD OF PROVIDING BEST QUALITY SB CHICKS & FEEDS





SB SULFATRIM (ORAL SUSPENSION)

SB TYLAN 10% (WATER SOLUBLE POWDER)

SB NEOXY (WATER SOLUBLE POWDER)

SB ADLEK (WATER SOLUBLE POWDER)

SB CIPRIN 20 (LIQUID)

SB TOLCOX (POULTRY COCCIDIOSIS)

> SB S3 (ORAL POWDER)

SB TYLAN 10% (FEED PREMIX)

SB COMBIF.T (ORAL DRENCH)

SB FLUKINEX (ORAL DRENCH)

SB LEVONEX (ORAL SOLUTION)

SB TIAMULIN 45% O/P TIAMULIN HYDROGEN FUMARATE

SB AMOXYTIN O/P

AMOXICILLIN TRIHYDRATE COLOSITINE SULPHATE

SB EXITIL ALBENDAZOLE 12.5%



New Introduces a new range of most effective & economical LIVESTOCK & POULTRY MEDICINES

SB PIPRAZINE (POWDER)

> SB HELMIN (SUSPENSION)

SB AMPROL 50 (WATER SOLUBLE POWDER)

SB COXINIP (WATER SOLUBLE POWDER)

SB RENAL (WATER SOLUBLE POWDER)

SB VITA POWER (WATER SOLUBLE POWDER)

SBC 20 (EFFERVESCENT GRANULES)

SB TIACLOR O/P **TIAMULIN HYDROGEN** CHLORTETRACYCLINE HCL

SB TIAMULIN 12.5% O/P TIAMULIN HYDROGEN FUMARATE

SB TIAMULIN 12.5% O/L TIAMULIN HYDROGEN FUMARATE

SB ASPER C (EFFERVESCENT GRANULES)

> SB VITA L (FEED PREMIX)

SB MINERAL MIX (FEED PREMIX)

SB ENROFLOXACIN (ORAL SOLUTION)

SB ENROFLOXACIN (POWDER)

SB ORAMOX 20 (WATER SOLUBLE POWDER)

SB ORAMOX + (WATER SOLUBLE POWDER)

SB PROTECTIN O/P

TYLOSINE TARTRATE DOXYCYCLINE HCL COLOSTINE SULPHATE **PHENYLBUTAZONE BROMOHEXINE**



SB Pharma

48 - C, Satellite Town Near Chandni Chowk, Rawalpindi PHONES:051-4927501 - 13 (13 LINES) UAN: 111-50 50 50, FAX: 051-4927520 E-mail: sbpharma@isb.paknet.com Website: www.sadiqbrothers.com

NECROTIC ENTERITIS INFECTION

A potential threat to poultry industry





lostridial enteritis infects the intestinal tract of birds and leads to significant losses in the poultry industry. Clostridium perfringens is the etiological agent of Clostridial enteritis, and it exists all around the world. Fighting this infection is a continuous challenge for the poultry sector. Protective action by using dedicated products are a valuable solution to preserve the healthy gut flora. In broiler birds around the 3rd week of age, growth reduction is the main issue that linked with poor intestinal health.

Worldwide in the broiler industry, Clostridial enteritis is prevalent, and it occurs frequently.

Clostridial perfringens: Agent of intestinal infection in poultry

In the poultry industry, Clostridial perfringens infection can be an acute clinical infection or a subclinical infection. In broiler flock, an acute form of condition leads to enhanced mortality up to 50% that may account for higher losses up to 1% per day.

In the intestinal tract of poultry, Clostridium perfringens is a commensal organism and colonized in the animal's earlier life stages. Clostridium perfringens is an anaerobic grampositive and spore-forming bacterium that can produce several toxins and enzymes responsible for associated lesions. Clostridium bacterium may be classified into five types, such as A, B, C, D, and E, while type A is the leading cause of Clostridium diseases in poultry.

It was also believed that aflatoxin is the responsible factor for a long time, while new research designates that type B is associated with the cause of necrotic enteritis.

Clostridium perfringens usually enter in chicken from the environment like feed, water, and soil. The studies revealed that subclinical infection is a global problem on average; 80% of birds flock have been diagnosed with Clostridium infection.

Signs and symptoms of Clostridial enteritis

Signs and symptoms include birds becoming dull, depressed, diarrhoea, ruffled feather, and

by Dr Maria Jamil, Dr Muhammad Kashif Saleemi, Dr Aisha Khatoon

Department of Pathology, Faculty of Veterinary Science, University of Agriculture, Faisalabad

apparent macroscopic lesions in the small intestine. The clinical form of Necrotic Enteritis is easy to detect and accidentally occur in flocks and may be treated. In subclinical cases, Clostridium enteritis impaired the intestinal mucosa and reduced digestion and nutrient absorption, decreased weight gain, and enhanced feed conversion.

The subclinical form of Necrotic Enteritis occurs primarily and leads to significant economic losses due to reduced growth rate and feed conversion.

Characteristics sign seen by poultry producer is the definite reduction in growth around the 23rd day of age. Wet litter quality leads to enhance moisture levels ?40%, and frequently undigested feed particles exist in the litter. Low litter quality consequences are evident and improved breast blister and footpad lesions, resulting in greater condemnations at the processing plant.

Economic losses of Necrotic Enteritis

Clostridium perfringens leads to high economic losses of up to 30% of the flock.

The subclinical form of Clostridium prefringens is known as a severe profit killer, leads to enhance FCR 6-9 points and a reduction in body weight from 3-5%.

As subclinical infection is sometimes undetected in broiler flock leads to severe risk and affects broiler production.

Annually economic losses due to subclinical infection in the US and Canada are assessed to be 1.5\$ up to 5 cents per bird.

Predisposing factors

Following are the predisposing factor:

• Infectious causes

The major predisposing factor is intestinal destruction caused by Coccidial pathogens. Intestinal damage through Eimeria resulting in earlier destruction of the gastrointestinal

lining that is further used by Clostridium perfringens for additional multiplication. Coccidiosis is usually seemed to occur just before or during the Necrotic Enteritis outbreak. Inflammation or damaging of GIT leads to the development of Clostridium perfringens.

Nutritional factors

Dietary factors play a significant role in controlling the action of Clostridium. Diets with a level of indigestible, water-soluble non-starch polysaccharides enhance the thickness of intestinal contact that leads to the development of necrotic enteritis.

Diets rich with a high protein level like fish meal are an excellent source of amino acid to Clostridium, known as a predisposing factor. Clostridium cannot produce 13 essential amino acids out of 20. That's why its growth is increased in an environment rich with proteins. In lower GIT, indigestible protein act as a substrate for microflora.

Any factor that stresses the broiler chicken GIT is a risk for Clostridium perfringens multiplication. There is an indication to suggest that changes in feeding regimes lead to stress in GIT.

