Factors Influencing Goat’s Semen Fertility and Storage:
A Literature Review

Lubanza Ngoma¹, Lukusa Kambulu¹ and Mulunda Mwanza¹

¹Department of Animal Health, Faculty of Agriculture and Technology, Mafikeng Campus,
North West University, Mmabatho, Mafikeng Campus, South Africa
²Department of Animal and Wildlife Sciences, Faculty of Natural and Agricultural Sciences,
University of Pretoria, Private Bag X20, Hatfield, 0028, South Africa


ABSTRACT The present review paper gives an idea about the candidate genes for buck fertility, including genes encoding hormones, their receptors, proteins of the seminal plasma, proteins involved in spermatozoa-ovum binding and genes influencing sexual development. Buck reproductive performance is highly influenced by semen quality. The quality of sperm after freezing is very important for success of artificial inseminations. Adopting marker could assist selection of candidate gene for genetic improvement of the bucks’ fertility. Decrease in fertility is a multifactorial condition which is very difficult to diagnose. Among various causes, genetic abnormality holds a major share. By identifying various genes that have effects on fertility, the genetic cause behind sub-fertility can be explored and also other non-genetic factors can be identified. Molecular genetic tools enables to explore individual genes in animals. Identification of these genes will eventually lead to genome assembly and development of novel tools for analyzing complex genetic traits.