

Agro Veterinary News

Pakistan's First Independent Agro Veterinary Periodical

Vol. 32 No. 1 / April 2020

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



Engro support Indus
Hospital to boost ...



>>> Wheat growers chide Govt for ...



>>> Coronavirus and Hantavirus ...



Everything about 19 Transmissible ...



Opposition slams center for delay in sugar subsidy probe report

AVN Report

in the National Assembly Shahbaz Sharif smells a rat in covering up the scandal.

the extension being given to the Sugar Inquiry Commission for presenting forensic audit of the subsidy approved for the sweetener's export, while the government accuses the PML-N president of politicking during the coronavirus

"Not issuing the final report is tantamount to confession of the crime by [Prime Minister] Imran Niazi," Mr Sharif said, alleging that granting the threeweek extension to the

commission showed a nexus **LAHORE -** Opposition Leader between the prime minister and the sugar mafia aimed at



In a statement issued recently, he said that those who chaired meetings of the cabinet and the Economic Coordination Committee (ECC), which had approved the subsidy for the export of sugar in the first

place, were actually responsible for the sugar crisis in the country.

Holding Prime Minister Khan

and Punjab Chief Minister Usman Buzdar responsible for the subsidy decisions, he said the delay in the final report was in fact validation of the Rs100 robbery made in the national exchequer.

"The delay is an attempt to save those who are primarily responsible for the robbery and Imran's crime cannot be concealed by covering up the inquiry report," the PML-N leader said.

Continued on Page 16

'Poultry industry is on the verge of collapse due to lockdown'

AVN Report

LAHORE - Coronavirus lockdowns, which have led to the closure of marriage halls

and restaurants across the country have further dented the already struggling poultry industry, with many



farmers expecting a surge in the prices of chicken during the month of Ramazan. Pakistan Poultry Association (PPA) Secretary Major (r) Javed Hussain Bukhari said most hatcheries are either throwing away chicks or destroying the eggs as high cost of production and lack of demand has made their businesses unviable.

"They [hatcheries] are not sending chicks to broiler farmers, and even the farmers

Continued on Page 16

Editorial Board

Ayaz Mahmood

pandemic.

Publisher & Managing Editor
M Hassan Mahmood

Syed Hashim A Hasan

Dr Aamir Ismail Rizvi Dr Hammad A Hashmi Dr Adil Rasheed

Manager Produc M Irfan Ali

Advertising Manager SM Shakil (0300-2559344)

Haroon Rashid (Islamabad) 0300-9710774

Graphic Designer & Layout Sh M Sadiq Ali

Karachi : Mahmood Centre BC-11, Block-9 Clifton Phone : 021-35872289, 35834932, 35833172 Fax: 021-35836940
E-mail: irfan@medicalnewsgroup.com.pk
mkt.dn@medicalnewsgroup.com.pk
Website: www.grupk.com

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}

Manifold increase in prices of fruits, vegetables as Ramazan starts

AVN Report

LAHORE - Already worried due to the worst economic situation and ongoing lockdown caused by the coronavirus, people are facing overcharging in the

market with the onset of Ramazan. In all markets, there was no one from the district admin to check the prices on the first day of Ramazan. According to a

survey the apple (white) is being sold in the market at the rate of Rs180 (per 1(g) instead of Rs115 as mentioned in the April 25 market committee's price list, banana (Rs160 to 200 instead of Rs95 to 160 per dozen), guava (Rs200 instead of Rs84), melon (Rs100 to 120 instead of RsG0), watermelon (Rs85 instead of Rs50) and lemon (Rs400 instead of Rs150). Similarly, prices of other fruits also were high. Besides, the vegetables prices too showed an upward trend. The tomato price also jumped to Rs80 within last couple of days from Rs35.

The government this year couldn't hold Ramazan

Continued on Page 16



A proven & tested treatment for:

- Babesiosis
- **Anaplasmosis**
- **Canine Ehrlichiosis**







Antibacterial for poultry
1 kg

Granules

Mycohil

Hittin

Mycohil

Tylosin tartrate, Doxycycline HCl & Bromhexine

Health, Growth & Productivity

Revital Plus®

Yeast derivatives, Organic acids & Probiotics Liquid



'Full prescribing information is available on request'.



Hilton Pharma (Pvt.) Ltd.
Progressive Plaza, Beaumont Road,
Karachi-Pakistan.
www.hiltonpharma.com

Animal Health Division







High Quality - Our Strength

Remedy for Complex Metabolic Disorders

Calfos-10

(Toldimfos Sodium) Injection



Optimizes Rumen Functions

Sc 47 PWD

ACTISATE PWE

Live yeast concentrate



'Full prescribing information is available on request'.



Hilton Pharma (Pvt.) Ltd. Progressive Plaza, Beaumont Road, Karachi-Pakistan. www.hiltonpharma.com **Animal Health Division**







High Quality - Our Strength

Poultry Businesses hit hard by COVID-19, seeks Govt. help

AVN Report

PESHAWAR - The surging cases of corona virus in the country had an adverse impact on poultry products in Khyber Pakhtunkhwa with a substantial decrease in chicken prices owing to closure of restaurants, wedding halls and tourists destinations

Thousands of laborers attached with 3,300 poultry farms including 148 controlled sheds and 300 eggs production units were hit hard by havoc being played by corona virus pandemic in KP where 25 persons became its victims since

The price of a chicken was Rs140 per kg prior to pandemic but as soon as the infections surged, cities went in lockdowns and

hotels, wedding halls and restaurants were closed, resultantly price of chicken per kg dropped to Rs 115.

The poultry sector is producing 11 million day-old chicks in a month with the help of 1.5 million people attached directly or indirectly with the industry. These people are afraid of becoming jobless if the pandemic prolongs.

Vice President, KP Poultry Association, Ashraf Khan said, "Corona virus situation has marred poultry business during last two months. The price of one kg broiler chicken has dropped by Rs 25 as its current production cost is Rs. 140 per kilogram against which farmers are getting Rs.115 these days in open markets".



against production cost of Rs 45. he said, adding companies were reluctant to increase production owing to drastic decrease in chicken sale.

He anticipated further shortage in supply of chicken and eggs in the upcoming months because of extremely low consumption due to closure of restaurants, hotels, birthday, and wedding parties'

"Once the situation returns to normal after opening of schools, hotels, restaurants, wedding halls, the demand of chicken would increase manifolds and its prices would shoot up especially during Ramazan." Ashraf said millions of rupees had been lost by poultry investors due to corona virus and sought a mega financial package for revival of dwindling poultry

Dr Mazhar Khan, Veterinary Officer, Livestock Department said that corona virus has made an adverse impact on indigenous poultry farming, which was mostly

Continued on Page 16

www.covid19corona.com **ANTI-VIRUS Disinfectant Solution Against Coronaviruses**

To kill VIRUSES and BACTERIA

Multi Surface Cleaner Anti-virus & Bactericidal

ZAZACORONA contains Glutaraldehyde and Alkyl Dimethyl Benzy Ammonium Chloride in a synergistic combination, which kill many groups of virus including coronaviruses. This combination of disinfectant is commonly used in healthcare facilities for disinfecting application.

- Developed by internationally accredited laboratory Pacific Lab Services.
- Tested and trusted by industry players against coronaviruses family for animals.
- Protecting lives since 1953.

WHERE TO USE

- · Tables, chairs
- Telephones Computers, keyboards, mouse Door knobs/handles
- Glass surfaces
- Toilet fixtures
- Switches Fridge handles
- Remote controls Gvm equipment
- Sports equipment Entrances
- Walkways
- PassagesStairs/railings

Public/private transport, buses, taxis/cars, hospitals, domitories, food centres, shopping malls, gymnasiums, schools, community centres, childcare centres, airports, bus depots, temples, churches, workplaces, factories,

The product is for wiping &mopping only.



