

PROCAMED

“Promotion des systèmes camelins innovants et des filières locales pour une gestion durable des territoires saharienne”



Mission activity report action 2.1 “Amélioration de la productivité numérique par l’introduction de biotechnologie de la reproduction”.

Medenine, 14 to 21 December 2012

Activities Coordination:

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Participants: dr. Mrs. Fatnassi M. (I.R.A. Tunisia), Dr Seddik (I.R.A. Tunisia), dr. Mrs Padalino B. (D.V.M., Italy), dr. Nagy (DRC, Egypt), dr. Monaco D. (D.E.T.O., Italy).

Activity report

Objectives of the implemented activities were:

- A. To implement the knowledge exchange and cooperation between partners of the project and share experience about the evaluation of dromedary camel behavior and about the management of male camels used for semen collection
- B. to implement an evaluation of the dromedary camel hormone profiles during the 24 hours of the day
- C. to monitor the behavior of the male camel belonging to the experimental semen collection Centre of Institute des Régions Arides (IRA, Medenine, Tunisia)
- D. to analyze and interpret data of the previous breeding season studies.
- E. to discuss and set cooperation activities to be implemented during the 2014 breeding season

The evaluation of dromedary camel behavior previously performed at IRA during the 2012-2013 breeding season and the acquired experience were the object of the visit of dr. Nagy (DRC, Egypt) in Tunisia. Dr. Nagy spent more than two weeks (from 4 to 20 Dec) sharing his experience on dromedary camel nutrition behavior and being involved in the studies implemented in Tunisia about, male camel's sexual behavior, during his visit. Moreover he participated to the other activities developed during the visit of the Italian Team.

The evaluation of the hormone profiles and behavior during the 24 hours were also performed. Serial blood sampling were collected at 2 hours interval for 48 hours, continuously. Indwell catheters were inserted in the jugular vein in order to collect samples without pain or stress, thus respecting animal welfare. Animals were also trained by classical conditioning for allowing the blood collection without any kind of restraining.

During the above mentioned study, animals were also monitored and filmed. The analysis of the behavior during the 48 hours (performed by expert ethologists) will help in understanding relationship between hormonal profile and behavior as well as the different behavior of housed male dromedary camels, and their frequencies, during the 24 hours.

After the practical part of the implemented studies , the team analyzed the results of the studies performed in the 2012-2013 breeding season. Statistical analysis were performed and their result discussed in order to set the writing of related manuscripts.

Other studies and activities were also planned for the 2014 breeding season, particularly about: the improvement and implementation of female camel estrus synchronization and the application of artificial insemination, improvement of male's libido and seminal parameters, collection evaluation and processing of male dromedary camel semen.

Photos: Indwell catheters on the animal's neck. This method allow a painless and easy collection of blood samples in observance of the animal's welfare. Classical conditioning was used for training the animals to the blood collection, performed without any kind of restraint. At the end of the collection the animal receive a price, if it behaved well, as a positive reinforce.

