

Relationship of scrotal circumference to age, body weight and onset of spermatogenesis in goats

ABSTRACT

Scrotal circumference (SC) and body weight (BW) measurements were obtained from 122 crossbred (Saanen × Loca; Jumnapari × Local) bucks, ranging in age from 3 to 28 months. Spermatogenesis and seminiferous tubule diameters were studied from testicular biopsies in 24 bucks. The results showed that SC increased curvilinearly and was significantly correlated with age ($P < 0.05$). Scrotal circumference correlated more significantly with BW ($P < 0.001$). Spermatogenesis was completed at 667 months with a sudden increase in tubular diameter at the same time. Since SC is an indirect measurement of testicular size, a marked increase in testicular size indicated the onset of active spermatogenesis and, hence, the possibility of using bucks for breeding at an earlier age than normally recommended. Further, SC norms obtained in this study may become useful in the evaluation of bucks for breeding soundness.

Keyword: Scrotal circumference; Body weight; Spermatogenesis; Goats