Do not spray on

- Wounds
- Food and food/eating utensils



+65 6759 1811 | corona@zagro.com www.zazacorona.com | www.zagro.com 5 Woodlands Terrace Singapore 738430

ZAZACORONA

Ready To Use Disin

ZAZACORONA

teady To Use Disinfectant

Engro support Indus Hospital to boost COVID-19 testing capacity

AVN Report

KARACHI - Engro Fertilisers a subsidiary of Engro Corporation has committed to provide Rs95 million to the Indus Hospital to expand the Covid-19 testing capacity across Sindh Under the 'Sindh Screening Programme Free of Cost' campaign. Engro

Fertilisers will sponsor the Indus Hospital network to launch testing interventions across rural Sindh. To ensure maximum coverage of the rural population, the testing campaign will be deployed in



Larkana, Nawabshah, Jamshoro, Sukkur, Tharparkar and Badin, which have seen a gradual increase in the number of cases over the past weeks. The initiative has been part of the Rs1 billion Hussain Dawood Pledge

According to Ghias Khan, President and CEO of Engro Corporation, "This partnership is geared to meet the priority of improving Covid-19 testing rates in Pakistan, based on the principle of inclusion and healthcare access for all. According to National Command and Operation Centre (NCOC), around 58 per cent of Pakistan's total coronavirus cases are now locally transmitted, hence, there is a real need for concerted focus on testing and isolation to control the spread of Covid-19. We look forward to continue collaboration with the government and expanding this programme with reputable implementation partners to other parts of Pakistan

Speaking on the occasion, CEO of Indus Hospital Dr Abdul Bari Khan said, "We are pleased to join Engro as an implementation partner to improve Covid-19 testing rates in Pakistan. To deal with this

Continued on Page 15

Management of heat stress in poultry

he normal body temperature of chicken has been found to be 105 to 107°F. The birds with high metabolic rate are more susceptible to various stress problems, which lowers the profit margin due to higher percentage of morbidity and mortality especially during extreme hot seasons.

The following are the most commonly face problems due to severe heat in summers.

Reduce the factors for heat

It is recommended that the depth of the litter should be modulated. The increase in the heap of litter, will comparatively increase the harmful factors to the birds in addition to the atmospheric heat. The heat produced from the birds is increased when the usual stocking density also heightens. Hence it is advisable to reduce the stocking density by increasing the floor space allowances. During extreme summer season, the environmental heat causes a severe threat to the birds, in addition to the heat disseminated from the birds.

It is advised to eliminate the total heat by installing pedestal fans / exhaust fans/ providing additional ridge ventilation. To reduce the heat radiating from the roof, the top of the roof should be painted with white colour and the bottoms of the roof should be painted with black colour. If the roof is of asbestos or tiles, it can be insulted by spreading paddy straw or thatches on the top of the roof.

If the temperature is too high, sprinkling of water



By Ghulam Raza Shah

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

on the top of the roof should be advised. Wet gunny bags should be screened on the sides of the poultry houses. This will reduce the heat considerably. Before constructing the poultry house, short growing plants and trees like soobabul, agathi, neem trees etc, should be planted around the sides of the houses

Nutritional manipulation

During summer months, the birds consume less quantity of feed than the usual consumption. This leads to less consumption of nutrients intake and thereby resulting in poor weight gain, drop in egg production and egg size. Hence it is suggested to increase the density of the nutrients in the ration. The energy level should be reduced and protein, calcium, phosphorus and all other important vitamin levels in the ration should be increased in extreme hot seasons. It is advisable to encourage the birds for consuming their maximum quantity of feed during the cooler parts of the day. Wet mash feeding is advisable during extreme hot summer. Increasing the frequency of feeding and raking the feed often will increase the feed consumption during summer. Provision of cool, clean, fresh and wholesome water is advocated. Ice cubes should be added to the water at extreme hot temperature period. Incorporation of anti stress vitamins like vitamin C in water should be advised. Frequency of watering the birds should be increased

Disease problems

General disease resistance of the birds is declined during summer season. Extreme temperature during hot season is the predisposing factor for the outbreak of the various diseases like Ranikhet, Infectious bronchitis, Infectious laryngeotrachitis, Infectious bursal diseases, Fowl pox etc, in poultry. Hence necessary precautions should be carried out. In order to check these diseases it is imperative to follow preventive vaccinations, follow strict sanitations and disinfection procedures along with proper medications.

Based on this, the poultry farmers are advised to strictly follow the basic principles for improving their flock performance during summer.

By Ghulam Murtaza Shah (SBB-UVAS)

asteurization is the processing of exposing the milk to a controlled temperature for a specific time with the object of destroying all the pathogenic bacteria and cooling the milk immediately to a temperature low enough to retard the growth of the surviving bacteria 161oF for 15 seconds and rapidly cooling to 50oF sufficient to kill the most common disease producing bacteria.

Why Milk is pasteurized?

Milk, a natural liquid food, is one of our most nutritionally complete foods, adding high-quality protein, fat, milk sugar, essential minerals and vitamins to our diet. However, milk contains bacteria that - when improperly handled may create conditions where bacteria can multiply. Most of the bacteria in fresh milk from a healthy animal are either harmless or beneficial. But, rapid changes in the health of an animal. Or the milk

handler or contaminants from polluted water, dirt, manure, vermin, air, cuts and wounds can make raw milk potentially dangerous.

Objectives of Pasteurization:

 To kill all the pathogens that may enter the milk & be transmitted to people.

pasteurization is High Temperature Short Time (HTST). This method involves using metal plates and hot water to raise the temperature of the milk to at least 161 °F (71 °C) for no less than 15 seconds, or 145 °F (62 °C) for 30 minutes, followed by packaging. The milk must

 Ultra High Temperature Another popular method of pasteurization is Ultra High Temperature (UHT). This process involves heating the milk using commercially sterile equipment and filling it under aseptic conditions into hermetically sealed

(UP) milk is heated using commercially sterile equipment, but it is not considered sterile because it is not hermetically sealed. Milk is heated to 280 °F (138 °C) for at least two seconds, then rapidly cooling it down. Since the milk is not hermetically sealed, it must be refrigerated with an average shelf life of 30 -90 days.

Since pathogenic micro-

Summary

organisms are readily isolated from raw milk through these methods. Many State health departments, the United States Food and Drug Administration and the International Dairy Federation strongly recommend that unpasteurized milk should not be drunk or used in the manufacture of any dairy product. Disease outbreaks from raw milk are usually associated with children visiting a dairy farm and drinking the raw milk, So people must be avoid to perches and sell the unpasteurized milk and follow the good milk hygienic practice at dairy frames.

Pasteurized Milk





- To improve the keeping quality of milk.
- To Increase the shelflife of products.
- To destroy microorganisms that would interfere with the activities of desirable organisms. Methods of Milk Pasteurization
- High Temperature Short

In the United States, the most common method of rapid cooling.

 Higher Heat Shorter Similar to HTST pasteurization, Higher Heat Shorter Time (HHST) uses slightly different equipment and higher temperatures for a shorter time. Using HHST, milk can be heated anywhere from 191 °F (89 °C) - 212 °F (100 °C) for its specified time (see chart below).

be heated to 280 °F (138 °C) for at least two seconds, then rapidly cooling it down. UHT kills more bacteria (good and bad) and gives it a much longer shelf life. UHT milk does not need refrigeration, until opened, and is shelf stable for at least six months

 Ultra Pasteurized Not to be confused with UHT, Ultra Pasteurized

Wheat growers chide Govt for 'delay' in procurement

AVN Report

LAHORE - Kissan Board Pakistan, Central Vice-President, Amanullah Chathha recently said that though the wheat harvesting has begun in central Punjab districts, the government has neither supplied growers with gunny bags, nor set up procurement centres so far to the worry of the farmers community.



While addressing the Media, Amanullah told "Neither a single gunny bag has so far been provided to wheat growers, nor a grain of the crop procured by the Passco or the provincial food department, while erratic weather conditions are giving sleepless nights to the farmers whose produce is lying in the fields." He said, "The situation is forcing the wheat growers to sell out their crop at throwaway prices to frontmen of arhtis (commission agents) and individual buyers as the government has banned the entry of large buyers like flour and feed mills into the market."

Chathha warned that Government policies will further deter the farming community from growing wheat as they already stand demotivated because of the 'meagre' increase in the wheat support price as compared to the rupee devaluation.

