The Bakerwali (Khagani) is the unique migratory goat breed of J.&K. reared by the Bakerwals, which is known for its ability to migrate over long distances. Despite its importance in the economy of the state, scientific approach for studying the morphology of various body systems in this goat is very less. Hence, the present study has been designed to establish a data base on the biometry of internal female genital organs in Bakerwali goat.

MATERIALS AND METHODS

The study was conducted on 145 specimens of female genital organs of Bakerwali goat of different age groups, which were collected from the local slaughter houses. These collected specimens were grouped into pre-pubertal (below 1 year), pubertal follicular (2-3 years), pubertal luteal (2-3 years) and senile (>4 years). Biometrical observations (length, breadth and thickness of the female genital organs of different age groups were recorded according to Singh et al. (1974) and analyzed statistically (Snedecor and Cochran, 1994). After taking biometric observations, the ovaries were observed for presence of visible surface follicles which were classified as small (1-3 mm), medium (3-6 mm) and large (>6 mm) according to Chakravarty (1986).

RESULTS AND DISCUSSION

The ovaries were paired almond shaped, firm ovoid bodies having varying number of follicles on their surfaces. The right ovary had higher values in all age groups and the difference was statistically significant (Table 1) in pubertal follicular group owing to presence of large vesicular follicle.

The mean number of follicles was recorded more in right ovary in all the age groups whereas, in prepubertal group the small follicles were recorded more (10.2±1.34) on the right ovary than on left ovary (8.4±0.78). In pubertal follicular group, 2-3 large vesicular follicles (2.50±0.35 on right ovary and 2.26 ± 0.44 on left ovary) and maximum number of medium follicles were recorded. This might be due to the time of sample collection in breeding season (Sept-Oct), when there was downward migration of the flocks. Smaller follicles were recorded significantly higher in pre-pubertal group than in any other group. Similarly, the number of follicles was higher on right ovary with in each group (Table 2). In luteal group, well developed corpus lutea were seen occupying whole of the cortex area (seen in cross section). In senile ovary, medium sized follicles and more number of corpus albicantia (white pin head sized scars) were observed as reported earlier in Gaddi goat (Shalini and Sharma, 2004).

The oviducts were long, highly tortuous, coiled tubular structures (10.00-30.00 cm). Ampulla was highly tortuous as reported earlier in Gaddi sheep (Rajput and Sharma, 1994). The isthmus formed “S” shaped curve before its termination with the free parts of cornua of uterus as also observed in Gaddi goat (Shalini and Sharma, 2004). The length of oviduct was significantly less in pre-
The free part of cornua had higher values in left one in all age groups but statistically non-significant within the group although the values were higher in pubertal luteal group (Table 1). The average length of corpus uteri in pubertal follicular and luteal group was 1.69±0.06 cm and 1.93±0.04 cm, respectively with highest values in senile group 2.45±0.09 cm and lowest value in pre-pubertal group (1.64±0.06 cm). Shalini and Sharma (2004) recorded the length of corpus uteri in pre-pubertal, follicular, luteal and senile phase of Gaddi goat to be 1.28±0.54 cm, 2.43±0.67 cm, 2.35±0.87 cm and 1.29±0.54 cm, respectively. The cervix uteri had higher mean values for length, width and thickness in senile group of Bakerwali goat (Table 1). Length of corpus uteri and cervix showed significantly higher values in senile group which might be due to repeated cycles. These results were comparable with the findings of Singh et al. (1974) in the goats.

**REFERENCES**


