

JOURNAL OF CAMEL PRACTICE AND RESEARCH

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Cover Photo: Top (Left): Diseased animals with Johne's disease in a group, Top (Centre): Dromedary camel for hump biopsy at Al-Jouf, Saudi Arabia, Top (Right): Bactrian camel for hump biopsy at Aigene, Kazakhstan, Bottom (Left): The mucous membrane of the intestine showing increased size of folds in a camel with Johne's disease, Bottom (Centre): Cartoon representation of 3D model of Paraflagellar rod 1 protein, Bottom (Right): Microfilariasis in camel during blood smear examination (Top), Adipose tissue suggestive of a lipoma (H& E stain) (Bottom).

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EDITORIAL

Dear Friends

The Journal of Camel Practice and Research completes twenty years of journey with this issue and during this period of two decades it has proved to be a milestone in enriching the camelid literature. It has also helped in bringing out many fruits in form of books of hitherto unavailable titles. The changing trends of research were depicted with every issue of this journal. Camel Publishing House would like to thank all its contributors and members of editorial board for strengthening the platform of JCPR.

Current issue has more focus on research on diseases and genes of *Trypanosoma evansi*. Scientists from UAE investigated that dromedaries produce antibodies against a variety of viral agents i.e., Epizootic Haemorrhagic Disease (EHD) and Schmallenberg virus (SBV) and highlighted new findings about brucellosis in camels. Scientists from Saudi Arabia studied the clinical, haematological, biochemical and pathological findings in 60 camels affected with *Mycobacterium paratuberculosis*. Scientists from India isolated *K. pneumoniae* from acute respiratory tract infected camels and fungal infections of skin i.e. *Epidermophyton floccosum*, *Scopulariopsis brevicaulis*, *M. audouinii*, *M. canis*, *M. nanum*, *M. ferrugineum*, *T. verrucosum*, *T. mentagrophytes*, *T. schoenleinii*, *T. equinum*, *T. concentricum*, *T. tonsurans*, *T. violaceum*, *T. soudanense* and *T. rubrum*. Scientists from India and Iran worked on Bluetongue Virus using BT-AGID test and c-ELISA test to detect antibodies against BTv.

The validity of immunohistochemistry in the proportional labeling of the diverse components of the lactating and non-lactating mammary gland was done. Primary antibodies against S100, alpha smooth muscle actin (α -SMA) and cytokeratin (Ck) were applied on paraffin sections. Scanning electron microscopy of the mucosa of the large intestine was also done.

Characterisation of Paraflagellar Rod 1 (*pfr1*), Rode Trypanozoon Antigen Type VSG (*RoTat* VSG) and the Alternative oxidase (*aox*) genes of *Trypanosoma evansi* from camel at molecular level marked the research in the field of parasitology. The effect of melarsenoxide cysteamine hydrochloride (Cymelarsan®) on the haematological changes in one humped camels (*Camelus dromedarius*) experimentally infected with a field strain (CT/29) of *Trypanosoma evansi* was also done.

The research in the field of nutrition involved estimation of effect of supplementation of calcium salts of fatty acids (CSFA) from palm oil (PO) at two levels (3 and 6%) to the concentrate feed mixture (CFM) on productive performance of dromedary she-camels and the rumen degradability and kinetics of some feedstuffs was also done. The effect of omega 3 polyunsaturated fatty acid (n3 PUFA) and vitamin E supplementation on blood fatty acids and vitamin E in alpaca were studied.

The pharmacokinetic disposition of marbofloxacin and danofloxacin was studied in camels and the variation in thermophysiological responses and heat tolerance of four Saudi camel breeds was investigated.

The best medium for *in vitro* maturation of camel oocytes was determined and measurement the gene expression of Connexin 43 and Glucose transporter-1 (GLUT-1) was done. The genomic DNA was extracted from 25 Iranian native camels and amplified using published primers that were designed based on bovine CAPN1 and ovine LEP gene sequences for carcass studies.

Ice-creams variants like chocolate, dry fruit, pineapple, rose-petal, strawberry and vanilla were developed and standardised in the laboratory using different combination of camel and cow milk

The effect of general anaesthesia with isoflurane and halothane on serum concentration of cardiac troponin I (cTnI) was determined. A significant variation was observed in both cortisol and glucose values with anaesthetic regimes (propofol 2 mg kg⁻¹\xylazine 0.25 mg kg⁻¹ and propofol 2 mg kg⁻¹\xylazine 0.25 mg kg⁻¹\diazepam 0.25 mg kg⁻¹).

The ultrasonographic findings in camels (*Camelus dromedarius*) with trypanosomiasis and clinical assessment of fractures also found space in this issue. Collection of hump fat by biopsy for monitoring the composition of fat storage or for the follow-up of xenobiotic lipophilic molecules is a new study.

The pathological studies include the histopathological features of dermatomycosis and sarcoptic mange mixed infection accompanied with chronic granulomatous hidradenitis, lipoma in the left ischio-rectal fossa, anomaly anotia and otognathia.

I am sure that every issue of JCPR would set the new trends of current and future research in the field of camel science. Camel Publishing House wishes a Happy New Year 2014 to its contributors and readers.



(Dr. T.K. Gahlot)
Editor