

THE NGUNI AS A SOURCE FOR RESEARCH

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Africa has been richly endowed with a large number of indigenous breeds which are adapted to the prevailing harsh conditions. However, during the period of colonolization the indigenous breeds of Africa were automatically regarded as inferior with little improvement potential. This perception was not supported by any evidence based on the performance of these breeds or results of research. It was only when a Beef Cattle Recording Scheme was introduced in 1959 in South Africa that the performance of indigenous cattle, such as the Nguni, was properly recorded and evaluated. However, research results on the Nguni were only published in the early 1980's and this resulted in commercial interest in the breed.

The research conducted and performance recording revealed the following:

- The Nguni is highly fertile with a long productive life
- The breed is the most resistant to ticks of all breeds in South Africa and it shows tolerance to tick borne diseases
- The Nguni is an excellent dam line for crossbreeding, with no calving difficulties
- Nguni crosses and even pure Ngunis, perform well in feedlots and more and more feedlots are buying Nguni calves
- The Nguni has meat tenderness characteristics similar to, or exceeding that of exotic breeds
- The Nguni has increased nitrogen recycling back to the rumen, which improves microbial growth and organic matter digestion, reducing the nitrogen requirement on low quality pastures. The Nguni therefore needs little or no supplementation during winter.

It is now generally accepted that the research and performance recording results saved the Nguni from the possible threat of extinction. The Nguni has now grown numerically to one of the largest seed stock beef breeds in South Africa.

A search by the author of this article found 15 postgraduate theses and dissertations (M.Sc and Ph.D) using data and information of the Nguni. They are listed below and the author requests that if he omitted any such studies that the information be send to him. It would be interesting to know how many similar studies were done on breeds such as the Afrikaner and Bonsmara.

Post graduate studies on the Nguni

BARDT F, 2007. The Nguni cattle breed in South Africa. Ms Thesis, Humbolt University, Berlin.

BOTHMAA, 1996. 'n Vergelykende studie tussen twee Nguni kuddes in Venda. M.Sc Thesis, University of Pretoria.

KARS A A, 1993. A genetic analyses of the Bartlow Combine Nguni cattle stud. Ph.D Thesis, University of the Orange Free State.

KOSTRZEWSKI M W, 1989. Differential resistance to *Amblyomma herbraeum* and other common South African tick species by different cattle breeds under field conditions. Ph. D, Medical University of South Africa.

KAY G W, 1988. The anatomy and physiology of testicular hypoplasia in Nguni bulls. Ph.D, University of the Witwatersrand.

LEPEN J M, 1999. A comparative evaluation of the Nguni under intensive and extensive systems. M.Sc Thesis, University of Pretoria.

LUBOUT P C., Environmental and genetic factors influencing the production in a herd of Pedi Cattle. M.Sc Thesis, University of Pretoria.

MORAKA J N, 2000. A comparative study of the biological performance of progenies of Western Sanga X Afrikaner crossbred and Bonsmara cattle in the sourish bushveld of the North West Province. M Tech, Port Elizabeth Technicon.

NEL N D, 1984. A survey of the occurrence of the 1/29 chromosomal translocation in indigenous Nguni cattle. M. Sc Thesis, University of the Orange Free State.

OSLER E H, 1996. Circadian activity patterns of Afrikaner, Nguni and Simmentaler cattle under extensive veld conditions in the northern Transvaal, South Africa. M.Sc Thesis, University of the Orange Free State.

STRYDOM P E, 1998. The characterization of indigenous cattle in relation to production and product characteristics. . Ph.D Thesis, University of the Orange Free State.

SWANEPOEL J, 1989. Die karkas- en vleisgehalte-eienskappe van jong intesief-gevoerde Afrikaner-, Nguni- en Pedibulle.

TESELING C F, 1994. Factors influencing the present cow efficiency measure of the beef cattle performance and progeny testing scheme. M.Sc Thesis, University of the Orange Free State.

VAN DER WESTHUIZEN J, 1997. Performance factors influencing total herd efficiency in beef cattle. Ph.D Thesis, University of the Orange Free State.

VAN NIEKERK M, 2003. A genetic evaluation of production traits in Nguni cattle. M.Sc Thesis, University of the Free State.