EDITORIAL

ROLE OF CAMELS IN FOOD SECURITY IN ARID AND SEMIARID REGIONS

The growing population of the world is projected to reach 9.7 billion by the year 2050. The priorities of the 21st century are food and water security which cannot be achieved without sustainable and intensive agricultural production. There is a continuously rising trend of number of camels in the last few decades and the population is estimated to be approximately 40 million head of Bactrian and dromedary camels and this may go above 60 million in 25-years' time (Faye, 2020). In parallel with the number of animals, the world's annual camel milk production has also increased from 0.63 million tonnes in 1961 to 3.15 million tonnes in 2020 (FAO, 2020; https://www.fao.org/faostat/en/#data/QCL); this is a 5-fold increase over the 60-yr period. With this quantity, camels are the fifth most important dairy animals. Although most camels are kept in developing countries under pastoral, extensive, or semiintensive systems, well-planned intensification might potentially help the further development of the species and its integration into the food production chain. In order to make the milk residue free, the controlled use of veterinary drugs under the supervision by a qualified veterinarian and regular monitoring is required (Nagy *et al,* 2022).

(Faye, B. 2020. How many large camelids in the world? A synthetic analysis of the world camel demographic changes. Pastoralism. 10:25. doi: 10.1186/s13570-020-00176-z and Nagy PP, Skidmore JA, Juhasz J. Intensification of camel farming and milk production with special emphasis on animal health, welfare, and the biotechnology of reproduction. Anim Front. 2022 Aug 12;12(4):35-45. doi: 10.1093/af/vfac043)

The current issue of the Journal of Camel Practice and Research has brought 4 review papers, i.e. MVA-based vaccine efficacies on the immune response and seroprevalence of MERS-CoV, methanogenesis and superovulation in dromedary camels, and parasitic infections of Bactrian camels in Mongolia. These review papers would not only help researchers in continuing research but would also enrich the literature and citations on the diverse topics and research being discussed in those papers. Another interesting research has come up on use of camel milk whey proteins with cytotoxic potential against cervical cancer cell line; this antineoplastic attribute of camel milk protein will be greatly appreciated, if positive results are achieved. Good research on pathology involving pulmonary lesions and cutaneous histoplasmosis in dromedary camels and immunological study in Bactrian camels on serological diagnosis of *Parabronema skrjabini* infection using a recombinant antigen also finds space in this issue. The pharmacokinetics and pharmacodynamics of betamethasone (phosphate and dipropionate), triamcinolone acetonide and hydrocortisone; molecular characterisation of diacylglycerol o-acyltransferase (dgat1) gene in camels marks important study of this issue. Cheese made from mixed milk of camel and goat, constituents of follicular and oviductal fluid, ultrasonographic assessment of follicular size, ultrastructure of pelvic urethral gland, prosthodontic application of acrylic polymer in buccal fistula and dexmedetomidine as sedative are other notable research published in the April 2023 issue of JCPR.

I am sure that all camel researchers and practitioners would continue their support for JCPR in future as well.

(Dr. Tarun Kumar Gahlot)
Editor