The Kissan Rabita Committee Pakistan has, meanwhile, demanded the government should compensate the farmers affected by the locusts attack and the untimely rains and hailstorms. It feared a significant drop in the per acre wheat yield because of the pest attack, intermittent hailstorms and rains in various parts of Punjab. Quoting UN Food and Agriculture Organisation (FAO), the committee's Secretary General Faroog Tarig said that the wheat crop suffered

Continued on Page 15

Corona hospital setup in agriculture varsity hostel

AVN Report

MULTAN - After the doctors of Nishtar Hospital protested over the announcement for conversion of the Pak-Italian Modern Burn and Plastic Surgery Centre of Nishtar Medial University into a coronavirus hospital, the provincial government recently decided to establish the facility at a girls' hostel of Muhammad Nawaz Sharif University of Agriculture. According to an official handout recently issued, a 100-bed field hospital would be established at the hostel for which work

Deputy Commissioner Aamer Khattak visited the location accompanied by District Health Authority Chief Executive Officer Dr Munawar

Adviser to the PM announced new opportunities for small enterprises

AVN Report

ISLAMABAD - Adviser to the Prime Minister on Commerce, Textile, Industry and Investment Abdul Razak

Dawood said recently that the government was finalising a scheme to

support small and medium enterprises (SMEs) across all sectors

"It is our endeavour to help small businesses as compared to larger ones because of their weaker

financial position," Mr Dawood said in a Twitter

Adviser to the PM on Finance Dr Abdul Hafeez Shaikh has already said that Rs100 billion had been allocated for supporting SMEs and the agriculture sector as part of the government's relief package of Rs1.2 trillion to deal with the impact of Covid-19 on

Salient features of the plan would include concessional loans to SMEs and the agriculture sector. SMEs, industry and agriculture will see deferment of loans both principal and interest. The



government will also provide risk quarantee to banks for fresh loans to SMEs, according to a tweet by Minister for Industries and Production Hammad Azhar. SMEs, being one of the largest and the most important sectors of economy, play a key role in shaping national growth strategies, employment generation and social

cohesion by improving standard of living of vulnerable segments of society. In most countries. SMEs constitute more than 90 per cent of all enterprises and significantly contribute towards inclusive economic

growth.

There has been concern that in Pakistan the SME sector has not been able to realise its full potential.

The SMEs continue to suffer from a number of

: weaknesses, which hamper their ability to take full advantage of the opening of economy and the increasingly accessible world markets. The areas of constraints are normally identified as labour, taxation, trade capacity, finance and credit availability, says a document of the Small and Medium Enterprises Development Authority.

PPA demands for approval of chicken, eggs export to Afghanistan

AVN Report

LAHORE - The Pakistan Poultry Association (PPA) has demanded the federal government to allow the poultry industry resume the export of chicken and eggs to Afghanistan.

In a recent press briefing, PPA (North) Vice Chairman Chaudhry Muhammad Fargham appreciated the Centre's decision to allow the export of selected items to Afghanistan for three days a week, and requested the government to "include chicken meat and eggs in the list of allowed items to

The vice-chairman maintained that Pakistan's poultry industry supplies "prime quality protein food in the form of poultry meat and eggs at a very affordable price".

Pakistan's poultry industry has an annual turnover of over Rs800 billion and it gives employment to over 1.5 million people directly and indirectly, he added.

Fargham said the poultry industry cannot pay electricity bills due to liquidity crunch (cash flow issues) caused by virus lockdown, and that the people in poultry business are now at the mercy of WAPDA officials since the disconnection sword is hanging on their heads. "We request the government to exempt the poultry sector, which includes feed mills, hatcheries, processing plants, broiler farms and layer farms, from disconnections. It should also be allowed partial payments [of electricity bills] for the next six months."



Fargham lamented that the poultry sector had so far witnessed more than 30pc reduction in demand due to the closure of marriage halls, restaurants etc.

Talking to this scribe, PPA-North Secretary Major (r) Javaid Hussain Bukhari noted that Afghanistan is highlighted dependent on Pakistan when it comes to the supply of chicken and eggs.

"Export of these essential food items would not only help our brotherly nation avert food crisis caused by coronavirus outbreak, but would also help Pakistan earn precious foreign

Meanwhile, market players fear that if the ban is not lifted immediately, India and other countries would capture the Afghan market and this could make Pakistan's re-entry very difficult.







وُنیامیں یالی جانے والی ہر تین میں سے ایک مُرغی میں CEVA کی مجمورو ویکسیز استعال کی جاتی ہیں



Phone: +92 42 111 (MARUSH) 627 874 +92 42 35887467 MARUSH E - mail: info@marush.com.pk



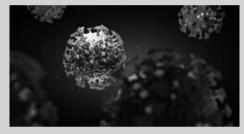
Positive Effects of Coronavirus **Pandemic on Environment**

(A Shift in Ecological Restoration)

By Zulgarnain Bagar¹, Junaid Latif²

¹University of Veterinary and Animal Sciences, Lahore, (Jhang Campus), Jhang, Pakistan. ²Northwest A&F University, Yangling, China. 712100

he outbreak of the Coronavirus has resulted in factory shutdowns and an overall decrease in traffic. NASA released satellite images taken in conjunction with the European Space Agency's pollution monitoring satellites shows a significant decrease in nitrogen dioxide (NO2) over China. The agency reported that the reduction of NO2 was due to the outbreak of the coronavirus. Nitrogen dioxide is a noxious polluting gas emitted by vehicles, power plants,



and industrial facilities. As the world shutdown businesses and the mobility of traffic is limited, the gas is no longer present. The images presented as map shows NO2 values across the world from before the quarantine (January 1-20, 2020) and during the quarantine (February 10-25). However, the researchers note that the new decrease has been more significant than in past years and there has been no rebound after the holiday.

While in New York, scientists at Columbia University reported a 5-10 percent drop in carbon dioxide (CO2) emissions and 35-50 percent drop in carbon monoxide (CO) this week as traffic levels drop to 35 percent. The level of Methane (CH4) emissions also dropped significantly. Because of the global lockdown from coronavirus pandemic, blue skies and fluffy white clouds have brought out in the atmosphere of California and southern hemisphere circulation trends paused on Antarctic zones. Which indicates the reduction in the emission of greenhouses gases and ozone depleting substances. Hence, overall decline in air pollution caused the elevation of Ozone (O3) level in the stratosphere.

A decline in seismic noise because of the reduction in human activity is bonus for geoscientists. Just as natural events such as earthquakes cause Earth's crust to move, so do vibrations caused by moving vehicles and industrial machinery,

Continued on Page 15



By Dr Atif Ali and Dr M Mehrban Shaheed Benazir Bhutto University of Veterinary and Animal Sciences, Skarand (SBBUVAS)

Introduction

Corona virus belongs to coronaviridae single stranded, positive-sense RNA virus, size of which is about 120 nanometer in diameter. There are about 40 different strains of corona which infect both human and animal. The virus that cause Corona virus disease (COVID-19) is thought to have originate in bats and then spread to snakes and pangolins and to human also via meat contamination.

Hantavirus belongs to Family of hantaviridae, Genus orthohantavirus and Order bunyavirales. Hantavirus had 10% mortality rate. It was named after the Hunter river in South Korea discovered by Ho Wang Lee, a South Korean virologist and his colleagues. As of 2017, 41 species of Hantavirus were identified. The virus can circulate asymptomatically in rodent, insectivores and Bats but sometimes cause illness in human. Hanta virus infection is commonly found in Asia, Europe and South America but less common in North America. More about their Discoveries

Corona virus was first discovered in mid 1960s, causing diseases in animals and humans. Since 2003 at least 5 new human coronavirus have been indentified. Severe Acute Respiratory Syndrome (SARS) caused by Novel Coronavirus (SCOV) is recently emerged human disease associated with pneumonia. The disease was first recognized in Guangdong Province, China in November 2002. Middle East Respiratory Syndrome coronavirus was discovered in 2012. Recently, a new strain of coronavirus is identified in December 2019 as 2019 novel corona virus disease (COVID-19). The strain of the virus was first discovered by a Chinese ophthalmologist in Wuhan Central hospital, Dr Li Wen Liang and died by the same viral infection on 7th of February 2020 at the

Hantavirus was first recognized when outbreak of Hemorrhagic Fever among American and Korean soldiers occurred during Korean War (1950-1953). In November 1993, specific strain of Hantavirus was identified in mice.

Sign and symptoms

Symptoms for Coronavirus may appear 2-14 days after exposure. Initial symptoms may include fever and shortness of breath. The alarming/emergency signs consist of trouble in breathing, persistent pain, constant pressure in the chest, bluish lips or face. Other signs include like fatigue, sputum production, sore throat, headache, nausea, vomiting and Diarrhea.

The incubation period of Hantavirus Pulmonary Syndrome (HPS) is unknown but in most cases symptoms develop in 1 to 8 weeks after

exposure. Sign and symptom of HPS is same like coronavirus. Fever, dry cough, body aches, headaches, diarrhea and abdominal pain.

Mode of Transmission

It is thought that coronavirus can be transmitted from animal to human but detail of which is still not clear. The outbreak of COVID-19 is similar to any other outbreak in past such as Sever Acute Respiratory syndrome (SARS) and Middle East Respiratory syndrome (MERS) in which corona virus migrate into human population from its animal reservoir

Like Coronavirus, Hantavirus is also not an airborne infection. It can only be spread if one comes in direct contact with infected rodent, its feces urine or saliva.

