



The Veterinarian

Official Newsletter of the Sri Lanka Veterinary Association

ISSN: 2279-2082

Issue I

July-October

2016

In this Issue

Message from the new President of the SLVA, Professor Basil Alexander	1
The 68 th Annual Scientific Sessions of the SLVA	3-4
The 68 th Annual Convention of the SLVA	5
Announcements	6-7
Continuing Professional Development (CPD) Programmes	8-9
Bovine Mastitis (Part II)	10-11

Message from the President SLVA 2016/2017



It is my pleasure to be delivering the Presidential speech in the 68th Annual Convention as the new President of the Sri Lanka Veterinary Association. The SLVA being the largest professional organization of veterinarians in Sri Lanka is capable of contributing to the GNP of Sri Lanka in a positive manner by way of increasing livestock production in line with the government development programs. The past presidents of the SLVA too have actively involved in this endeavour in addition to their valuable contributions to the development our profession.

As a universal rule, different times call for diverse approaches. I intend to augment the professional unity during my tenure as the president of the SLVA. At present our profession is facing many challenges that have never been experienced before. Our

focus is being pulled in many directions. Irrespective to those challenges we must remain focused, united and have one vision and one voice. While engaging in different practice areas, we must have mutual respect and understanding and collaborate with our colleagues to make this world a better place for animals and humans alike. While contributing to increase animal production by attracting more young veterinarians to food animal practice in state and private sectors making them financially viable, active professional involvement in the national and global trends such as animal welfare, mitigation of antimicrobial resistance, prevention of trans-boundary animal diseases which fall under one health concept will be assured during my tenure. I kindly request all members of the SLVA to join hands to achieve these noble tasks.

Thank you.

Professor Basil Alexander
69th President of the SLVA

For the latest issue of the Sri Lanka Veterinary Journal, visit our official website <http://www.slva.org/slvj.php>

Message from the Outgoing President - Dr. K. Kuleshwarakumar



Serving SLVA as president for the past one year had been a multifaceted experience. I have stopped being amazed at the pace and amount of work our many volunteers put into serving the SLVA by participating in the monthly Ex-Co meetings, being involved in the CPD programs as resource persons, reviewing publications and research papers which continue to improve and offer information on current scientific activities. All these activities help accomplish the mission of the SLVA which fosters our members across the many disciplines represented in SLVA to address many issues and challenges. Serving as the president, I had the opportunity to interact with different strata of people in the society. Following the tradition initiated by my processors, we the committee have standardized most of our processes and procedures with the help of academicians, scholars and industrial colleagues. This will allow the new committee to focus on initiatives that will further increase the quality of SLVA activities and the value of our membership and provide all of us with an enhanced sense of community and oneness. The financial strength that we have gained will provide more efficient infrastructure, and we can respond better and faster to the need of the members and expand our horizons both in technologies and in services. We have cultivated trusting relationship and friendship with all the stakeholders to promote exciting and viable common initiatives. All these accomplishments achieved during the past year would have been impossible without the hard and dedicated effort of all SLVA Ex-Co members.

69th Executive Committee of the SLVA (2016/2017)



Prof. Basil Alexander
President



Dr. Susil Silva
President Elect



Dr. K. Gunasekara
Vice President



Dr. L.G.S. Lokugalappatti
Vice President



Dr. Chanaka Rabel
Secretary



Dr. R.M.C. Deshapriya
Treasurer



Dr. K.K. Jagath
Asst. Treasurer



Dr. Neshma Kumudini



Dr. M.N.M. Fouzi
Asst. Secretary



Dr. Bandula Kumara
Asst. Secretary



Dr. V. Dharmawardena



Dr. R.A.J.U. Marapana



Dr. K.D. Ariyapala



Dr. Neil Alles



Dr. K. Nizantha



Dr. Ruchika Fernando
Former Secretary



Dr. Sanjaya Wasala
Former Treasurer



Dr. Kuleshwarakumar
Former President

The 68th Annual Scientific Sessions of the Sri Lanka Veterinary Association (SLVA)



The scientific sessions held on 15th July, 2016 at the Oak-Ray Regency Hotel, Kandy, provided an opportunity for veterinarians to share recent research findings, clinical experiences and knowledge on current developments in veterinary and allied sciences.

Keynote Address by Nimal Pathiraja, Professor in Food Safety, Jinan University, China



The keynote speaker at the Scientific Sessions reviewed contributions by veterinarians to food safety and discussed why it has become even more important in the 21st century. Professor Pathiraja highlighted that veterinarians' contribution to food safety has increased in a wide range of areas, including risk-based controls applied at different parts of the food chain. He stated that one of the strategies to intensify animal production is using improved genotypes. He also stressed that respective governments should develop suitable policies to mitigate these serious global risks in food safety.

