## <u>Title</u>

## Morphometric, Productive and Reproductive Traits in Indigenous Cattle of Azad Jammu & Kashmir

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## ABSTRACT

The objective of this research was to study the morphometric measurements, productive and reproductive performances of indigenous cows and heifers in Northern Azad Jammu & Kashmir (AJ&K). A total 237 phenotypic characteristics was recorded visually. Five main coat colors (reddish brown, light brown, black, white and grey) were found with black muzzle and eye-lashes. The head length was  $37.7\pm0.2$  cm with small horns ( $11\pm0.3$  cm). The positive correlation between horn length/horn base circumference, ear length/ear width, forehead width/horn length were found statistically significant ( $p\leq0.01$ ). The highest positive correlations were found between age/rump width (0.77), age/parity (0.66), body weight/ heart girth (0.62) and parity/rump width (0.60). The average age at puberty ( $41.02\pm0.6$  months), average age at first service ( $49.3\pm0.7$  months), age at first calving ( $58.54\pm0.7$  months), mean gestation period ( $257.69\pm5.8$  days), mean post-partum heat period ( $253.2\pm14.8$  days), mean service period ( $257.69\pm5.8$  days), mean calving interval ( $17.87\pm0.4$  months), mean service period ( $1.5\pm0.06$ ) and average milk yield per day ( $1.20\pm0.06$  litre) were also recorded. In conclusion, the indigenous cattle are short stature, reddish brown in color with poor reproductive and productive performance.

Key Words: Morphometric, Productive, Reproductive, Indigenous cattle, Azad Kashmir.