## Phenotypic Characterisation of Bapedi Sheep Breed

**Authors :** Fhulufhelo Ramukhithi, Kgothatso Masethe, Tlou Chokoe, Ayanda Maqhashu, Julius Sebei, Tshililo Raphulu, Joseph Mugwabana

**Abstract :** Phenotypic characterisation ensures that the physical appearance of an animal is well documented. The information provided by this phenotypic characterisation study is important for planning management and the use of animal genetic resources. The aim of this study was to characterise the phenotypic characteristics of Bapedi sheep. Bapedi sheep are at risk of extinction like most of the indigenous breeds. As a result, a total of 196 Bapedi ewes and 35 rams were used. Phenotypic-qualitative characteristics were evaluated through visual appraisal. Phenotypic-quantitative characteristics such as body parts measurements were obtained using a flexible tape (cm), while body weight were obtained by using a weighing scale (kg). Bapedi rams (97 %) had higher satisfactory body condition when compared to ewes (75 %). A higher proportion of Bapedi sheep that did not have ticks observed (ewes = 87 % and rams = 91 %). Brown and white colour combination (head x body) was dominating in Bapedi sheep (80 % ewes and 91 % rams). Bapedi ewes did not have any horns; however, 3 % of rams had them. Bapedi sheep had a higher proportion of brown eyes, moderate neck, stiff sideways ears and normal front legs. Bapedi rams had a higher proportion of well-balanced and good attached testicles. Bapedi ewes had average (45 %), small (40 %) and big udders (15 %). Bapedi rams had a significantly higher body weight, height, depth, hearth girth circumference, rump width, hind leg width and length compared to ewes. However, both Bapedi rams and ewes had similar age, body condition score, tail length, length below hock and knee. In conclusion, Bapedi sheep had a higher satisfactory body condition and brown and white colour combination. Some of Bapedi rams' quantitative characteristics were higher compared to ewes.

**Keywords:** extinction, indigenous, phenotypic, smallstock

Conference Title: ICSGL 2022: International Conference on Sheep and Goat Livestock

**Conference Location :** Tokyo, Japan **Conference Dates :** June 09-10, 2022