Guest Lecture by Indira Silva, Senior Professor in Veterinary Clinical Sciences, Uni. of Peradeniya



Professor Indira Silva delivered the guest lecture at the 68th Scientific Sessions titled "An update on vaccinations of the dog and cat". The lecture was based on the latest vaccination schedule recommended by the Vaccination Guidelines Group of the World Small Animal Veterinary Association (WSAVA) for dogs and cats. Further information on the latest vaccination schedules has been published on Proceedings of the 68th Annual convention of the Sri Lanka Veterinary Association, July 2016.

Awards Presented at the SLVA Scientific Sessions 2015/2016

Dr. Perumal Pillai award for the best research paper published in the Sri Lanka Veterinary Journal, Vol. 62, December, 2016. Nuclear and microtubular behavior in somatic cell sheep embryos activated with 6-dimethylaminopurine and cycloheximide by *Basil Alexander*

Dr. Hector C. Perera Memorial award for the best Clinical Communication

Managing hypoxia with administration of oxygen via nasal cannula in dogs by *S. De Silva & E.A. Rajapaksha*

Dr. & Mrs. A.R. Mohamed award for the best presentation in the Animal Health Session

A molecular epidemiological survey of bovine *Babesia*, *Theileria*, & *Trypanosoma* in cattle and water buffalo in Vietnam by *K.M.S.G. Weerasooriya, T. Sivakumar, D.T.B. Lan, P.T. Long, H. Kothalawala, S.S.P. Silva & N.Yokoyama*

Air Commodore Dr. R.M.P.H. Dassanayake award for the best presentation in the Animal Production Session

Polymorphism of casein cluster genes in Ayrshire and Holstein Friesian dairy herds in Sri Lanka by *Ruwini K. Rupasinghe & Saumya Wickramasinghe*

SLVA award for the best presentation in the Wildlife & Aquatic Animal Health Session

First isolation of exotic bacterial pathogen *Edwardsiella ictaluri* in Sri Lanka from an imported stock of catfish (*Pangasius sutchi*) by *S.S.S. De S. Jagoda, R.A.D.S. Ranatunga, D.M.S.G. Dissanayaka, T.P.M.S.D. Bandara, W.R. Jayaweera, G.S.P.de S. Gunawardena & A. Arulkanthan*

Dr. Arunasiri Iddamalgoda award for the best poster

Profiling of bacterial public health hazards associated with elephants participating in the "Esala Perahera" by *G.D.B.N. Kulasooriya, P.P. Jayasekara, J.M.S.M. Wijayarathna, M.K.U.T. Amarasiri, B.C.G. Mendis, A. Siribaddana, A. Dangolla, R.S. Kalupahana & B.R. Fernando*

SLVA Awards for Excellence in Performance at Examinations - Veterinary Undergraduates

M. P. Seneviratna gold medal for excellence in Veterinary Parasitology : *Miss N.M. Wijesekara*

D. Senevirathna gold medal for excellence in Veterinary Public Health : *Miss K.A.S. Nadeeshani*

The 68th Annual Convention held at the Earl's Regent Hotel, Kandy



The Minister of Rural Economic Affairs, Hon P. Harrison, graced the occasion as the Chief Guest. The Director General of the Department of Animal Production and Health, Dr. Aruni C. Tiskumara, and the Dean of the Faculty of Veterinary Medicine and Animal Science, Prof. H.B.S. Ariyaratne also participated as special invited guests.

Felicitations of Professor Viranjanie K Gunawardana



Professor Viranjanie Gunawardana, former Professor at the Department of Veterinary Basic Sciences of the Faculty of Veterinary Medicine and Animal Science, University of Peradeniya was felicitated for her tremendous contributions made for the betterment of the Veterinary profession.

Guest Lecture at 68th Annual Convention by Dr. H. P. Premasiri, Pussalla Meat Producers



Dr. H. P. Premasiri, the General Manager of Pussalla Meat Producers (Pvt) Ltd, delivered the Guest Lecture on “Present status and challenges faced by the Poultry Industry” at the Annual Convention. He presented novel ideas about how to overcome these challenges to expand the industry to the next level.

MVSc in Animal Reproduction (2017 Cycle)

The batch of 2016 MVSc students are on the verge of completing the degree programme in February 2017. The Faculty of Veterinary Medicine and Animal Science is now calling applications for the second cycle of the course to be commenced in January 2017.

