

INTRODUCTION TO NGUNI ECOTYPES

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There are about 14 ecotypes common to Southern Africa. Some of these ecotypes are not widely used by members of society. In this article I want to discuss 6 of the ecotypes more commonly used by breeders.

WHAT IS MEANT BY ECOTYPE?

Ecotypes refer to differences within the Nguni breed. These differences are mainly attributed to differences in environment as we know that the phenotype (what the animal look like) is determined by the animal's genetic makeup, the environment wherein the animal is and the interaction between the genotype and the environment. *Environmental differences therefore play a major role eg.*

- veld type
- mineral status of the soil
- temperatures
- humidity
- rainfall

ECOTYPES AND PURITY.

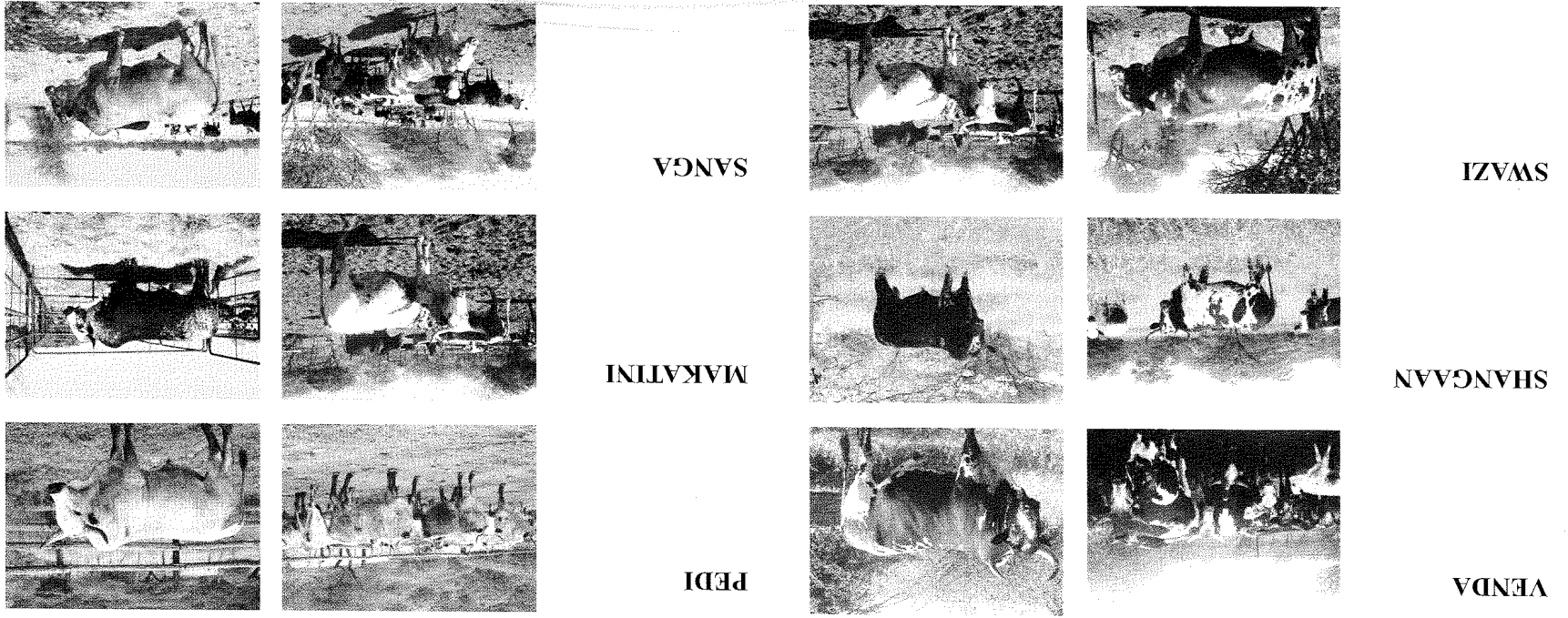
When we talk about ecotypes we normally think about purity and size. We must remember that the characteristics for purity remain the same, irrespective of the ecotype, and that size is not indicative of purity. *The characteristics are as follows:*

- dish face
- flat between the horns
- relatively small ears
- relatively clean ears (not woolly)
- typical kink in dewlap
- respiratory type
- fine bone structure
- high split between hooves
- sloping rump
- cow hocks
- relatively long, thin tail
- smooth coat
- typical small udder with small neat teats
- neck hump in bulls

PITFALLS.