Preventive management

There is a clear indication that Necrotic Enteritis is undiagnosed and treated too late. When watery intestinal content and wet litter are detected, its mean Clostridium already multiplies in the intestinal tract. The traditional method to manage the Clostridium enteritis is the use of Antibiotic Growth Promoters (AGPs). Preventive activities by-products with selective action against Clostridium perfringens before the first symptoms are detected to be a valuable solution to sustain a healthy gut flora

Conclusions

Due to economic losses, Necrotic Enteritis is a significant disease in the poultry industry. New regulations and consumer demands for reducing Antibiotic Growth Promoters have led to enhancing the disease's occurrence. Current trends are focused on knowing and acting on its predisposing factors.

Why antibiotic withdrawal period matters?

by Umar Bin Farooq¹, Kiran Niaz²
¹University of Veterinary and Animal Sciences (UVAS), Jhang
²University of Agriculture Faisalabad (UAF)

owadays, drug residues in animal by-products are a stabbing concern. Lack of properly observing drug withdrawal period, indiscriminate use of feed additives, quackery tactics developing antibiotic resistance, and poor legislation pose severe public health consequences. It has been recognized and ranked by WHO (world health organization) as a looming health threat confronted by the world.

Antibiotic: More than just 'wonder drug'

Antibiotics can be rightly named as "wonder drugs." They are widely used for therapeutics, prophylaxis, and as growth promoters in animals' feed too. However, senses for their use must prevail. While administering animal with antibiotics, following ethics and proper record maintenance is important. Selling animal by-products with antibiotic residues is not defendable at any cost. For this, the antibiotic withdrawal period should be strictly followed.

What is 'Antibiotic withdrawal period?'

Antibiotic withdrawal period refers to the mandatory time required for

Animals get antibiotics and develop resistant bacteria in their guts. Drug-resistant bacteria can remain on meat from animals. When not handled or cooked properly, the bacteria can spread to humans. Fertilizer or water containing animal feces and drug-resistant bacteria is used on food crops. Drug-resistant bacteria in the animal feces can remain on crops and be eaten. These bacteria can remain in the

an animal to metabolize an administered drug and to reach a concentration of drug residues in tissues (meat/milk) at a minimum or safer level. Thus, each antibiotic has a specific withdrawal period ranging from a few hours to days. This withdrawal period is also

tissue-specific, e.g., the withdrawal period in meat is longer than in milk.

Antibiotics misuse: A concern for human and animals alike

In today's world, antibiotics are widely used to treat livestock and

poultry, and thus concerns for antibiotic residues in our food are rising day by day. Improper administration of dosage or discontinued course of antibiotic treatment is a major contributing factor in this regard. Other factors may include large drug residues in animal and poultry finished products that can pose grave health consequences. Several factors leading to the occurrence of antibiotic residues in animal products: which include failure to observe drug withdrawal periods, poor records of treatment, failure to identify treated animals, lack of advice on withdrawal period, offlabel use of antibiotics, and availability of antibiotics to laypersons as over the counter drugs in the developing countries. These bad practices lead the antibiotic residues into the food chain and play a pivotal role in developing antibiotic resistance. This incidence is not only dangerous for birds but also for humans.

The importance of respecting antibiotic withdrawal periods

Drugs given to animals or birds orally or parentally may be found in tissues, particularly when the birds (poultry) are slaughtered without observance of the withdrawal period or when eggs

Continued on Page 15

All you need to know about Botulism

by Dr Ghulam Raza Shah

Shaheed Benazir Bhutto University of Veterinary Animal Science (SBBUVAS), Sakrand

otulism is one of the most serious chicken diseases, as the symptoms progress very quickly, and the death rate is very high.

It is caused by contamination of food or water by rotting meat and most commonly occurs in summer and fall when temperatures are warm enough for the bacteria to thrive.

This illness is not passed on from bird to bird but can affect an entire flock if they all share the same food and water source.

Symptoms of Botulism

- Weakness and nervousness,
 Tremors or shaking, Feathers are easy to pull out.
- Paralysis of the legs, which progresses to the wings and neck before a chicken, then suddenly dies.
- If the disease is caught early enough, it can be treated with an antitoxin by a vet.
- However, a home remedy of 1 teaspoon of Epsom salts mixed with 1 oz of warm water daily with a dropper can also work.

Diagnosis of Botulism

Botulism may be suspected when there is a

sudden onset of floppy paralysis in one or more birds in a group. A careful search should be done for a potential source of the toxin in the area where the birds can roam. With botulism, the body appears normal on a postmortem examination.

Laboratory confirmation of botulism is difficult



and not routinely done. However, laboratory submission of sick or recently deceased birds is encouraged to rule out other causes of illness

Treatment of Botulism

There is no specific treatment for botulism. Most affected birds will die. Death occurs due to paralysis of the muscles needed for breathing.

Birds that have ingested only a small amount of toxin may survive, but they need careful

nursing until the toxin wears off.

The birds cannot swallow, so do not try to give them food or water. Putting food or water in the mouth, such as a syringe, may cause

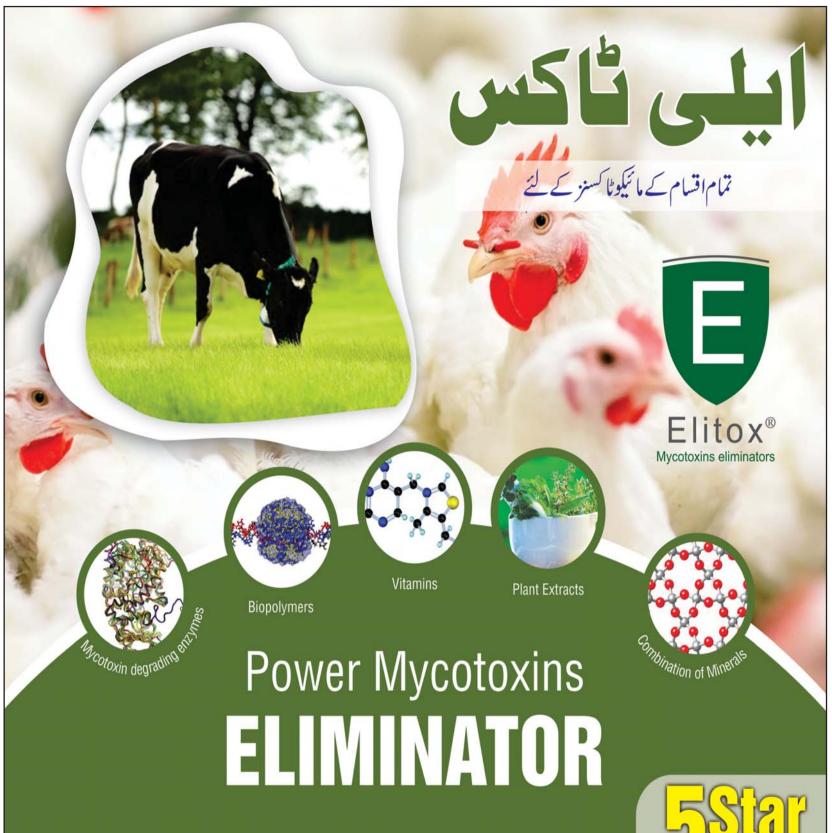


pneumonia because it will end up in the lungs. Please wait until the birds can lift their heads and make clucking sounds before offering water. Protect the birds from the sun and from other birds or animals that might attack them. Provide birds with soft bedding. If there is no improvement in 24-48 hours, the birds are unlikely to survive.