Application deadline: **15th of November 2016**

Contact Professor Basil Alexander, course director, on 077 378 2141 or basilalex66@gmail.com for the application procedure

Dr. Dhanapala Research Fund

SLVA offers two research grants worth Rs. 20,000 each for field veterinarians.

Application deadline: **30th of November 2016**

Contact Dr. Chanaka Rabel, SLVA secretary, on 0713 179 379 or chanakarabel@yahoo.com for further details



1-Year Scholarship in Japan

Rare Opportunity for 2 Sri Lankan Veterinarians to Study in Japan

- Are you 45 years or younger as of April 1st 2017?
- Have you worked at a Veterinary Investigation Center or as a field veterinarian for at least 5 years?
- Are you a member of the SLVA as of November 10th 2016?

If you answered YES to the above questions, you may qualify to apply for a fully funded training programme in Japan...

Visit www.slva.org/jvma-scholarship for more details...

Application Deadline: November 10th 2016



SLVA Annual Convention 2017



Date : 22nd July 2017
Venue : Nelum Pokuna, Colombo-7

Acknowledgement of Sponsors of the 68th Annual Convention

Platinum Sponsor

Coral Property Developers (Pvt) Ltd.

Bronze Sponsor

CIC Vetcare (Pvt) Ltd.
Stassen Exports (Pvt) Ltd.
Hemas Pharmaceutical (Pvt) Ltd.
Super Feed (Pvt) Ltd.
Brown and Company PLC (Pvt) Ltd.
Farmchemie (Pvt) Ltd.
Ronasco (Pvt) Ltd. & QUADRAGEN VETHEALTH

Other Sponsor

Ceylon Grain Elevators (Pvt) Ltd.
Zagro Singapore/Browns (Pvt) Ltd.
Astron (Pvt) Ltd.
Eastern Traders (Pvt) Ltd.
Citi Health (Pvt) Ltd.

Silver Sponsor

Gold Coin Feed Mills Lanka Ltd.
Fonterra Brands Lanka (Pvt) Ltd.
Pussalla Farms (Pvt) Ltd.

Bronze Sponsor

New Anthoney's Farms (Pvt) Ltd.
Hayleys Agriculture Holdings Ltd,
Gamma Pharmaceutical (Pvt) Ltd.
Vet World (Pvt) Ltd.
Bairaha (Pvt) Ltd.
Chemifarma International (Pvt.) Ltd.

Other Sponsor

Alltech Biotechnology (Pvt) Ltd.
Crybro (Pvt) Ltd.
Weehena Farms (Pvt) Ltd.
Agro Nutrition Ltd.
Megavet (Pvt) Ltd.

Objectives of the 69th Executive Committee for 2016/2017

The first committee meeting of the 69th executive committee of the SLVA was held on 22nd July, 2016 considering the fields of specialization of executive committee members, it was unanimously decided to dedicate activities to the following two major themes during their tenure.

- (1) Dairy development as a means for food security, poverty alleviation and national development
- (2) Professional development for Veterinarians

The SLVA will cover these major themes by conducting a series of CPD programmes in different provinces according to the following schedule.

- 5th August 2016 - Southern Province (completed)
- 23rd September 2016- Uva Province (completed)
- 21st October 2016 - North Central Province
- November 2016 - Sabaragamuwa Province
- January 2017 - Wayamba Province
- February 2017 - Eastern Province
- March 2017- Western Province
- April 2017 - North Western Province
- May 2017-Northern Province

Continuing Professional Development (CPD) Programme Conducted in Baddegama, Galle

The first CPD programme organized by the 69th Executive Committee of the Sri Lanka Veterinary Association was conducted on the 5th of August, 2016 in the Baddegama Veterinary Range, Galle, targeting government veterinary surgeons of the Southern Province. The Veterinarians were trained on “Management of Transition Cows” and “Application of Intra-Vaginal Progesterone Devices for Oestrus Synchronization of Cattle and Buffaloes”. The event was partly sponsored by Agrinova Pvt Limited.

Resource persons: Professor Basil Alexander , Dr. Keerthi Gunasekera, Dr. Sampath Lokugalappatti, Dr. Chanaka Rabel, Dr. Deshapriya Rathnayake, Dr. Jagath Kankanamge, Dr. R.A.J.U. Marapana and Dr. K. Nizanantha of the 69th executive committee.