How to diagnose

The saliva and sputum can be collected from both upper and lower respiratory tract and can be assessed for RNA using polymerase chain reaction (PCR) test.

Hantavirus can be diagnosed serologically. The antibody titer can usually be detected by the time clinical signs are developed. ELISA, PCR, Immunochromatographic test and immunofluorescent antibody test are the most commonly used.

Treatment Modalities

No specific treatment but preventive measures and supportive therapy can save the life. In China, Dr Liu Bende stated that transfer of plasma from recovered patient to infected patients can be an effective strategy. He explained that recovered patient develops antibodies against virus which neutralizes the

The recommended dose for plasma is 200-300ml. Another strategy that Chinese healthcare professionals used was control against COVID-19 by using drug like faripiravir or avigan. The doctors recovered 340 patient by the usage of this drug and health professionals from USA recommended Choloroquine Phosphate, a malaria drug against COVID-19. Prevention of Corona virus includes cleaning

hands often avoid close contact with people and should wear a mask if sick. Hence practice social distancing as much as possible. No specific treatment has been found for Hantavirus. The mainstream supportive therapy is Ribavirin. This has been found as helpful in some cases especially in animals, though the responses in humans were disappointing. As per the instructions laid out by CDC (Centers for Disease Control) the infection of Hantavirus can be prevented by eliminating or minimizing contact with rodents in home or anywhere sealing any holes or gaps in homes and

garages. Both Corona and Hantavirus are single stranded RNA virus. Coronavirus can be transferred easily among the humans. The result of which is the global crisis that world is facing right now.

World Veterinary Day 2020

By Muhammad Ahmad

orld Veterinary Day is an annual event that was created and established to promote and highlight the lifesaving work performed by veterinarians around the world. The day was proclaimed in 2000 by the World Veterinary Association and it is celebrated on the last Saturday of April every

In 2020, World Veterinary Day will be celebrated on April 25th, usually; there is a specific theme every year. The theme of World Veterinary Day 2020 is "Environmental protection for improving animal and human health."



Veterinarians, in their role as advocates for animal health and welfare, have a responsibility as well as the opportunity to safeguard our environment for future generations. Their actions can help mitigate the effects of climate change, ensure proper disposal of medicines, and support responsible use of natural resources (e.g. water and feed) necessary in raising livestock.

A vet's main job is to take care of animals that are sick or injured. Vets take care of all sorts of animals. They examine animals to find out what is wrong and give x-rays and treatment to help them get better. Veterinary professionals do not only provide animal care, but they also perform number of other kinds of tasks and jobs, including conducting research, ensuring the nation's food supply is safe, and working towards controlling the spread of diseases. These professionals also have to own communications and problemsolving skills because they have to fulfill a number of roles. Veterinarians are involved in the care for companion animals, promoting the health of farm animals, working animals, and exotic animals.

Veterinary professionals are very much needed in every community to care for the pets, livestock and working animals. Veterinarians work towards improving the public health and the health of animals, they research, diagnose and treat diseases and medical conditions in pets and livestock. Some of the most prominent tasks of veterinary professionals include treating wounds, performing surgery, examining animals, testing and vaccinating against diseases, prescribing medications, operating medical equipment, and euthanizing animals.

To every veterinary professional: we hope you enjoy your special day and thank you for everything you do! To vet owners, try to always be on time for your appointments, follow the advice of your vet, and honor them on World

Continued on Page 15

'84pc households in Pakistan are food secure'

AVN Report

ISLAMABAD - The PSLM survey report 218-19 was recently conducted by the Pakistan Bureau of Statistics (FBS). The report covered 25,940 households across rural and urban communities for collecting information on a range of social sector issues education, health and food security by facilities and services. It is eleventh round of PSLM surveys since 2004 for monitoring of development plans at the provincial/ district level in the over-all context of MDGs (Millennium Development Goals) and now SDGs (Sustainable Development Goals). The calculation of food security is included in the report for the first time. It was revealed further that moderate or severe food insecurity is more in the rural areas as compared to the urban areas

Sindh witnessed the highest level of moderate or severe food insecurity followed by Khyber Pakhtunkhwa, Balochistan and Punjab,



The survey reveals that more than one half of the population of 10 years and older 61pc in 2018-19 as compared to 60pc in 2013-14 has ever attended

Similarly, overall 30pc children aged 5 to 16 are out of school in Pakistan as compared to 33pc in 2013-14, showing a overall declining trend. The percentage is highest in Balochistan and lowest in Punjab.

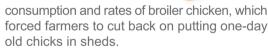
Out of school consists of children, who have never been to school and those children who attended school but left afterwards. At the same time, 24pc children age (5-16) years have never been to school in Pakistan, this percentage is highest in Balochistan, followed by Sindh and lowest in Punjab. Dropout rates are lower and have almost same pattern in all provinces.

The overall literacy has increased to 60pc from 58pc in 2013-14. There is increasing trend in provinces except Balochistan. The report reflects increasing trends in indicators of education such as literacy rate for male increased to 71pc and 49pc for female. In the youth, the literacy rate increased to 72pc from 71pc in 2013-14.

Poultry farmers warn of acute meat shortage

AVN Report

LAHORE - Pakistan Poultry Association (North) has warned of acute poultry meat shortage on the back of drastic decline in



PPA (North Region) Chairman Ch Fargham said on resumption of businesses as usual and opening of schools, hotels, restaurants, wedding halls, etc the demand was going to spurt and due to extreme low availability of chicken, prices would shoot up.

"If the government intervenes by way of price controls, the farmers who have lost during this period will suffer much greater loss and discouragement for resuming production," he warned. He said that the PPA understood that in the current situation, reopening marriage halls, hotels, restaurants, etc was not possible, and life of citizens was more important. But he said "it is our responsibility to inform the government" of the outcomes of these decisions. Fargham also mentioned that electricity had become the second highest input cost in chicken and eggs. In order to avert the losses, the association has requested for reduction in electricity tariffs and deferring recovery of loans.

Experts urged not to wash chicken before cooking

AVN Report ISLAMABAD -

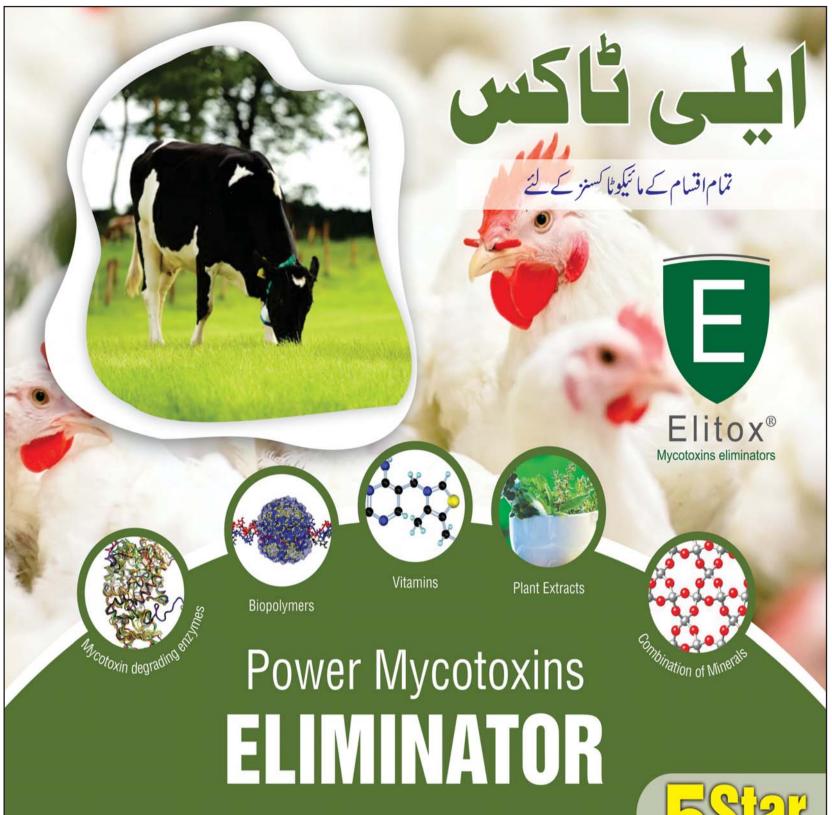
Experts have warned that people should stop washing chicken before cooking it so that

they can avoid food poisoning.

The British Food Standards Agency has issued a call to the public to stop the practice, as more than two-fifths of cooks say that they wash chicken as part of their food preparations, Medical Daily reported.