Prevention of Botulism

To reduce the risk of botulism, it is important to prevent birds from having access to possible.

Feed only fresh food. Do not discard old or wet food where birds can peck at it.
Check the area where birds can roam and remove any rotten food scraps or carcasses.
Regularly clean water containers daily, and prevent the birds from drinking or swimming in water where there is rotting vegetation.
If birds start to show signs of weakness or floppy paralysis, the flock remains in a clean area until a diagnosis has been made and the range has been thoroughly checked.



Afla Toxin
Ochra Toxin
Fumonisin Toxin
Zearalenone Toxin
Trichothecene Toxin
Deoxynivalenol Toxin

Enzymatic Detoxification of Non Polar Mycotoxins

Adsorption of Polar Mycotoxins Non-Toxic Metabolites

Dosage: Poultry: 0.5 - 1.5 Kg / ton feed Cattle: 10 - 20 gm / head / day Or 0.5 - 1.5 Kg / ton cattle feed

Sole Distributor in Pakistan:





In Agrisolutions **Since 1953**

ZAGRO

VITAMIN & MINERAL PREMIX

Balanced formulation for optimum performance

balanced formula to manufacture feed for 🎢 BROILERS &



- For better growth
- For better FCR & Egg Production
- To overcome stress conditions
- To prevent from vitamins & minerals deficiencies Dosage:

Anavite Vitamin Premix.....500 gm / ton feed.

Anavite Mineral Premix.....500 gm / ton feed.

Sole Distributor in Pakistan: NTERNATIONAL www.jawadimpexintl.com



Kuwait lifts poultry import ban on Pakistan

AVN Report

KARACHI - Kuwait has recently announced to lift the ban on imports of bird meat and eggs from Pakistan after ascertaining that the products were free from bird flu.

The decision came upon a recommendation presented by Kuwait's higher authority for food and nutrition, a Trade Development Authority of Pakistan (TDAP) notice quoting the Embassy of Kuwait said.

The Embassy of Kuwait informed that ban was lifted by the Ministry of Commerce and Industry Kuwait on August 25, 2020. It was decided to lift ban on imports of all kind of birds meat (fresh, chilled, frozen, processed), all products, derivatives and eggs from Pakistan, as the country was free of bird flu, TDAP notice said.



Maroof Siddigui of Pakistan Poultry Association said, "The country was free from bird flu disease, and the Organization of Islamic Conferences (OIC) had also declared Pakistan free from the disease, after which the ban was lifted." He further informed that inspection teams from Kuwait, Saudi Arabia and UAE had also come to Pakistan and visited the poultry facilities in the country.

"There is no ban on our poultry products, and yet we can't take any benefit because the higher cost of production leaves us uncompetitive," Siddiqui

Despite surplus production, Pakistan's poultry exports are nominal, and the same are not even mentioned by Pakistan Bureau of Statistics in its export numbers.

Siddiqui said a small quantity of poultry goods was exported to Middle East after Saudi Arabia lifted the ban last year. "The purchase price of poultry meat in the international market is around Rs 407.80/kg, while the freight cost is Rs 175/kg. We cannot compete with Brazil, Argentina, and Thailand etc. with such high cost of production here."

Pakistan imports most of its poultry feed ingredients, including soybean, chemicals and vitamins.

"Every year, we send our proposals for the budget requesting tax exemptions on the import of poultry feed items/ingredients, and other measures to reduce cost of production, but none of our proposals are accepted. Governments across the world give rebate and subsidy to their exporters, but our government is only interested in collecting taxes," Siddiqui added.

CM KPK orders e-billing system in irrigation dept



PESHAWAR - Mahmood Khan, Chief Minister (CM), Khyber Pakhtunkhwa (KPK) has recently directed the authorities of irrigation department to introduce e-work order and e-billing system to ensure transparency in the contracts of developmental schemes being executed by the department.

He ordered the authorities to take concrete steps to remove illegal encroachments on irrigation channels permanently as well as protect the water of those channels from all sorts of contamination and pollution.

The meeting chaired by CM KPK, was given detailed briefing about the progress made on various schemes, reforms initiatives introduced in the department and other related matters.

Besides Finance Secretary Atif Rehman, Irrigation Secretary Tahir Khan, Secretary to Chief Minister Shahab Ali Shah and Chief Engineer Sahibzada Saeed, other relevant of ficials also attended the meeting. Briefing the participants of the meeting about the developmental portfolio of the department, it was said that a total of 243 projects were reflected in Annual Development Programme (ADP) with an allocation of Rs 15,806 million.

The meeting was told that 70 schemes were included in the ADP of the tribal districts with an allocation of Rs 2.031 million whereas work was in progress on 16 different projects worth Rs 4,731 million

under the Accelerated Implementation Programme (AIP).

It was told that an amount of Rs 4,657 million was allocated for 12 schemes under public sector developmental programme.

The meeting was informed that substantial progress was made on raising of Baran Dam in Bannu to enhance its storage capacity. The approved cost of the project is Rs515.331 million. Similarly, work on enhancing the storage

capacity of Tanda Dam in Kohat would be started by January next year. An amount of Rs100 million has been allocated during the current fiscal year for construction of Bara Dam in Khyber tribal district. Work on Pehur High Level Canal extension scheme is in progress for which an amount of Rs2,559.525 million has been allocated. The meeting was informed that various projects of constructing small dams in different districts were in pipeline including 10 small dams in tribal districts besides

Khattak Banda dam in Kohat, Pezu dam in

Abbottabad, Sanam dam in Dir and Baz Ali

Lakki Marwat, Chammak Maira dam in

dam in Kurram.

The meeting was told that Water Act, 2020 was passed from the provincial assembly to bring reforms in the department. Similarly, Integrated Water Resource Management Strategy has been approved by the provincial cabinet to ensure better and efficient management of water resources in the province.-Bureau

UVAS organises activities to raise awareness on Rabies

LAHORE - Vets Care Club, | from Society for the University of Veterinary Animal Science (UVAS) recently celebrated Rabies Awareness Week in 2020.

