

## NATIVE GOAT OF BRAZILIAN NORTHEAST: A GENETIC RESOURCE TO PRESERVE

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The native goat has great importance in a social point of view and its importance in breeding specially in harsh environments. Approximately 92.0% of the Brazilian national goat flock is found in the Northeast of Brazil (Anuário Estatístico do Brasil, 1992) and maybe 3.0% of these are native types. These animals are characterized by a small body size, a high fertility and viability, good prolificacy and high quality skin. In considering these aspects, the native goats can represent important economical support for the sustainability of the region. Also considering these attributes, their high adaptation to region and the small number of them in the population, there is justification in increasing the efforts to preserve these animals. In addition, indiscriminate breeding of these animals with exotic breeds specialized in milk and meat production put in high risk the survival of this small population of native goats.

It is also important to consider that, during the long adaptation process suffered by these animals, they acquired essential information, stored in their genes, on how to adapt to adverse climatic conditions. This rusticity may also be especially related to disease problems.

In the Brazilian Northeast, the principal breeds of native goats include: Azul, Canindé, Graúna, Gurguéia, Marota, Moxotó and Repartida. In general, it is assumed that there is no significant productive differences for milk and meat production among Canindé, Marota, Moxotó and Repartida breeds (Shelton & Figueiredo 1981; Lima 1994). However, it is also emphasized that the Moxotó breed produce the best skin.

According to Grosclaude & Tucker (1992) the importance of preservation and scientific study of adapted genetic resources is to emphasize the relevant productive aspects and knowledge about biochemical markers which can aid the understanding of genetic variability and the influence of environment on animal production.

It is important to have knowledge on the genetic characteristics of native breeds for the progress of preservation and in relation to variability of preserved material. Molecular biology and reproduction techniques such as cryopreservation of semen, oocytes and embryos to use in productive programs can constitute an appropriate solution to the viability of preservation and multiplication of species threatened with extinction. Another important aspect to consider is the possibility of some breeds or native goat types being genetically resistant to gastrointestinal nematodes (Buvanendran et al., 1981).

The Brazilian Agency of Agricultural Research (Embrapa) has put effort to maintain and study the native goat resource in the Northeast of Brazil. Some actions are been carried out by Embrapa

Caprinos, in Sobral, Ceará in association with the producers. The main actions carried out to date include:

- ◆ Discuss with farmers about the importance of native breed goats and how they can contribute to the development of the goat industry, especially in the Northeast region;
- ◆ *in situ* preservation of animals, especially at private farm level in consonance with the Brazilian Association of Goat Farms (ABCC);
- ◆ Formation of a germplasm bank by cryopreserving semen, oocytes and embryos;
- ◆ Study of protein polymorphisms in blood and milk

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