Continuing Professional Development Program Conducted in Welimada, Uva province

The second CPD programme organized by the 69th Executive Committee of the Sri Lanka Veterinary Association was held on the 23rd of September, 2016 in Welimada, Uva province. The areas discussed were Professional development for veterinarians by Drs. Keerthi Gunasekera and Ruchika Fernando, Clean milk production by Dr. Deshapriya, Common diseases of ornamental fish by Dr. Fouzi, and Transition cow management by Dr. Jagath Kankanamge. Further, a practical session was conducted by Prof. Basil Alexander and Dr. Nizanantha on Usage of ultrasound scanning for estrus synchronization of dairy cows.

The event was sponsored by ProCare Holdings (Pvt) Ltd, Welimada dairy farmers and milk collectors.



Bovine Mastitis (Part II)

Dr. PGA Pushpakumara *BVSc, PhD, FSLCVS*

Senior Lecturer, Department of Farm Animal Production and Health, Faculty of Veterinary Medicine and Animal science, University of Peradeniya

Common causes and clinical manifestations of clinical and sub clinical mastitis were described in Part I (SLVA Newsletter, Issue 1 & 2, 2015/2016) and this issue deals with the treatment of clinical mastitis.

Selection of antimicrobial: The following criteria should be considered when choosing an antibiotic for treating clinical mastitis:

- antibiotic sensitivity of the organism involved
- ability to penetrate udder
- ability to persist in the udder for sufficient time after single or multiple infusions
- effectiveness in the presence of milk
- mode of action of the antibiotic
- lipid solubility, plasma protein binding properties and pH in solution
- cost & availability
- withdrawal period.

Route of administration of antibiotics

Intramammary: The main advantage of using this route to treat mastitis is that high concentrations of antibiotic can accumulate at the site of infection with small amount of Infusion. This type of treatment is generally sufficient for non-invasive type of infection where invading pathogens reside in epithelial lining of ducts and alveoli of mammary gland. Intramammary infusion also would prevent unnecessary systemic use of antibiotic and development of antibiotic resistance. Disadvantages of this route include; the drug action can be impeded by the inflammatory process and possible irritation of the mammary tissue by the drug. Some of the intramammary preparations available in Sri Lanka contain 10 mg of prednisolone, which is aimed at reducing the swelling and firmness in the affected quarter. This may also enhance the distribution of antibiotics.

Systemic route: This route of administration is required when deep tissues of the udder are involved (*S. aureus* and *S. uberis*). Successful systemic treatment requires passage of drug to the site of infection by crossing the blood-milk barrier. The drug diffusion rate is directly proportional to drug concentration gradient and lipid solubility. As such only lipid soluble and unbound drug can enter the udder. Selection of antibiotic to be used in intramammary or parenteral is given in following table.

Table 1. Distribution of antibiotics after intramammary or parenteral administration.

Distribution after intra mammary administration		
Good	Moderate	Poor
Ampicilin	Benzyl Penicillin	Aminoglycosides
PenethamateHCl*	Tetracycline	
Amoxicillin	Cloxacillin	
Novobiocin	Cephalosporines	
Erythromycin		
Distribution after parenteral administration		
Good	Moderate	Poor
Tylosin	Sulphonamide	Aminoglycosides
Erythromycin	Penicillin	Ceftiofur
PnethamateHCl	Tetracyclines	
Trimethoprin + sulphonamide		

* an ester of benzyl penicillin and reaches concentrations in the milk five to ten times higher than those achieved by other penicillin salts.

Combine treatment: Combine treatment is often used when animal is pyrexic. Reports have shown that cure rates increased when combine treatment was used especially in *Staph aureus* infection.

Treatment options for mastitis during lactation:

Treatment of clinical mastitis could be based on severity of mastitis (mild, acute or severe), potential pathogenic organism involved, stage of lactation and previous history if any in the farm. Mild or subacute mastitis could be treated with intramammary infusion alone without visiting the farm. Correct advice should be given to the farmer regarding the hygienic measures to follow when infusing the tube and the number of tubes and frequency of using it. The combine treatment is usually required for acute mastitis and mastitis caused by *Staph aureus* and *Strep uberis*. Veterinary intervention is required for administration of antibiotic and possibly NSAID. Severe or peracute mastitis which causes generalized endotoxaemia leads to hypovolaemia, reduced cardiac output and poor tissue perfusion. These animals could be treated with large volume of isotonic saline (7% dehydrated cow weighing 400 kg with 10-12 liters) within 10 minutes. Other option is to infuse hypertonic saline (7.2%) 1-2 liters over a short period which induce drinking of water. NSAID such as flunixin meglumine can be given IV initially and then IM for another 2-3 days. Although the use of intramammary antibiotics is debatable, combine treatment is used to treat peracute mastitis. Broad spectrum antibiotics such as potentiat-