Prevention of Cruelty to Animals (SPCA), Lahore. Meanwhile, a free vaccination camp was

inaugurated the free vaccination camp and led the Awareness Walk. Many people registered their pets for free vaccination through



A workshop was conducted under Dr Hafiz M Ismail from Pet Centre, UVAS.

The workshop guided students on administering rabies vaccine in animals, and a practical application was also carried out on dogs Chancellor UVAS,

arranged in collaboration with Ghazi Brothers and Saadat International at Pet Center, UVAS. The camp vaccinated more than a hundred animals. Prof. Dr Nasim Ahmed. Viceorganiser's social media

Later, the Global Alliance for Rabies Control also recognized the efforts demonstrated by the team of Veterinary Care Club. -PR

The haunting wheat crisis Continued from front page

in the market and an increase in price. The meeting was informed that the Punjab government was releasing 17,000 to 20,000 tonnes of wheat every day and the commodity was also being supplied to the utility stores as

per demand. It was also told that the Sindh government was releasing 85,000 tonnes of wheat to mills in the current month. The cabinet, however, reiterated its resolve to

ensure adequate supply of food items to the market and take steps to reduce their prices.

COVID-19 put negative ... Continued from front page

building of different institutions including Department of Plant Protection (DPP) to meet the future challenges.

Imam also appreciated the resilience shown against the virus and following standard operating procedures (SOPs) to eradicating the menace. He said it was collective efforts from the platform of National Command and Operation Centre (NCOC) due to which Pakistan minimised the

Syed Fakhar Imam said that due to the economic situation, it is impossible to implement complete lockdown in the country.

However, the government focused on smart lockdown policy, he said adding that it had helped to reduce the out spread of virus.

The menace of locust swarms ... Continued from front page

cleared last few hectares of land in two districts this week," Ejaz said at a ceremony in the capital Islamabad.

Pakistan deployed drones, helicopters, hundreds of vehicles and thousands of agriculture workers since declaring an emergency in February.

Locust swarms first entered Pakistan in June 2019 from neighbouring Iran and quickly devastated large areas of agricultural land across south western districts, ravaging cotton, wheat, maize and other crops.

The damage prompted Pakistan, a country of 220 million people, to miss its production target for wheat by about 2 million tonnes, forcing the government to import the grain for the first time in almost 10 years.

The low yields have pushed up the price of wheat and other food grains, pushing overall inflation to almost 10 percent in September piling political pressure on the government. Despite the government's claims, officials did not rule out the possibility of another attack by

"There can be a [resurgence] but based on our experience we will be ready to pre-empt that," said Mohamed Afzal, head of Pakistan's disaster management agency.

China, Pakistan's close ally and neighbour, had donated drones, thousands of tonnes of pesticides and technical expertise to help the country tackle the crisis.

Farmers warn of protest if ... Continued from page 04

sought Rs 2,000 per 40 kg support price for wheat to keep the prices on a par with the international market rates for checking smuggling of the commodity out of the country. To provide relief to the urban consumers, they argued, the government could give Rs 400 per 40 kg subsidy for the local market.

The farmers lauded the amended Sugarcane Act, saying it gave them a sense of protection and called for its implementation in letter and spirit. They demanded Rs4 per unit flat electricity rate for farm tube wells to make farming sustainable as the current Rs 12 per unit rate was not affordable for the growers.

PMAS-AAUR celebrates ... Continued from page 04

Khalid Saleem Malik, Dr Arfan Yousaf, Dr Nasir Mukhtar, and Dr Asif were also present. The speakers shared that experts consider egg as a complete diet. They also highlighted the real value of an egg as an essential item of daily meals.

Prof. Dr Qamar uz Zaman said that the University has formed close ties with the poultry industry and could resolve challenges and problems through research. He assured that the university would provide all-out technical support and services to the farmers to advance the poultry sector.

UAF VC case: Court issues ... Continued from page 06

After hearing the arguments, Justice Sajid Mahmood Sethi observed that the contention raised by the counsel needed consideration. The judge issued notices to the chief minister and other respondents with a direction to file their replies by Oct 6.

Why antibiotic withdrawal ... Continued from page 11

are harvested within the withdrawal period of the drug. This is more likely when the drug is fed continuously over a long time when used at an extra level or beyond recommendation. The use of antibiotics that might deposition residue in meat, milk, and eggs must not be permitted in food intended for human consumption. A withholding period must be observed until the residues are negligible or no longer detected. A withdrawal period must be established to safeguard humans from exposure to antibiotic added food.

Conclusion

This condition raises concerns that if our farmers have no idea about the withdrawal period or do not bother to maintain the drug use at an appropriate level and do not follow the prescription of registered veterinarians. This issue should be reconciled by educating farmers. The registered veterinary doctor should be fully equipped with sound knowledge of this drug's severity resides challenge. On government levels, proper legislation can be effective in this regard.

یا کتان بولٹری ایسوی ایش کے سالاندامتخابات ممل

میجر (ر) سید جاوید حسین بخاری سیرٹری پی پی اے (ناورن ریجن) نے ایک اخباری بیان میں بتایا کہ 30 ستمبر 2020 کو یا کستان بولٹری ایسوسی ایشن کے سالا نہ انتخابات مکمل ہو گئے ۔ تمام تر انتخابی عمل قانون اور آئین کے مطابق سرانجام پایا۔جس میں جناب خلیل ستارمرکزی چئیر مین پی پی اے، را ناغلام مصطفیٰ وائس چئیر مین پی بی اے، راجاعتیق الرحمٰن عباسی وائس چئیر مین پی بی اے نادرن ریجن اور جنابمجموداحمد وائس چئیر مین پی پی اے ساؤتھ ریجن منتخب ہوئے اوراس کےعلاوہ مجلس عاملہ پی بی اے کےمبران بھی منتخب ہوئے۔

ڈاکٹر محمداسلم مرکزی چئیر مین پی پی اے، جناب اللہ بخش واکس چئیر مین پی پی اے، چوہدری محمد فرغام واکس چئیر مین پی پی اے نادرن ریجن اور جناب سلمان منیروائس چئیر مین بی بی اےساؤتھ ریجنا ہے فرائض بخو بی سرانجام دینے کے بعد 30 ستمبر2020 کو اپنے عہدوں سے سبکدوش ہوگے۔













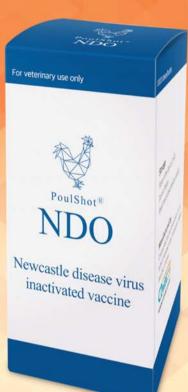
مرکزی چئیرمین یی بی اے





MAXIMUM PROTECTION NDV LOG109 EID50









ND Killed Vaccine
Conferring Protective Antibody Titers



ELKOMEC-TRI DRENCH

Ivermectin 2mg/ml Triclabendazole 120mg/ml

For the treatment and Control of Internal and External Parasites of Cow, Buffalo, Camel, Sheep and Goat.

