

EDITORIAL

Special issue on “Recent Trends in Camel Research”

Bernard Faye^{1,2*}

¹FAO Consultant, Camel and Range Research Center, P. O. Box n°322 Al-Jouf- Sakaka, Saudi Arabia

²FAO/CIRAD-ES, Campus International de Baillarguet, TA C/dir B 34398 Montpellier, France

*Email: bernard.faye@cirad.fr

The camel (dromedary and Bactrian) is more and more a study object for scientists around the world with an increasing number of publications which are devoted to him either on its biology or on its performances, its health and its place in the desert ecosystems. The success of the last ISOCARD (International Society on Camelid Research and Development) conference at Muscat (Sultanate of Oman) testifies to the dynamism of the camel sciences and to the growing interest of the scientific world for a species remaining marginal in the research, including in the countries where the camel plays an undeniable economic and environmental part.

The “Emirates Journal of Food and Agriculture” (EJFA) has already published many papers on camel research in the past. As it is widely involved in research in arid regions, the EJFA is implied in the dissemination of the information regarding all agricultural and agro-food activities in such context. Thus, the proposal for a special issue on camel underlines the commitment of the journal for contributing to a better knowledge of camel biology and performances.

The present issue included 10 papers with wide variety of topics. In a first paper (Abdallah and Faye, 2013), presents changes in camel farming systems in an emblematic country (the Kingdom of Saudi Arabia) are analyzed. Emblematic because the Kingdom is probably the country of the Arabian Peninsula where the camel biodiversity is the most important and where the modernization of the camel farming is quite fast as we observed in the Emirates. The urbanization is pushing Bedouins to be settled around the town and to intensify the camel production. And consequently to propose a more adapted products to the urban consumers. For this reason, the quality of camel meat must be better known has it is proposed by the second paper on Bactrian camel meat (Raymbeck et al., 2013). The quality of camel meat is due to its gross composition widely described in this last paper, but

also to its specific components as vitamin D (El-Khasmi et al., 2013).

Meat and milk are the main products issued from camel farming and the quality of milk proposed to the consumers deserves also to be better investigated. The milk quality concerns not only the hygienic aspects but also some of the virtues attributed to camel milk. For example, the capacity of the lactic bacteria strains isolated in fermented camel milk for absorbing the heavy metals and then, contributing to the detoxifying effect of the camel milk (Akhmetsadykova et al., 2013). In general, the milk composition, especially its protein part, has to be explored more deeply because it is only through a fine analysis that the scientific community will be able to understand the specific character of this milk (Si-Ahmed Z. Saliha et al., 2013). This composition as well the yield is varied according to very various factors. In their study, Attigui et al. (2013) explored the effect of the estrus status of lactating camel on the milk production and composition. Samara et al. (2013) showed that the infra-red thermographic technology could be a convenient method to assess the thermophysiological responses during lactating period and thus to take the good decision under heat stress conditions.

The camel is seasonal breeder which represents a constraint for example for planning deliveries or for satisfying milk market demand. In consequence, methods for synchronization could be very helpful for answering to this constraint (Monaco et al., 2013). A method using the dosage of progesterone in fecal samples is also proposed especially by taking in account the storage temperature of those samples (Fatnassi et al., 2013). The camel is known for its ability to support long dehydration without negative effect on the kidney function. This property is studied by measuring the creatinine metabolism as the best indicator of the kidney function (Kamili et al., 2013).

Considering these contributions, it appears that the camel is arousing interest in many fields of research, from farming system up to physiology. It is encouraging also to see that the present special issue will contribute to deepen the knowledge regarding camel through the world with investigations and studies from Morocco, Algeria, Tunisia, Egypt, Saudi Arabia, Kazakhstan, France, Sultanate of Oman and Italy. The camel science is really entered in globalization.

References

- Abdallah, H. R. and B. Faye. 2013. Typology of camel farming system in Saudi Arabia. *Emir. J. Food Agric.* 25(4):250-260.
- Akhmetsadykova, Sh., G. Konuspayeva, G. Loiseau, A. Baubekova, Sh. Kanayat, N. Akhmetsadykov and B. Faye. 2013. Protection against lead contamination by strains of lactic acid bacteria from fermented camel milk. *Emir. J. Food Agric.* 25(4):274-282.
- Atigui, M., M. Hammadi and T. Khorchani. 2013. Effects of oestrus on milk yield and composition in Tunisian Maghrebi camels (*Camelus dromedarius*). *Emir. J. Food Agric.* 25(4):291-295.
- El Khasmi, M., R. Bergaâ, F. Riad, A. Safwate, E. H. Tahri, M. Farh, N. El Abbadi, R. Abouhafs and B. Faye. 2013. Meat levels of 25-hydroxyvitamin D3 in Moroccan one-humped dromedary camels (*Camelus dromedarius*). *Emir. J. Food Agric.* 25(4):267-273.
- Fatnassi, M., M. Hammadi and M. Khorchani. 2013. Effects of storage temperature and time on fecal progesterone concentration in camel (*Camelus dromedarius*). *Emir. J. Food Agric.* 25(4):301-307.
- Kamili, A., M. Bengoum, M. Oukessou, B. Faye and H. P. Lefebvre. 2013. Assessment of glomerular filtration rate in normally hydrated and dehydrated dromedary camel by plasma exogenous creatinine clearance test. *Emir. J. Food Agric.* 25(4):314-319.
- Monaco, D., G. M. Lacalandra and K. A. El-Bahraw. 2013. Ovarian monitoring and effects of Controlled Intravaginal Drug Releaser (CIDR) on vaginal environment and follicular activity in dromedary camels, during non-breeding season, in Egypt. *Emir. J. Food Agric.* 25(4):296-300.
- Raiymbek, G., B. Faye, A. Serikbaeva, G. Konuspayeva and I. T. Kadim. 2013. Chemical composition of Infraspinatus, Triceps brachii, Longissimus thoraces, Biceps femoris, Semitendinosus, and Semimembranosus of Bactrian (*Camelus bactrianus*) camel muscles. *Emir. J. Food Agric.* 25(4):261-266.
- Samara, E. M., M. Ayadi, A. A. AL-Haidary and R. S. Aljumaah. 2013. Thermophysiological study in lactating and dry camels (*Camelus dromedarius*) under summer conditions. *Emir. J. Food Agric.* 25(4):308-313.
- Si-Ahmed Z. Saliha, S. I., S. Almi, D. Senoussi, C. Boudjenah and A. Mati. 2013. Separation and characterization of major milk proteins from Algerian Dromedary (*Camelus dromedarius*). *Emir. J. Food Agric.* 25(4):283-290.