Campylobacter bacteria is responsible for the majority of cases of food poisoning and the FSA said four out of every five cases are caused by contaminated chicken, where in most cases people suffer from abdominal pain, severe diarrhoea and vomiting, some cases can lead to more significant health problems.

FSA chief executive Catherine Brown said that although people tend to follow recommended practice when handling poultry, such as washing hands after touching raw chicken and making sure it is thoroughly cooked, their research has found that washing raw chicken is also common practice.



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



www.zagro.com

Squirrels: A significant factor in Ecosystem

By Nusra Mukhtar¹, Shafqat Ijaz¹, Muhammad Bakhsh² ²University of Agriculture, Faisalabad ²University of Veterinary and Animal Sciences (UVAS), Jhang Campus,

quirrels belong to the family Sciuridae that includes small or medium-sized rodents. Squirrels are mainly found in America, Eurasia and Africa; and were introduced by humans to Australia. A group of squirrels are called a scurry or dray. They are very territorial and will fight to the death to defend their area. Mother squirrels are the most vicious when defending their babies. During the winter, however, all squirrels tend to become idle and typically stay in their nests. Most species of around squirrel, including the Arctic ground squirrel of Alaska, hibernate and are inactive throughout the winter.

How they look like:

Squirrels typically have slender bodies with bushy tails and large eyes. In general, their fur is soft and silky, though much thicker in some species than others. The coat color of squirrels is highly variable between and often even within species. As their large eyes indicate, squirrels have an excellent sense of vision, which is especially important for the tree-dwelling species. Many also have a good sense of touch, with vibrissae (for gnawing) that grow throughout life, and cheek teeth (for grinding) that are set back behind a wide gap, or diastema. The typical dental formula for Sciurids is 1.0.1.3/1.0.1.3.

Size Range:

Since there are so many types of squirrels, they range greatly in size. The smallest squirrel is the African pygmy squirrel. It grows to 2.8 to 5 inches (7 to 13 centimeters) in length and weighs just 10 grams. The Indian giant squirrel is the world's largest known squirrel. It grows to 36 inches (1 meter) long and weighs up to 4 pounds (1.8 kilograms).



What do Squirrels eat?

To prepare for cold months, squirrels bury their food. In the winter months they have a store of food they can eat when supplies are scarce. Because squirrels cannot digest, they must rely on foods rich in proteins carbohydrates and fats. In temperate regions, early spring is the hardest time of year for squirrels because the nuts they buried begin to sprout (and thus are no longer available to eat), while many of the usual food sources have not yet become available. During these times, squirrels rely heavily on the buds of trees. Squirrels, being primarily herbivores, eat a wide variety of plants, as well as nuts, seeds, conifer, cones, fruits, fungi and green vegetation.

Predatory Behaviour

Predatory behavior has been observed in various species of ground squirrels, in particular the thirteen-lined grey squirrel. For example, Bernard Bailey, a scientist in the 1920s, observed a thirteen-lined ground squirrel preying upon a young chicken. Wistrand reported seeing this same species eating a freshly killed snake.

Reproductive Behaviour:

A female carries her young for a gestation period of 29 to 65 days, depending on the size of the species; smaller squirrels have shorter gestation periods. They depend on their mothers for around two or three months. Female squirrels reproduce by mating and then birthing live young. They are able to begin the mating process at the age of one year. The second mating season occurs at the end of spring and lasts until late summer. Most squirrel species have two litters; one at the end of spring and one at the end of summer. Squirrels mate either once or twice a year and following a gestation period of three to six weeks, give birth to a number of offspring that varies by species. The young are altricial, being born naked, toothless, and blind. In most species of squirrel, the female alone looks after the young, which are at six to ten weeks and

become sexually mature by the end of their

Species of Squirrels:

Flying squirrels make their homes in tree holes or nests that are built into the crooks of branches. To get from tree to tree or from a tree to the ground, flying squirrels spread the muscle membrane between their legs and body and glide on the air. They can glide up to 160 feet (48 m), making it look like they can fly.

Eastern grey squirrel also known as the grey squirrel depending on region is a tree squirrel in the genus Sciurus. It is native to Eastern North America, where it is the most prodigious and ecologically essential natural

forest regenerator

Red squirrel or Eurasian red squirrel is a species of tree squirrel in the genus Sciurus common throughout Eurasia. The red squirrel is an arboreal, primarily herbivorous rodent. In Great Britain, Ireland, and in Italy numbers have decreased drastically in recent years.

Fox squirrel, also known as the Eastern fox squirrel or Bryant's fox squirrel is the largest species of tree squirrel native to North America. Despite the differences in size and coloration, they are sometimes mistaken for American red squirrels or eastern grey squirrels in areas where the species co-exist.

The Northern flying squirrel (Glaucomys sabrinus) is one of three species of the genus Glaucomys, the only flying squirrels found in North America.

The groundhog (Marmota monax), also known as a woodchuck, is a rodent of the family Sciuridae, belonging to the group of large ground squirrels known as marmots. It was first scientifically described by Carl Linnaeus in 1758.

The African pygmy squirrel is a species of rodent in the family Sciuridae. It is monotypic within the genus Myosciurus. It is found in tropical rainforests in Cameroon, the Republic of the Congo, Equatorial Guinea, and Gabon. It is not considered threatened, but likely declines locally due to habitat loss.

Role in the Maintenance of Ecosystem:

- · The caching behaviour of seeds by squirrels is very important for the renewal of many tree species, particularly plants that produce heavy seeds that have few chances to sprout when they fall near the parent plant. In this case, the squirrels promote germination by hiding the seeds far from the trees.
- · Squirrel take in its mouth nuts fallen on the ground, and dig a small hole 2-4 inches deep with the front legs so to place the nut with the help of the muzzle and cover it with earth. This behaviour is called "caching" or "hoarding". In autumn, when the nuts or cones of conifers are ripe, the squirrels may take up to an hour to hide groups of 1-5 seeds rich in energy in holes dug in the ground. Many of the hidden seeds will be recovered by the animals in winter and spring, but some will be forgotten. The seeds left in the ground will have the chance to germinate and give rise to a new
- The red squirrel eats many mushrooms, including the hypogeous ones (truffles and similar species). When the squirrel eats the mushrooms, it ejects the spores (the reproductive part) in the feces. Falling onto the soil, they can germinate, giving rise to a new fungus and a new association with plants. Squirrels, mushrooms and trees are thus linked

By Inam Ullah Yasir, Kamran Sajid University of veterinary and animal sciences, Lahore (Sub-campus CVAS Jhang)

t is the first milk produced after calving. It is creamy-yellow, sticky and thick in nature. The next 2-8 milking are termed as "transition milk". Main difference between colostrum and whole milk is that, it contains antibodies (which protect the calves against disease) growth factors, increased level of minerals and vitamins, cytokines and more energy as compared to whole milk. Protein and fat level is also higher in colostrum than whole milk. It has also been proved by researchers that there is no difference in calf weight gain between calf fed with individual dam colostrum and mixed colostrum. However, mixed colostrum can reduce colostrum quality due to dilution and there is a biosecurity risk in feeding mixed colostrum.

Importance of colostrum for

dairy calves: Colostrum contains high nutrition and it is energy source for newborn calf. About 20% solids in colostrum is highly digestible fat. Total solids present in colostrum are twice the whole milk. Fat plays important role in providing energy. It also contains chemicals which helps to provide additional energy to calves by using their own fat reserves. Colostrum is strengthened with vitamins and blood proteins. The concentrations of vitamin A, D and E and protein in colostrum are five times of the whole milk. It has been observed that vitamin status of colostrum depends upon cow's own vitamin status. As we know that calves are born without protective antibodies and they are more susceptible to disease. Colostrum is rich source of antibodies. Calf requires passive immunity which can be achieved by antibodies present in colostrum, untill calf's own active immunity begin to work. They do not get passive immunity through placenta, so any antibodies that they need have to be ingested (unless supplied by any artificial mean). Lactoferrin multinutritional protein is potent immunomodulatory and its significant concentration is present in colostrum. Lactoferrin also shows broad spectrum antimicrobial activity against bacteria, virus, fungi and protozoa. Lactoferrin helps in the growth of good bacteria within gut. Continuous feeding of smaller amount of colostrum or transition milk throughout the 1st two weeks of life can reduce the chance of diarrhoea in dairy calves.

Benefits of Colostrum



Colostrum improves long term production. It has been identified that there is positive correlation between serum IgG at 24-48hrs of age and average daily gain at weening.

How much colostrum should be fed?