Delivers results for fluke and worm control in one easy oral dose



Marketed by: SHAHEEN ENTERPRISES

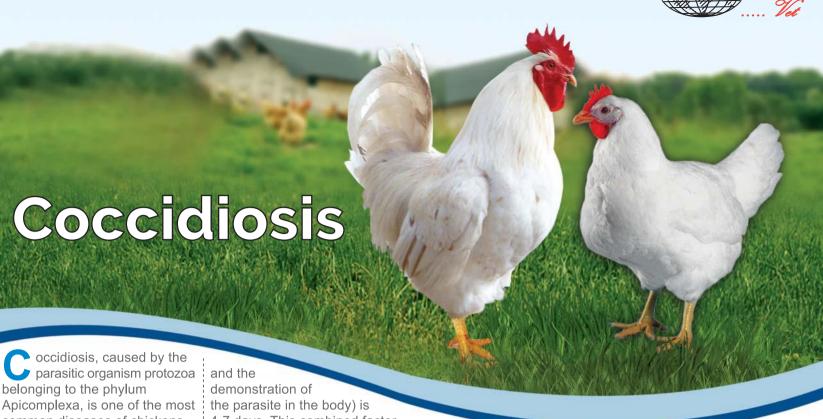


shaheenenterprises96@hotmail.com Tel.: +92 21 35082488









belonging to the phylum common diseases of chickens universally present worldwide. It mainly damages the host's intestinal system. Due to loss of production, morbidity and death, the economic impact is devastating worldwide to the poultry industry, especially countries in the third world - like Pakistan.

Coccidial is caused by mainly by the species: genus Eimeria: E. acervulina, E. brunetti, E, maxima, E. mitis, E. necatrix, E. praecox and E. tenella. All belong to Phylum Apicomplexa. Most of them are deep tissue invaders and cause severe necrosis, haemorrhage of the intestinal mucosa, and bloody diarrhoea that may result in death. The lifecycles of these species are short and straight: The infective oocyst is ingested by the host chickens ingesting the parasite eggs, sporulated oocysts from contaminated feed, passing into the intestinal tract, where the parasites invade the cells of the abdominal wall.

Cycles of replications start to occur in the small intestine, and sporozoites infect the cell lining of the gut, which leads to the formation of new oocysts that are shed in the faces. Oocysts sporulate due to favourable environmental conditions temperature and humidity and become infective. The short cycle is of just 4 to 6 days. The optimal conditions are 25°-35°C with adequate moisture and oxygen requiring 1-2 days with a prepatent period (the period between infection with a parasite to achieve a balance between

4-7 days. This combined factor of the short cycle and environment has the potential for massive replication during the intracellular phase. This makes this group of parasites a serious problem under exhaustive farming conditions, found in most country's small, medium and even large size farms.

This replication of the parasites leads to damage in the bird's intestinal tissues. The parasites reproduce in the small intestine. and merozoites keep infecting more intestinal cells. After several cycles, oocysts are produced which are passed in the faeces of the infected host bird and the cycle is completed affecting outside of the host's body by contaminating feed, dust, water, litter, and soil.

Although initially, the birds may show no clinical signs, such as loss of appetite or weight loss, diarrhoea, as resistance develops but immunity, is strictly speciesspecific, and the birds are exposed to one species of Eimeria will remain susceptible to infection from all other species. The damage caused by the different species varies, but all have a significant impact on production.

The genus Eimeria are present globally. They are ever-present under intensive farming methods. This omnipresent nature of Eimeria precludes eradication as a practical option for control. Because species-specific immunity develops rapidly, the management of coccidiosis aims allowing natural immunity to build up and preventing high oocyst exposure to naïve birds. Hygiene and anticoccidial drugs both play significant roles.

The primary means of the spread between farms and between sheds on a farm is mechanical transmission because all species of Eimeria have short and direct life-cycles. Oocysts are incredibly resistant - both to climatic extremes and disinfectants, and can survive up to several weeks in soil. Good hygiene practices do assist in minimizing the transmission of oocysts. Effective farm management, such as well maintained, drip-free water lines, reduces the level of infective oocysts in the litter, as desiccation significantly reduces sporulation (formation of nearly dormant forms of protozoa in spores that preserves the genetic material until the conditions are inhospitable).

Manny commercial vaccines are available that consist of living, sporulated oocysts of the various coccidial species administered at low doses. Anti-coccidial vaccines are given to day-old chicks, either at the hatchery or on the farm. Since the vaccines serve only to introduce infection, chickens are reinfected by the progeny of the vaccine strain on the farm at later stages.

Many anti-coccidial drugs are available for the prevention or treatment of coccidiosis in chickens and other poultry, like turkey and ducks. All commercial, intensively farmed flocks are administered anti-coccidial drugs as prophylactic measures. They are given in the feed to prevent disease and the economic loss often associated with subacute infection. Prophylactic use is preferred because most of the damage occurs before signs become apparent and because drugs cannot completely stop an

outbreak. Treatments are usually given by water because of the logistical restraints of feed administration. Antibiotics and increased levels of vitamins A and K are sometimes used in the ration to improve the rate of recovery and prevent secondary infections. Diclazuril and toltrazuril are highly effective against a broad spectrum of coccidia. Diclazuril is used mostly for prevention at one ppm in the feed, whereas Toltrazuril is mainly used for treatment in the water. Toltrazuril works against all Eimeria species and intracellular stages of coccidian and is compatible with most commonlyused feed additives. It does not interfere with the development of stable immunity. Water-based treatment, the preferred treatment regime for coccidiosis is comfortable in administration and fast and effective control and reduce economic losses. It has a high safety margin with no reduction of feed or water intake, or any depression in the growth rate and feeds conversion.

- Advertorial Content

ELZURIL

(Toltrazuril 2.5%)
ORAL LIQUID

MANAGING COCCIDIOSIS LONG TERM CONTROL

With Safe and unique formulation palatability specific to poultry.



- Works against all important Eimeria species
- Water-based treatment for Easy Administration
- Compatible with most additives and medicines.
- Does not Reduce Feed Intake, or depress Growth
- Fast and effective control to minimize economic losses
 ... and High Safety Margin.



