Centre for Cellular and Molecular Biology (CCMB) Hyderabad

24-8-2007

LaCONES delivers "BLACKY", a Black Buck

The Indian Black Buck, also called the *Kala Hiran*, is an antelope, which exists as four species in India. It is found all over India except the North East. The Black Buck is a Schedule 1 animal and thus is considered an endangered species.

A group of scientists (Drs. S.D. Sontakke, Manoj Patel and G. Umapathy) at LaCONES, Annexe 1 of the Centre for Cellular and Molecular Biology, Hyderabad under the leadership of Dr. S. Shivaji, Director-grade Scientist, CCMB, has been working towards developing assisted reproductive technologies to successfully induce pregnancy in endangered animals by artificial insemination. This effort was part of a long-term Project of the Laboratory for the Conservation of Endangered Species (LaCONES) of the CCMB. Dr. Lalji Singh, Director and Dr. S. Shivaji, Director-grade Scientist, CCMB are the two Principal Investigators of this Project.

In the present study, a total of three females following estrus synchronization using prostaglandin F₂ alpha, were inseminated non-surgically at 72 and 96 hrs. After 55 days, one of the animals conceived. CCMB scientists were delighted with their success when it delivered a live fawn at 12:00 Noon on August 23, 2007. **This is the first successful artificial insemination in the world in estrus induced Black Buck**, by non-surgical intra-vaginal insemination, which led to the birth of a live fawn.

The primary objective of LaCONES is to conserve endangered animals of India by using modern techniques of DNA finger printing, genetic polymorphism analysis and assisted reproductive techniques such as artificial insemination, in vitro fertilization, cryo-banking of DNA, cells and tissues and eventually somatic cell cloning. Somatic cell cloning has been successfully employed for cloning of animals such as sheep, mouse, goat, pig, rabbit, cat, dog and donkey and two critically endangered animals namely the Mouflon sheep and the bison elsewhere in the world.

LaCONES is sponsored by the Central Zoo Authority (CZA), Ministry of Environment and Forests (MoEF), Govt. of India; Department of Biotechnology (DBT) and Council for Scientific and Industrial Research (CSIR), Ministry of Science and Technology, Govt. of India and Department of Biotechnology and Forest Department, Govt. of Andhra Pradesh.

The new-born antelope has been named "Blacky".