As the calves birth weight varies depending upon gestation length and breed, the rule is to feed 8.5% of their birth bodyweight for the first feed (e.g. 40kg calf will require 3.4 liters). According to animal health Ireland, best practice for colostrum feeding is the "colostrum 1, 2, 3 rule" it has been described below as:

- 1. Use colostrum from the 1st milking for the first feed
- 2. Provide colostrum within 2hrs from calf's birth
- 3. Provide at least 3 liters Bottle or stomach tube should be used to give colostrum to calves, it provides them the quantity they require but stomach tube passing should be done easily and correctly. It has also been observed that calves left to suckle their dam attain less immunity.

Earlier the calf is fed after birth α greater the level of IgG absorption

Factors affecting the transfer of immunoglobulins/ antibodies

Volume of colostrum ingested, length of time from birth to first feed and quality of colostrum. Calf's ability to absorb IgG is highest in the first 2hrs after birth, after 6hrs this ability progressively declines and after 24hrs it completely ceases. Calf' ability to absorb IgG is also affected by bacterial contamination.

Factors affecting the level of immunoglobulins/ antibodies in colostrum:

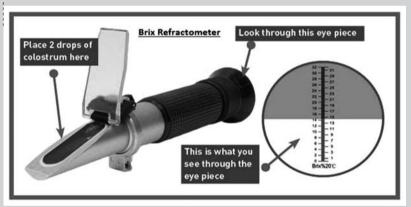
1. Lactation Number: 1st and 2nd lactation cows produce colostrum with lower IgG concentration as compared to 3rd and 5fh lactation.

2. Time interval from calving to first milking: colostrum harvested later quality of colostrum is very poor, it should not be used as calf's first feed but it can be used ad 2nd or 3rd feed. Measuring the colostrum quality indirectly by a brix refractometer or colostrometer is considered good. Visual assessing of colostrum quality should be discouraged. Following devices can be used to measure colostrum quality.

Colostrometer:

It is a device which floats in colostrum's sample, it measures specific gravity. As a rule, if colostrum contains high concentration of IgG, it will be denser and specific gravity reading will also be high. It means device will float higher in good sample and vice versa. However, frothiness of the sample, total solid content and temperature can affect the colostrometer readings.

Brix Refractometer: it is the pocket sized device and uses light to measure density of liquid. Values greater than 22% suggest that quality of colostrum is suitable for calves first feed. This device is quite accurate in measuring IgG level.



than 10hrs post-calving has lower: IaG concentration than colostrum harvested before this time

- 3. Month of calving: later calving cows produce colostrum with lower IgG concentration
- 4. Month of calving: later calving cows produce colostrum with lower IgG concentration
- 5. Breed of cow and length of the non-lactating period

How to measure colostrum quality:

Colostrum quality can be measured by the level of immunoglobulin/ antibodies G (IgG) present. IgG concentration should be greater than 50g/L. It has been seen that if colostrum is collected immediately after the cow calves, it contains highest level of IgG. Concentration of IgG 60mg/ml is considered very good, 50mg/ml good and 30mg/ml is considered very poor. It is recommended if the

Storage of colostrum

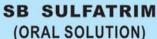
Colostrum can be stored at 4C for 2 days without affecting its absorption. Storing colostrum at any higher temperature decreases its absorption. Frozen colostrum can be stored at -18 to -25C for at least year, it will not change its quality. Refrigerated and cold colostrum should be warmed in water before feeding. Colostrum should never be thawed in boiling water. Temperature above 50C cause antibodies and protein to

FPT(Failure of passive transfer) immunity develops in calves which are unable to get enough colostrum. FPT increases the risk of disease and mortality. It is the reason that it should be measured that calves have received adequate antibody protection or not. FPT can be determined by zinc sulphate turbidity test. Test is measured in Zinc Sulphate Turbidity units.



WE ARE PROUD OF PROVIDING BEST QUALITY SB CHICKS & FEEDS





SB SULFATRIM (ORAL SUSPENSION)

(WATER SOLUBLE POWDER)

SB TYLAN 10%

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

Hantavirus: A deadly virus

By Maryam Korejo

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

t is scientifically proven that the mortality rate of Hantavirus is 10%. The virus was named after Hunter River, located in South Korea. The virus was first discovered by Ho Wang Lee and his colleagues in 1976. They isolated the virus from the lungs of stripped field of mice.



The virus is also known as Hantavirus Pulmonary Syndrome (HPS). It was first outbroken back in 1933 at U.S. The first case reported was a young physical fit man who was suffering from shortness of breath and died shortly.

In March 2020, a man from Yunnan, China was tested positive for Hantavirus. He died while travelling to Shandong for work on a chartered bus. According to the local Press, around 32 other people have been tested for the virus.

Introduction

Hantavirus, also called as Orthohantavirus is genus of single-stranded, enveloped negative-sense RNA virus. The virus belongs to the family, Hantaviridae and Order, Bunyavirales.

The virus infects rodents, but do not cause disease in them. Humans become infected with Hantavirus through contact with rodent urine, saliva, or feces.

The Hantavirus is not transmitted from human to human contact.

Physiology

Hantavirus virions are about 120-160 nanometers (nm) in diameter. The lipid bilayer of the viral envelope is about 5 nm thick and is embedded with viral surface proteins to which sugar residues are attached.

HPS: A Rodent-Borne Disease

Hantavirus pulmonary syndrome is a life threatening disease. It was spread in California by mice among human population.

The symptoms are similar to influenza. The virus can be found mice feces, urine and saliva. The infected dropping can become airborne. This can be inhaled by humans, leading to cause acute respiratory distress. The infection can become life threatening very quickly.

Symptoms

The early symptoms include chills, fever and muscle aches. The symptoms will lead into dry cough, headache, nausea, vomiting and shortness of breath.

The viral disease is most prevalent in rural areas. Campers and hikers are more likely to catch disease because tents rest on the ground. Though it is proven that disease cannot spread between humans.

Treatment

Ribavirin can be used against Hantavirus Pulmonary Syndrome (HPS) but its effectiveness remains unknown, still, spontaneous recovery is possible with supportive treatment.

As of 2016, there is no FDA-approved, commercially available vaccine against hantavirus. A vaccine known as Hantavax has been under study since 1990. As of 2016, the development was in clinical phase 3 trial stage.

Conferences held in UVAS on supply chain of dairy, poultry

LAHORE - University of Veterinary and Animal Sciences (UVAS) recently arranged two separates consultative stakeholder video conferences on challenges of efficient food supply chain of dairy, poultry and meat in Punjab during

COVID-19
emergency.
Punjab Minister for
Livestock and Dairy
Development
Sardar Husnain
Bahadur Dareshak

presided over the events and discussed the issues, challenges which affected the livestock sector. He sought

recommendation/sugges tions and technical input from the stakeholders for formulation of policies/plans for smooth supply chain to catering the needs of country especially during COVID-19 emergency to safeguard the farmers for their profitability.

UVAS Vice-Chancellor

Prof Dr Nasim Ahmad,

stakeholders from public and private dairy, meat and poultry sectors across Punjab, academicians, researchers and officials from Livestock Department participated in meetings through video link



Prof Dr Talat Naseer Pasha urged the Livestock Department to start a media campaign for awareness among the general public that consumption of milk, meat and eggs was not only safe but also significantly helped boost immune system for effectively combating the coronavirus. An open discussion was also held. All the participants put forward various suggestions/recommend ations about how to

combat such crisis during emergency situation in the country. It was recommended that the import of milk powders especially skimmed milk powder in the country be banned immediately to safeguard local dairy

industry.
Furthermore, it was recommended that feed mills, franchises and livestock products-related retail shops should be allowed

to remain open by government during emergency from 9am to 8pm. The participants demanded provision of cargo flights and subsidy on freight for facilitation of export of chicken, eggs and red meat to the regional markets during the lockdown. They called for giving special package to the livestock and poultry sector by giving them tax exemptions and free electricity during COVID-19 emergency situation. -PR

Engro support Indus ... Continued from page 04

pandemic, it is critical that coronavirus cases are detected early and the patients are isolated to prevent transmission of the virus."

Nadir Qureshi, CEO of Engro Fertilisers, said that, "Engro Fertilisers is committed to support Pakistan's fight against Covid-19, the most pressing issue faced by the country today. Currently, Pakistan has one of the lowest per capita testing rates in the world, which could impact the efforts to contain the virus. This collaboration with Indus Hospital will enhance the outreach of testing facilities across key clusters in Sindh and InshaAllah help fight this pandemic more effectively."