Marketed by: SHAHEEN ENTERPRISES



shaheenenterprises96@hotmail.com Tel.: +92 21 35082488

POWERFUL COMBINATION WINNING PRODUCTS





COMPOSITION: Per kg contains:

Amprolium Furaltadone 200 gm Vitamin A 4000000 iu Vitamin D3 2000000 iu Vitamin K3 10 gm

Treatment: 1 gm per 2 liters of drinking water for 3 to 5 d Prophylaxis: 1 gm per 2 liters of drinking water for 3 to 5 d

PACKING: 100gm, 500gm & 1 kg

VETY

COLA-MOXIN23%

COMPOSITION:

Each 100 gm powder contain: Amoxicillin Trihydrate . . 23 gm Colistin Sulphate 100 miu

INDICATION:

Highly effective in Enteritis, E.Coli, Coryza, Fowl Typhoid and pasteurellosis in poultry. It is indicated in GIT infections, respiratory tract infections, urogential infection secondary bacterial infections during viral disease in calves, sheep, goats and

DOSAGE AND ADMINISTRATION:

Poultry: 1gm in 4 to 5 liters of drinking water for 3 to 5 days. Cattle: 600mg per 50 kg body weight daily for 3 to 5 days. Sheep & Goat: 600mg per 50 kg body weight daily for 3 to 5 days.

PACKING:

1Kg





Tridin Bolus - Bolus Bio Oxfend Plus - Suspension Fenfoxamide - Drunch Bio ECT - Powder 98% C.S. Minerals Multigest Plus **Dressing Oil** Vision Shrien Feed Block Linspec - Injection Red Mido - Injection Tri Zone - Injection Meloxa - Injection Gentex B-10 - Injection Amoxa 20 - Injection Penprol - Injection

TRADERS

POULTRY PRODUC

Cola Moxin - Powder PolyQuin - Liquid Vety Ampro Plus - Powder Vety Dek - Powder Spelinamox - Powder Vety Strescheck - Powder Penprol Solution - Liquid Grow-Mix - Liquid Waltak - Injection Vacci Drops - Dropper Super Premix - Premix Bio Unibiotic - Liquid E.C. Adek - Liquid Livamin - Liquid Liso Hen - Powder Gumbo Hen - Powder Asper Tox - Liquid Mentho Hen - Liquid Mico Ton - Liquid Uni Renal Target - Liquid Mune E Plus - Liquid

Askrolyte - Powder

REQUIRED DISTRIBUTORS FOR MULTAN, FAISALABAD, HYDERABAD AND KARACHI

E-mail: Visiontraders@ hotmail.com 0333 5394974,03214435966 Cell:



web: www.vision-traders.pk

by Mehvish Liaquat (BZU Multan), Mohammad Munawar

University of Veterinary and Animal Sciences, Narowal Sub Campus UVAS, Lahore

Introduction

Cats are popular as pets worldwide

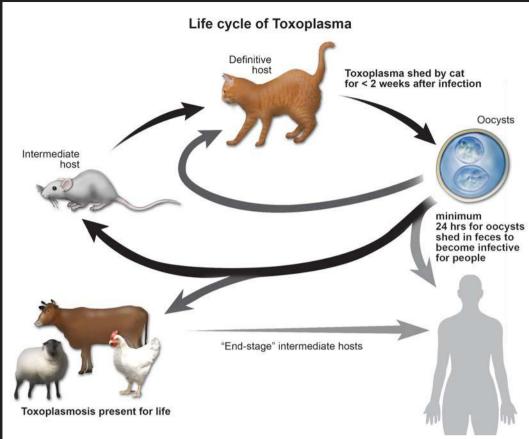
because they are easy to care for and provide companionship that enriches the lives of human being. Little attention has been focused on their potential to contaminate the environment with zoonotic pathogens. One such pathogen, the protozoan parasite Toxoplasma (T.) gondii, rarely causes clinical manifestations in cats or immunocompetent human. However, it can have serious adverse effects on human foetuses and immunocompromised patients. Many human infections believed to be acquired from eating undercooked or raw meat such as pork and lamb. As many cat owners allow their cats to deposit faeces

outside and cats maintained in colonies always defecate outside, ample opportunity exists for T. gondii oocvsts to enter the environment and be transmitted to humans. The vertical transmission from mother to foetus, which cause abortion in human female. Toxoplasmosis, a zoonotic disease usually acquired by eating undercooked meat or by contact with cat faeces. Primary problem is a congenital infection of foetus, resulting in still birth or severe brain or vision damage. Normal final host is cat. Cats excrete the pathogen in their feces for a number of weeks after contracting the disease, generally by eating an infected intermediate host that could include mammals (like rodents) or birds. Oocyst shedding usually starts from the third day after ingestion of infected intermediate hosts, and may continue for weeks. Oocysts are not infective when excreted. After about a day, oocyst undergoes a process called sporulation and becomes potentially pathogenic. In addition to cats, birds and mammals including human beings are also intermediate hosts of the parasite and are involved in the transmission process. However the pathogenicity varies with the age and species involved in infection and the mode of transmission of T. gondii

Epidemiology

Geographical area, age, and

TOXOPLASMOSIS A food born disease



socioeconomic factors influence the prevalence of the disease. The prevalence is highest in tropical region and lowest in cold regions of the world. Toxoplasma gondii infections occur throughout the world, although infection rates differ significantly by country. For women of childbearing age, a survey of 99 studies within 44 countries found the areas of highest prevalence are within Latin America (about 50-80%), parts of Eastern and Central Europe (about 20-60%), the Middle East (about 30-50%), parts of Southeast Asia (about 20-60%), and parts of Africa (about 20-55%). In the United States, data from the National Health and Nutrition Examination Survey (NHANES) from 1999 to 2004 found 9.0% of US-born persons 12-49 years of age were seropositive for IgG antibodies against T. gondii, down from 14.1% as measured in the NHANES 1988-1994. Toxoplasma gondii is considered the second leading cause of foodborne-related deaths and the fourth leading cause of foodborne-related hospitalizations in the United States

The reported seropositive rates among healthy adults vary considerably throughout the world. About 70% and 80% of women of childbearing age in the United States lack antibodies to T. gondii, however, the incidence of toxoplasmosis acquired during

pregnancy is only 0.2 - 1 %. Disease acquired early in pregnancy often result in spontaneous abortion, stillbirth, or severe congenital disease. Whereas that acquired later in gestation may produce an asymptomatic, normal appearing infant with latent infection.