Do not be misled by the size of the animal.
Do not be misled by colour and colour patterns as there are approximately 119 variations.
Do not be misled by horns and horn size as there are approximately 39 variations.

| | VENDA | PEDI | SHANGAAN | MAKATINI | SWAZI | SANGA |
|-------|---------|---------|----------|---|--------------|----------------|
| SIZE | Medium | Large | Large | Small | Medium | Medium/Large |
| BULLS | 480 650 | 550 700 | 550 800 | 400 550 | 500 650 | 600 700 |
| COWS | 330 370 | 380 420 | 360 500 | 280 360 | 350 420 | 380 420 |
| HEAD | Short | Longer | Longer | Short, narrow base, often "v" between horns | Short | Longer |
| EARS | Medium | Bigger | Large | Small | Medium/Large | Medium/Large |
| COAT | Smooth | Coarser | Smooth | Smooth | Smooth | Smooth |
| TAIL | Thin | Thicker | Thicker | Thin | Thin | Thicker |
| BONE | Fine | Coarser | Coarser | Fine | Medium | Coarser |
| TEATS | Thin | Thicker | Thicker | Thin | Thin | Thin and small |



XAMPLES OF 6 COMMON ECOTYPES

The Nguni is fortunate to have such variation within the breed as variation is needed to enable us to do selection. We must however be careful not to change the normal distribution of the breed by selection for extremely small or extremely large animals. Always beware of extremes - this holds true for any characteristic or trait. Breeders should have the freedom to breed animals of whatever ecotype they choose. I believe that we have such variation in environment that it allows for different animals suited to the specific environmental conditions and that the environment will dictate how animals suited to that environment should look. The principle of "horses for courses" is valid. We must therefore allow market forces to determine what is needed and marketable.

DISCUSSION

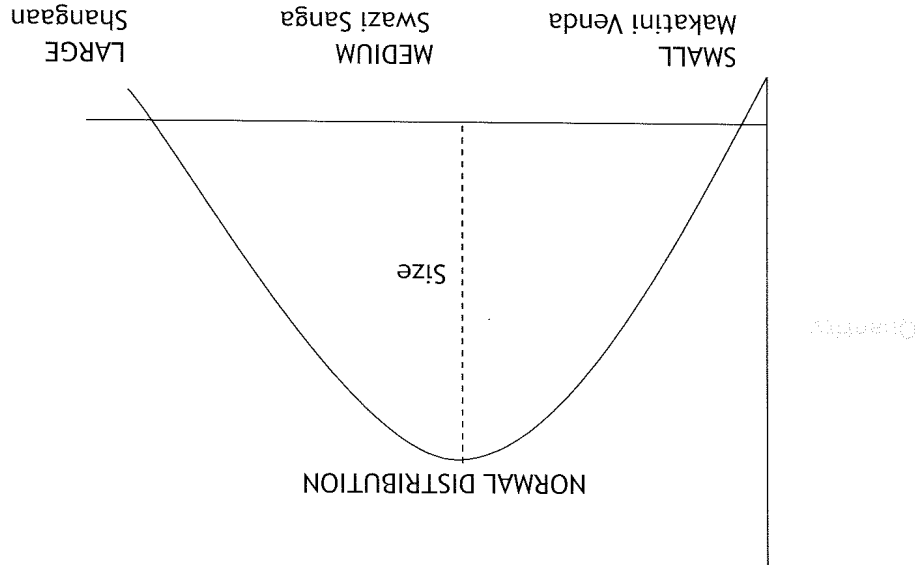


Figure 1 : Normal distribution of 6 Ecotypes

DESCRIPTION OF 6 COMMON ECOTYPES.
The ecotypes described are Venda, Pedi, Shangaan, Makatini, Swazi and Sanga.