Under the Rs1 billion pledge made by Engro Corporation chairman Hussain Dawood and Dawood Hercules Corporation, Covid-19 relief efforts will be supported in services, kind and cash on multiple fronts, including disease prevention, with a major focus on testing and diagnostics; protecting and enabling healthcare practitioners and other key workers, who are at the frontline of the fight against this pandemic; enabling patient care and facilities; and bolstering livelihoods and sustenance of the most deserving in society. although their effects from individual sources.

Wheat growers chide ...

Continued from page 06

a heavy damage because of rains and locusts attack during the months of March and April, demanding a fair compensation for the affected farmers to save them from starvation and enabling them to sow the next crop as well.

He argued that the farmers were already facing financial crunch because of the drop in milk sale due to closure of hotels and tea-stalls in the wake of Covid-19 pandemic.

He demanded that the farming community, like

other workers, should also be compensated for the losses they are suffering because of the pandemic and other reasons.

Positive Effects of ... Continued from page 08

might be smaller but together, they produce background noise, which lessens the ability of seismologist's to detect other signals occurring at the same frequency. The crowds of tourists who normally swarm the Venice canals are gone and the number of motorboats vastly reduced. As a consequence, the normally polluted waters of the canals are clearer than at any time. There are no boats, there is no traffic. We can hear birds chirping in busy localities. It is improving not only air quality, water pollution and seismic noise, but also various other environmental factors including noise pollution. In short, these are just some of the possibly beneficial effects of the coronavirus pandemic on the environment. And this time, definitely earth is recovering by itself.

World Veterinary Day ... Continued from page 09

Veterinary Day and every day! They are doing their best for your beloved friend.

The earth gives us everything we need to live. It is our home and the home of countless species. Our responsibility is to take care of our environment. The 2020 theme celebrates the participation of veterinary professionals in supporting sustainability and protecting the environment. It is also an opportunity for veterinarians to exchange innovative ideas and learn other approaches to keep raising awareness on how harmful actions towards the environment can affect animals and humans. We want to thank everyone involved in the veterinary world for their dedication and willingness to help animals, even in difficult times.

Opposition slams center... Continued from front page

Mr Sharif also objected to the composition of the commission saying those who had been part of the inquiry committee were also made members of the panel for forensic audit.

"The [composition of the] inquiry commission is not justifiable as members of the committee had been nominated as members of the commission, too," he said, demanding that former prime minister Shahid Khagan Abbasi and former federal comer minister Khurram Dastgir Khan should be allowed to join the commission's proceedings for exposing the real characters behind the sugar and wheat export scandals. Reacting to the statement, the government accused the opposition of indulging in petty politics not withstanding the coronavirus pandemic. Federal Information Minister Firdous Ashig Awan told a press conference in Sialkot that the opposition leader had commented on an issue which was yet to be approved by the cabinet on Monday.

Defending the subsidy decision, she chided the opposition leader saying neither the prime minister nor his close family members benefited from the subsidy unlike the PML-N government when son and other relatives of Mr Sharif had taken advantage of the scheme. She regretted that the opposition was politicising during the pandemic while the prime minister had been urging all to rise above petty politics for forging a united front against the disease.

Poultry industry is on ... Continued from front page

are reluctant in taking them under the current circumstances. As a result, most of the chicks are dying at the hatcheries."

He further explained, "For instance,

; if poultry farmers are spending Rs150 to produce one ka chicken. the same is available in the market at Rs90 per kg. This means the poultry farmers are taking a hit of about Rs60 per kg.

"Owing to high production cost, the poultry farmers are reluctant to produce chicken and this may lead to low production. And when the demand will ultimely increase in Ramazan, the prices will automatically go up as production (supply) would be less." Bukhari said before the Covid-19

lockdowns, poultry farmers were producing chicken for marriage halls and restaurants (major consumers). "Following the lockdowns, they have stopped buying our produce which has badly impacted our sales."

He said the biggest reason behind high cost of production is the exorbitant cost of ingredients used to prepare chick feed, adding that farmers aren't getting enough return from the market to cover the costs. Agreeing with Bukhari, Irfanullah Malik, a poultry farmer and trader from Sahiwal, requested Prime Minister Imran Khan to help avert the prevalent poultry crisis and provide healthy, hygienic and economically-priced chicken meat to the nation, besides saving hundreds of thousands of people associated with poultry industry from unemployment.

He said the production cost of chicken has increased 50pc within the last two years, however, the "farm gate rate" and chicken's "market price" on average has been on the same level for the last decade or so.

"We want the government to give a relief package to broiler poultry farmers, and also announce interest free and concessional loans schemes with easy terms and quick processina.'

Malik further urged the government to reduce taxes, custom duties on

poultry feed, medicines, raw materials, utility costs, etc. Meanwhile, former PPA chairman Abdul Basit informed that hatcheries produce around four million chicks on a daily basis (six million kgs of chicken). "But due to lockdown and closure of marriage halls, cumulative losses of poultry industry as a whole is around Rs1 billion per day."

He said as the government had announced to reschedule loans for industries and sectors that had defaulted after December 31, 2019, it should also reconsider this clause for poultry industry, which defaulted way before this date due to high cost of production.

"The government should defer the electricity and other utility bills for three months to help the poultry industry survive this tough period," he added

Manifold increase in ... Continued from front page

bazaars, except some model bazaars in Lahore and other districts due to threat of coronavirus. According to vendors, the fault doesn't exist on their part but on the hoarders.

Lahore Market Committee Secretary Shahzad Cheema admitted the fact of hike in the prices of fruits and vegetable. "It is profiteering and the Deputy Commissioner (DC) has circulated a message for all price control committees in our WhatsApp group. He directed the magistrates to launch a crackdown on the profiteers and hoarders," he said. He also held the people responsible for purchasing certain essential goods in bulk ahead of or during Ramazan and creating spike in the

"This attitude tempts the wholesalers as well as retailers to increase prices," he added. Cheema said in a day or two the prices would see a downward trend.

Meanwhile, the Lahore DC in a press release said the city district administration on Saturday imposed a fine of Rs61,000 besides arresting seven vendors for profiteering.

Poultry Businesses hit ... Continued from page 04 a backyard venture till 1960s.

He said, "The indigenous chicken and eggs business had been jolted by the pandemic due to disruption of supply and demand chain between villages and cities." Resultantly, prices of eggs and chicken have witnessed a sharp decrease of Rs 25-30 per dozen eggs and Rs. 100-150 per chicken in open markets, he added. Dr Alamzeb Khan, Director General, Livestock and Dairy Development Department KP said that substantial losses have been witnessed by poultry owners, milkmen, butchers, transporters and others stakeholders associated with livestock and poultry productions due to corona virus pandemic in last two months. "These losses were being evaluated

an inclusive package would be prepared to help poultry and livestock farmers affected by the pandemic," the DG said. Dr Alamzeb said KP was mostly relying on Punjab for chicken and meat requirements and plans were under-consideration regarding opening of cattle markets at least one each in all districts in a week. He said poultry meat contributes 37pc in overall meat consumption and sufficient stock was available in markets to fulfill peoples'

by a high-level Task Force led by Additional Chief Secretary KP and

on basis of its recommendations,

during next few months then about 50,000 poultry workers are likely to lose jobs and poultry's productivity would be adversely affected. Mohibullah, Provincial Minister for Agriculture and Livestock Department said special package for poultry farmers affected by corona virus situation was under consideration.

requirements.

Dr Alamzeb feared that if

coronavirus was not contained

Under PM's Backyard Poultry Program worth Rs834.81million, he said the department would help the affected farmers by distributing five hens and one rooster among them. He said poultry program was launched last year under aegis of PM"s National Agricultural Emergency Programme worth Rs 309.7 billion, under which one million poultry birds would be distributed in next four years among poor people in KP.

Livestock Minister said wheat harvesting season would formally commence from DI Khan on April 20 that would substantially reduce prices of livestock and poultry's feed and sale of poultry situation would be improved.

Disclaimer

Contents of Agro Veterinary News do not necessarily reflect the views of the publisher, editor and the member of the editorial advisory board. The publisher and the editor bear no responsibility/liability whatsoever for any damage resulting from the use of the contents herein.