Risk factors Besides the ingestion of the raw, uncooked meat, several ways of transmission were also reported. Ingestion of raw or partly cooked meat, especially pork, lamb, or venison containing Toxoplasma cysts. Infection prevalence in countries where undercooked meat is traditionally eaten has been related to this transmission method. Tissue cysts may also be ingested during hand-to-mouth contact after handling undercooked meat, or from using knives, utensils, or cutting boards contaminated by raw meat. Ingestion of unwashed fruit or vegetables that have been in contact with contaminated soil containing infected cat. Ingestion of unfiltered water through direct consumption of water for food preparation, ingestion of unpasteurized milk and milk products, particularly goat's milk, ingestion of raw seafood also responsible for disease transmission. Toxoplasmosis may also be transmitted through solid organ transplants. Toxoplasma-

seronegative recipients who

receive organs from recently infected Toxoplasma-seropositive donors are at risk. Organ recipients who have latent toxoplasmosis are at risk of the disease reactivating in their system due to the

> immunosuppression occurring during solid organ transplant. Recipients of hematogenous stem cell transplants may experience higher risk of infection due to longer periods of immunosuppression. Heart and lung transplants provide the highest risk for toxoplasmosis infection due to the striated muscle making up the heart, which can contain cysts, and risks for other organs and tissues vary widely

Prevention

Cook food to safe temperatures to reduce the chances of infection. A food thermometer should be used to measure the internal temperature of cooked meat. Color is not a reliable indicator that

meat has been cooked to a temperature high enough to kill harmful pathogens like Toxoplasma. Do not sample meat until it is cooked. Cook whole cuts of meat at 63°C, ground meat at 71°C and poultry whole cuts and ground at 74°C. Peel or wash fruits and vegetables thoroughly before eating. Do not drink unpasteurized goat's milk. Do not eat raw or undercooked oysters, mussels, or clams (these may be contaminated with Toxoplasma that has washed into seawater).

Avoid drinking untreated water. Wear gloves when gardening and during any contact with soil or sand because it might be contaminated with cat feces that contain Toxoplasma. Wash hands with soap and water after gardening or contact with soil or sand. Teach children the importance of washing hands to prevent infection. Feed cats only canned or dried commercial food or well-cooked table food, not raw or undercooked meats. Ensure that the cat litter box is changed daily. The Toxoplasma parasite does not become infectious until 1 to 5 days after it is shed in a cat's feces. Prevention efforts should focus on educating cat owners about the importance of collecting cat faeces in litter boxes, spaying owned cats to reduce overpopulation, reducing the numbers of feral cats and promoting rigorous hand hygiene after gardening or soil contact.



PHIBROAB.20 (TOXIN BINDER) The Unique selling proposition (USP) OF AB 20 is that: * It binds my cotoxins NOT Nutrients. * It does not depress animal growth. * It does not depress tibia mineral concentrations. * It does not interfere with the metabolism of nutrients in the animal degestive tract. * AB20 is a specially processed smecife or montmorillonite clay,an. aluminosilicate material with a 2:1 layered structure. * The only toxin binder in market which is characterized by alternating layers of tetrahedral silicon and octahedral aluminum layers coordinated with oxygen atoms. * The fineness of AB20 provides a large surface area accessible for binding to more my cotoxins.

wal start sales all the

PHIBRO ANIMAL HEALTH CORPORATION

Glenpointe Centre East, 3rd Fl 300 Frank W. Burr Blvd., Ste 21 Teaneck, NJ 07666-6712

Represented by ELITE MARKETING ASSOCIATES

28, Empress Road, Lahore
Ph# 42-3-6375791, 6368548
Email: info@elitemarketingassociates.pk

Website: www.elitemarketingassociates.pk

Fishermen in danger ...

Continued from page 06

deep-sea fishing licensing policy that was opposed by bodies representing fishermen and provincial government. They called it a constitutional violation and an encroachment on the livelihoods of fishermen in the coastal provinces. But fears about foreign fishing companies are not new.

For years, fishermen in the southwestern city of Gwadar in Baluchistan have protested against foreign trawlers.

Tensions first began to surface when the Fisheries Department disclosed its plan to issue licenses to foreign fishing vessels to operate in an exclusive economic zone in 2016. But last week the federal minister for maritime affairs. Ali Haider Zaidi. said the country's new policy would not allow Chinese trawlers to engage in unregulated deep-sea fishing. Bottom trawling would be banned under the new system, he

"Importing boats is not illegal," he told Arab News. "How you use them has to be regulated."

Pakistan divides its sea into three zones. The federal government controls zone 3 (from 20 to 200 nautical miles). Up to 12 nautical miles (zone-1) is the domain of Sindh and Baluchistan and, between

(Hitchner B1)

12 to 20 nautical miles, the sea is declared a buffer zone.

Local fishermen are not allowed to fish in Zone 3, and foreign fishing vessels are not permitted to fish in the other two zones under the existing policy.

The Fishermen's Cooperative Society (FCS), which issued the permit to the Chinese trawlers, said the vessels would not use the destructive bottom trawling method and would help to "upgrade" the Pakistani fishing industry and exports.

Official figures put the annual value of Pakistan's fish exports at around

"Bringing Chinese trawlers for deepsea fishing is in line with the government's deep-sea fishing policy and aimed at upgrading and modernizing fishing, besides providing job opportunities to local fishermen." Abdul Berr, FCS chairman, told Arab News. "Around 3,500 fishermen will get employment opportunities with the arrival of the world's latest fishing boats and modern small boats. First, 70 percent of the staff at trawlers and processing facilities will be local. There will be no fishing in provincial, territorial waters. The trawlers will bring all their catch to Karachi, where it will be processed in factories and then exported."

Strain 2512 (Intermediate Plus)

Small local fishermen would receive modern fiber boats on easy instalments, he added, a step toward replacing their obsolete boats. But Sindh's minister for livestock and fisheries, Abdul Bari Pitafi, said the mega fishing ships would wipe out sea life even if they were only operating in the federal government's Zone 3.

"We will also oppose its (trawlers') operations in Zone 3 because they will just wipe out sea life including the fish's seed," Pitafi told Arab News.

A 2016 survey from the Food and Agriculture Organisation revealed that more than 72 percent of the fish stock in Pakistan's coastal areas had already declined.

"One trawler does a catch that is equal to a catch by 100 of our fishing boats," fisherman Younus Khaskheli said. "And their fishing net is the most dangerous one because it hunts thousands of tons of fish.' Tens of thousands of fishing boats were registered in Pakistan, he added, with fishermen from Sindh, Balochistan, Punjab, Khyber Pakhtunkhwa and even Bangladesh fishing in these waters.

"Our sea stock will end. The country will lose the income of billions and our fishermen will become jobless. There won't be any food left in the sea."