ed sulphonamide, OTC or calvulanic acid potentiated amoxicillin can be recommended for parental use. However, due to poor availability of OTC after IM injection, it is best given IV. If intramammary infusion is not administered, regular stripping of affected gland is crucial to remove the toxins and injection of oxytocin (20 IU) can facilitate stripping. In this case intramammary infusion could be infused after the last stripping for the day. Other supportive therapies may include multivitamin and slow IV infusion of calcium borogluconate if mastitis occurs close to calving.

Heifer mastitis

Mastitis control programmes in large dairy farms do not pay attention to control mastitis in first calf heifers as heifer mastitis was quite uncommon in these farms. However, in the recent past a significant number of heifer mastitis cases have been reported in these farms. Reports have shown that intramammary infection (IMI) is quite high in first calf heifers and the commonest isolate was Coagulase Negative *Staphylococci* (CNS). However, the major pathogen isolated from clinical mastitis cases in heifers was *Strep uberis* and *Staph aureus*. In addition Coliforms have also been isolated from clinical cases. One New Zealand study has shown that milk production and total milk fat decrease by 7.8% in experimentally infected mastitis in heifers. Heifers with open teat canal and dripping of milk close to calving and unhygienic udders are at greater risk of getting heifer mastitis. The possible strategies to control heifer mastitis include;

- prepartum parenteral antibiotic treatment
- prepartum intramammary antibiotic treatment
- infusion of teat sealant
- application of external barrier (sealant or teat dip).

Prepartum parenteral treatment with penthamate HCl and penicillin G have been proven to reduce heifer mastitis. However, prepartum treatment with tylosin failed to have any effect on heifer mastitis. Prepartum intramammary treatment with either dry cow (DC) or lactating cow (LC) products has shown to reduce IMI and mastitis following calving in heifers. Prepartum administration of teat sealant has been shown to reduce IMI and clinical mastitis in heifers considerably. Application of barrier teat dip and more recently external teat sealant have shown to reduce IMI and clinical mastitis during early postpartum period in heifers. Increased incidence of clinical mastitis in freshly calved cows and heifers in large upcountry dairy farms could be satisfactorily controlled by daily dipping of teat with iodine based solution starting from 4 weeks prior to calving. This strategy could be effectively applied in small and large scale dairy farms to control mastitis in freshly calved cows and heifers.

References:

TJ Parkinson, JJ Vermunt and J Malmo (2009). Diseases of Cattle in Australasia. Published by The New Zealand Veterinary Association Foundation for Continuing Education (VetLearn®)

Roger Blowey and Peter Edmonson (2010). Mastitis Control in Dairy Herds (2nd Edition) Published by CAB International.

**WITH BEST COMPLEMENTS
FROM**



SUPPLIERS OF

**MEDICAL LABORATORY EQUIPMENT & CONSUMABLES, VETERINARY EQUIPMENT & CONSUMABLES
ELECTRONIC TESTING & MEASURING EQUIPMENT**

<p>BOVINE/SWINE SEMEN LIQUID NITROGEN CANS AI CONSUMABLES LIQUID NITROGEN TRANSPORT VESSELS VETERINARY ULTRASOUND SCANNERS</p>	<p>- ALTA GENETICS CANADA - MVE CHART USA - CONTINENTAL PLASTICS USA - WESSINGTON CRYOGENICS UK - ECM- FRANCE</p>
---	--

No. 39,
School Lane,
Nawala,
Sri Lanka.

Tel : (011) 5733800 722757575
Tel/Fax. (011) 2864067
Email : procaremedical@slt.net.lk
procare@slt.net.lk



Coral



Coral Property Developers



CORAL PROPERTY DEVELOPERS (PVT) LTD
No. 58, Davidson Road, Bambalapitiya.
Tel: 0112-596225 / 0114-951636
Fax: 0112-596224
Email: marketing@coral.lk
Hotline: 0777 994 403 / 0777 994 406
0777 994 407 / 0777 994 408 / 0777 994 409
www.coral.lk



The Veterinarian

Official Newsletter of the Sri Lanka Veterinary Association

If undelivered, please return to:

To:

SLVA Secretariat,

OPA Centre,

275/75,

Prof. Stanley Wijesundara Mawatha,

Colombo 07.