White Camel for the first time in the 27 year history of National Research Center on Camel

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Excitement is prevailing in the National Research Center on Camel (NRCC) in Bikaner with birth of a "white" camel calf recently. According to Director NRCC, Dr. N. V. Patil, "It is an extremely rare happening as the female calf is not an albino. It is seems that a recessive character of the gene has been expressed." The NRCC now plans to monitor carefully this white camel and will try to use the camel in the breeding programme to know whether we can get similar type of "white" trait in the progeny. There will be only a 50 per cent chance that its progeny may also be white, he added.

Interestingly the white camel has been born to the Mewari breed of camels located in the mountainous tracts of the lower foothills of the Aravali ranges in Rajasthan. Mewari breed is a dwindling breed of camels with just 8,800 of them being there in the Livestock census carried out in 2007. Dr Patil said, "At NRCC we bring the camels of the Mewari breed from the hilly tracts in our attempt to conserve and preserve the germplasm and also undertake improvement in the breed. We got a female camel which has given birth to the white calf for the first time in the 27 year history of NRCC.”

This particular breed is very good as far as milk production is concerned with an average production of 7-8 litres milk per day compared to Jaisalmeri or Bikaneri which produce on average 5-6 litres of milk per day. In the difficult hilly terrain the strong and sturdy Mewari breed's capability as draught animal is much better compared to other breeds which are used to the sandy desert areas. One of the main reason for the drop in camel population over the years is due to the loss of its traditional role as a vehicle for transport and draught animal in agricultural fields during ploughing and harrowing has been now taken over primarily by mechanization and coming of automobiles and tractors.

"The role of camel is becoming limited though it continues to be a non polluting means of transport. The cost of maintenance of a camel has also risen. Growing urbanization, industrialization with concomitant pressure on agricultural land has led to the loss of camel's natural grazing land." On last count the total number of camels in the country stood at 5,17,000 only, compared to cattle population going into crores. "The Mewari breed which was already having a low population has been badly hit by these developments. Eighty per cent of camels are in Rajasthan though camels also found in Gujarat, Punjab, UP, Haryana and MP.

The NRCC is mandated to undertake the basic and applied research in production, reproduction, growth, disease management and also value addition of camel milk products, Dr Patil said. We are also the agency, he said, to undertake national and international collaboration on camel research and be the repository of camel research and husbandry activities, he added. The NRCC is presently engaged in testing camel immunology in collaboration with Bhabha Atomic Centre, Mumbai. "Camel immunology is unique, the anti bodies produced in its blood stream are very special called nano anti bodies which can be used for human disease diagnostics as well as treatment. We are working with Bhabha Atomic Centre to study the effectiveness of these anti bodies on T. B. and Thyroid Cancer diagnosis and treatment.”

Interestingly with S. P. Medical College, Bikaner, NRCC is collaborating to develop an anti snake venom. The nano anti bodies, he said, traverse through the animal and human body extremely fast to reach their target passing the internal barriers like blood-brain barrier and placental barrier. There is great prospect in this area for developing drugs for diseases of animals and human, he added.

The efforts are also on to find alternate uses of the camels like its use for generation of electricity to charge the inverter battery using rotary gear system and get electricity to far off desert and also use the same system for fodder chaffing. The multipurpose tool carrier is also being developed for ploughing and harrowing—agricultural operations at the farmer’s field.

In addition to preservation of camel breeds of different regions like Bikaner, Jaisalmer and Kachchh, the research efforts are on to develop value added products from the camel milk. The milk products like Kulfi, flavored milk, tea and coffee are already on high demand at the milk parlour established at the centre for the tourist visiting the campus. Further researches are also progressing to produce Cheese and curd from the milk.

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