VMD

بيَ:كُل گُھوڻو

3- جگہ جگہ خون کے دھے۔ سوجن والى حكه كوا گر كاث كرعليجد ه كما جائے كيس دارمواد کا اخراج عام نشانیوں میں سے ہے۔ حفاظتی اقدامات:

🖈 بارشوں ہے قبل سال میں 2 مرتبہ یعنی مئی ، جون اورنومبر، دىمبر مىں گل گھوٹو كا حفاظتى ئىكەلگوا ئىس _ 🖈 بیمار جا نورکود وسر ہے جا نوروں سے الگ رکھیں ۔ 🖈 بیار جانورکوگردن کی بحائے یا ؤں سے

☆ دن میں سائے کا بندو بست کریں۔ المردہ جانوروں کو 6 فت گڑھے میں چونے کے ساتھ دفن کریں۔

🖈 بیار جانوروں کارجشر ڈDVM ڈاکٹر سے علاج کروائیں۔

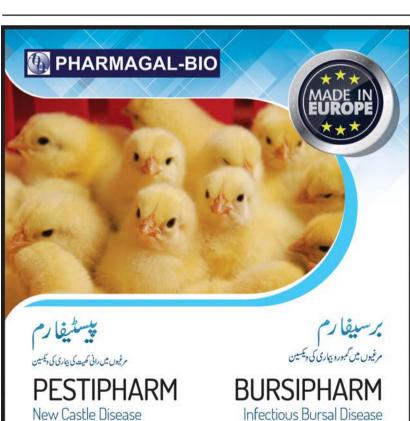
علاج:

سلفاميتها زين ياسوديم سلفاديمادين كاذير علاج ئىكە 150 mg/kgB.W تىن دن تك_ اوکسی ٹیٹر اسائیکلین 5-10mg/kgB.W_

كلورم فينيكول 10mg/kgB.W_

10mg/kg B.WAmpicillin بحلى استعال کریکتے ہیں۔

ليواوييو-15



Chakwal Pharma International

House of Quality Medicines & Vaccines www.cpi.net.pk

VAVETo-15



GASTRO-INTESTINAL NEMATODES:

Trichostrongylus spp



√ Oesophagostomum spp



PULMONARY STRONGYLES:

Dictyocaulus viviparus





Orient Traders International = 8 CM-10, Block A. Kazimabad, Model Colony, Kazarbi, \$ -0.00 Y (2000)





🖈 آئسیجن کی کمی کی دچہہے جانور گر یڑ تا ہےاور چند گھنٹوں میں اس کی موت واقع ہوجاتی ہے۔اوراسی وجہسےاس بیاری کا نام گل گھوٹو کہا جا تاہے۔ اگرجانورکاپوسٹ مارٹم کیا جائے تو گل گھوٹو میں مبتلا جانور کی مندرجہ ذیل باتیں سامنے آتی ہیں۔ 1- آنتول میں خون آمیز گوبر۔ 2- پھیھردوں میں اجتماعی خون اور بقة صفح نمبر (23) سوزش۔



سانس کی تنگی کی وجہ ہے خرائے دارآ واز اورمد ہوشی ہوجانا۔

کھڑ ہے ہونا۔ 🖈 جبر ول سے گردن تک سوجن ۔

كُل گُھوڻو

(HEMORRHAGIC SEPTICEMIA)

تحريز: ڈاکٹرمحمر جمیل، ڈاکٹرنو مان لطیف اور محمدار شدخان

زرى تحقیقاتی مرکز برائے خشک علاقہ جات، یا کستان زرعی تحقیقاتی کونسل، ڈیرہ اساعیل خان (ایڈیشنل ڈائزیکٹرلائیوسٹاک)

گائیوں کےمقالے میں زیادہ ہوتا ہے۔جھوتی بیاری ہونے کی وجہ سے اموات بهت زیاده هوتی ہیں اوربيه جوايالعاب دهين اورفضلے کے ذریعے جلدی ہے چھیلتی ہیں۔ علامات: به بهاری وباء کی صورت میں پھیلتی ہے۔اس كى مندرجەذ مىل علامات و نشانیاں ہیں۔ ☆زبان کاسوج جانااورمنه ☆ جانورکاانتہائی ست ہو

ہونے کی وجہ سے اس بیاری کا حملہ

☆ جانور کااجا نک کھانا پینا چھوڑ دینا۔ الى يىك كادرد مونا_ ☆جگالی نه کرنا۔ ☆ منه سے لال اجھاگ نکالتا 🖈 پھیٹر وں کی سوزش۔ ☆106-108 كا بخار

🖈 آنکھوں سے بکثرت یانی رواں ہوتاہےاورآ تکھوں کی جھلی کی رنگت نیلی ہوجاتی ☆ سانس لينے ميں دشواری۔

🖈 بچھڑ وں اور کڑ وں میں سانس کی نالی کیسوزش اور کھانی کا آنا۔ 🖈 گردن اور سرینیچ جھکا کر

تعارف:انسان اور جانور دونوں بیاری ممله زیادہ ہے بھینسوں کارنگ کالا سے مفرنہیں ہیں۔انسان اور حیوان کے جسم میں کچھالیی علامات رونماہوتی ہیں جنہیں دیکھ کریہ کہا جاسکتا ہے کہانسان و حیوان بیار ہے۔ان علامات میں المنكصين مندهي موجانا، ناك كابيروني حصەخشك ہوجانا،جسمانی جلدخشک با کھر دری ہوجانا، کا نوں کی حرکت نہ كرنا،كھانانەكھانا،حركات ميں كى، لاغرى،سائس انبض كى رفتار بهت تيزيا بہت کم ہوجانا، دودھ کی کمی وغیرہ وغیرہ۔ حانوروں میںایسی بیاریاں ہیں جو اموات كاسبب بنتي ہيں۔اور كسان

بھائيوں كواسكا كافى نقصان اٹھانايڑتا ہے۔ان بہار یوں میں گل گھوٹو بھی شامل ہے۔جو بہت خطرناک بیاری ہے۔جس کی وجہ سے جانوروں میں اموات بہت سبب مرض: اس بماری کا سبب ایک بیٹیریا ہے۔جبکانام (Bascillus Bovi Septicus) ہے۔یہ جانوروں میں برسات کےموسم میں نمودارہوتی ہے۔ بہجانوروں میں سخت متعدی بیاری ہےجسکا جراثیم قدرتی طور پر جانوروں میں پایاجا تاہے۔ بیمرض زياده ترتشيبي علاقون نهرون ، درياؤن کے کناروں اورسیم ز دہ جگہوں میں زیادہ پھیلتا ہے۔ یہ بیاری دنیا کے اکثر علاقون میں یائی جاتی ہے۔خاص طور پرافریقہ، پورپ اوراشیاء کے مما لک پاکستان اور انڈیامیں کثرت سےموجود ہے۔مون سون کی ہارشوں کے بعداس مرض کاحملہ

زیادہ دیکھنے میں آتا ہے۔6ماہ سے کیکر

2سال کے جانوروں میں اس بیاری کا

TETRA-DELTA®

Sterile Suspension

Anti-bacterial and anti-inflammatory

For the treatment of bovine mastitis...





- Covers most common mastitis causing pathogens
- Consistently reliable
- Fast recovery of normal udder function
- Negligible resistance development
- Presence of a potent anti-inflammatory agent
- Short milk withdrawl time
- Real value for money





Powered by:



Tel: +92 21 111 250 365 | Fax: +92 21 3454 3763 | E-mail: mail@ghazibrothers.com.pk