Karachi

Mehmood Centre, BC-11, Block-9, Clifton-5, Karachi

Tel: 021-3587 2289, 3583 4932, 3583 3172

92-21 35836940

Email:irfan@medicalnewsgroup.com.pk mkt.dn@medicalnewsgroup.com.pk

Lahore

11485 C-5/4 Alluddin Road, Cantt.

Tel: 042-3667 6296 Fax: 92-42 3667 3518

Islamabad

House no. 128, Street-11 sector E/17

Tel: 051-210 6747

Subscribe to >



Please provide us with these details to aid customer service

Mobile

Email:

Renewal

if working company name

Pakistan's First Independent Agro Veterinary Periodical

Yes I want subscribe to AVN for 1 year (12 Issues)

By Courier Rs. 3000/= Rates

Outside Pakistan US \$ 150

I wish to pay in the following way (tick appropriate box)

Country –

- 1- Bank Transfer Net of all bank charges to: A/c Title: Agro Veterinary News Bank UBL A/c # 0949-01032003
- 2- I am sending in the name of Agro Veterinary News Karachi

Personal Details
(Please write in Block Capitals)

Address

ш	Pay Order
	Bank Draft
	Money Order

Bank Draft
Money Order

Karachi: Mehmood Cent 9, Clifton-5, Karachi 021-35872289, 35834932, 35833172 92-21 35836940

Attention Renewing Subscription
Please fill in your subscription number

Return to: When complete either mail, email or fax your details to one of the following contact points:

POWERFUL COMBINATION WINNING PRODUCTS





VETY AMPRO PLUS

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



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 PRODUC

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:

Cola Moxin - Powder

Spelinamox - Powder

Grow-Mix - Liquid

Waltak - Injection

Vacci Drops - Dropper Super Premix - Premix

Bio Unibiotic - Liquid E.C. Adek - Liquid Livamin - Liquid

Liso Hen - Powder

Askrolyte - Powder

Gumbo Hen - Powder Asper Tox - Liquid Mentho Hen - Liquid Mico Ton - Liquid Uni Renal Target - Liquid Mune E Plus - Liquid

Vety Ampro Plus - Powder Vety Dek - Powder

Vety Strescheck - Powder Penprol Solution - Liquid

PolyQuin - Liquid

1Kg

Tridin Bolus - Bolus **Bio Oxfend Plus - Suspension** Fenfoxamide - Drunch Bio ECT - Powder 98% Vision Shrien Feed Block Linspec - Injection Amoxa 20 - Injection

LIVESTOCK PRODUCTS

C.S. Minerals Multigest Plus **Dressing Oil** Red Mido - Injection Tri Zone - Injection Meloxa - Injection Gentex B-10 - Injection Penprol - Injection



REQUIRED DISTRIBUTORS FOR MULTAN, FAISALABAD, HYDERABAD AND KARACHI

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



web: www.vision-traders.pk



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 smecite 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

was sent sent to be a

PHIBRO ANIMAL HEALTH CORPORATION

more my cotoxins.

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

Everything about Transmissible Venereal Tumor

By Muhammad Ayub DVM (CVAS)

transmissible venereal tumor (TVT) is a naturally occurring tumor that is sexually transmitted from one dog to another. A high number of cases tend to be seen in veterinary hospitals. TVT is usually seen in young, intact (non-neutered) dogs. Symptoms and its Types A red, tumorous mass bulging out of the surface membrane of

the vagina, or on the penis. The tissue mass may break off upon manipulation. Blood drops may also be observed dripping from the vagina or penile foreskin. The dog will usually lick the affected area with frequency.

Causes

This condition is the result of direct contact with tumor cells from a diseased animal. It is transmitted through the act of

sex, and can also be transmitted; dog, etc. by oral contact. Infact, free roaming dogs are at greater risk of acquiring and spreading this disease

Diagnosis

A veterinarian will need a complete health history, with as much information as possible regarding when the symptoms began, how much freedom your dog has to roam freely or whether there are other dogs that roam the area, if you have been attempting to breed your

The physical examination will focus especially on your dog's genital organs. A tissue sample of the mass will need to be taken for biopsy, and fluid samples will be taken for the standard laboratory tests, including the complete blood count, biochemistry profile and urinalysis. The results of these tests are usually within normal ranges, but in some cases blood cells or abnormal cancer cells may be found in the urine sample. Visual diagnostics will include chest and abdominal Xrays to determine if there has been metastasis, and what stage it is in, if cancer is present. Veterinarian will also palpate the lymph nodes of the affected area to determine how much the lymph nodes are reacting to the abnormality, an important distinguishing factor when cancerous cells are present. A sample of lymph fluid will be sent to laboratory for further evaluation, to determine if cancerous cells are in the

sample. The presence of

cancerous cells in the lymph

that the tumor is not benign.

nodes is often a strong indication

Treatment will be based on the results of these tests

Treatment

Surgery may be difficult due to the location of these tumors. Surgery alone often leads to recurrence. Chemotherapy is very effective for TVTs. The prognosis for complete remission with chemotherapy is excellent. The most common chemotherapy agents used are vincristine, vinblastine, and doxorubicin. Radiotherapy may be required if chemotherapy does not work. Vincristine sulphate should be used @ 0.025mg/kg of body weight.

Surgical intervention

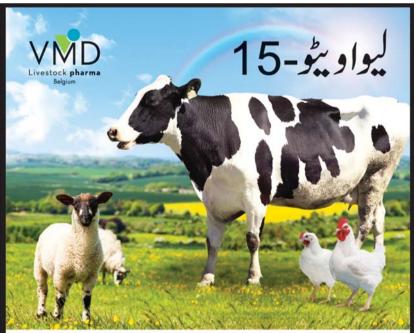
Complete surgical excision, radiation therapy, and chemotherapy are effective treatments however. chemotherapy is considered the treatment of choice. Complete surgical excision may be difficult (and often cannot be achieved) due to the location of these tumors. Surgery alone often leads to recurrence. If there is resistance to chemotherapy, radiation therapy may be required. The prognosis for total remission with chemotherapy or radiation therapy is good.





Chakwal Pharma International

House of Quality Medicines & Vaccines



EVAVETo-15



GASTRO-INTESTINAL NEMATODES:

- Trichostrongylus spp
- ✓ Bunostomum spp
- ✓ Oesophagostomum spp



Dictyocaulus viviparus









Orient Traders International =





4 poultry workers died from Coronavirus in Georgia

SAVANNAH, GEORGIA -

Four employees of a major poultry producer's operations in rural southwest Georgia have died after becoming infected with the coronavirus. a company spokesman said recently.

Tyson Foods spokesman Gary Mickelson said three of the employees worked at : American workers who

the company's chicken processing plant in Camilla. while the fourth person worked in a supporting job outside the plant. He declined to say how many workers there have tested positive for COVID-19, the disease caused by the new virus.

process the nation's meat have proven especially susceptible to the new virus, as they work shoulder-toshoulder on production lines. Several U.S. plants have closed because of outbreaks, including a large plant owned by Smithfield Foods in Sioux Falls, South Dakota, that produced

a mamilia A

roughly 5% of U.S. pork before it was shut down after more than 500 workers became infected.

Mickelson said two other

Tyson Foods workers have died from the virus at its plant in Columbus Junction, Iowa. "We realize everyone is anxious during this challenging time and believe information is the best tool for combating the virus," Hector Gonzalez. Tyson's senior vice president for human resources, said in a statement. "That's why we're encouraging our team members to share their concerns with us, so we can help address them." Gonzalez said the company has improved safety measures at the Camilla plant by checking employees' temperatures. requiring workers to wear face coverings. installing dividers at work stations and providing more space in break rooms. He said the company in March had "relaxed our attendance policy to encourage workers

to stay at home when

they're sick."

Wholesale and

Union, which

Department Store

The Retail,

represents 2,000 workers at the Georgia chicken plant, identified the three plant employees who died as women who had worked there for 13 to 35 years. A statement from the union said many plant employees are "sick or in quarantine." "It's too little too late here." Edgar Fields, president of the union's Southeast Council, said in a statement Friday

The Georgia Department of Public Health reported Friday that 650 deaths statewide have been linked to the virus.

Infections have been confirmed in more than 17,100 people. About 20% of them were hospitalized. In Georgia's rural southwest corner, where the Camilla plant is located, the rate of coronavirus infections and deaths have outpaced far more densely populated regions of the state. The union said many plant employees live in neighboring Dougherty County, which leads Georgia with 91 coronavirus deaths. For most people, the new coronavirus causes mild or moderate symptoms that usually clear up within weeks. For some, it can cause severe illness and be life-threatening. The union has called on poultry processors to require employees to quarantine themselves for 14 days, and pay them sick leave, when they're exposed to coworkers testing positive for the virus. It also wants individual departments to be shut down for 72 hours and cleaned after a worker tests positive.











Fluximine

Non-Steroidal Anti inflammatory Analgesic Agent



Powered by:



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

Printed at Clifton Printers, BC-11, Block-9, Clifton, Karachi - 75600, and published by S. Hashim Hasan, 1485 C/5-4, Allauddin Road, Lahore Cantonment, Lahore.