

ABSTRACT

Ph.D Thesis

TESTIS CHARACTERISTICS, SEMEN QUALITY AND MATING BEHAVIORS ON KARYA TYPE AND ÇİNE ÇAPARI YOUNG AND MATURE RAMS

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This study was performed to determine testis, sperma and sexual behaviour traits in Karya and Çine Çaparı rams. Research material consisted of 4 mature Çine Çaparı and 4 mature Karya, 8 young Çine Çaparı and 8 young Karya; totaly 24 rams in ADU-GKYP (Adnan Menderes University Group Sheep Breeding Programe). The effect of season, month and year on the live weight, testis length, testis diameter and scrotum circumference of Çine Çaparı and Karya rams were investigated. Average testis characteristics of young Karya lamb rams were, 9,48 cm, 4,38 cm and 23,73 cm; In Çine Çaparı, 8,83 cm, 4,30 cm and 22,69 cm respectively, for mature Karya rams were; 11,13 cm, 5,64 cm, 33,98 cm, In Çine Çaparı 11,60 cm, 5,19 cm and 32,70 cm respectively. Sperma samples were evaluated with respect to volume, progressive sperm motility, percentage of dead spermatozoid, sperm concentration and total number of spermatozoid. In young Karya lamb rams this characteristics, 1,01 ml, 3,98, %11,05, %8,17, $1,72 \times 10^9$ /ml, $1,74 \times 10^9$ /ejeculate respectively, In Çine Çaparı; 0,87 ml, 3,55, %12,86, %8,98, $1,63 \times 10^9$ /ml and $1,42 \times 10^9$ /ejeculate respectively, In mature Karya ram; 1,65 ml, 4,77, %11,48, %7,84, $1,89 \times 10^9$ /ml, $2,16 \times 10^9$ /ejeculate, In Çine Çaparı; 1,32 ml, 3,58, %14,81, %17,71, $1,56 \times 10^9$ /ml, $1,66 \times 10^9$ /ejeculate respectively. In mating behaviour test of rams were evaluated mount frequency, latency, mating efficiency. This traits in young Karya rams, 7,11, 197,34 s, 184,96 s, 2,75, 212,08 s, 431,61 s and 0,23 respectively, In Çine Çaparı; 4,08, 286,00 s, 180,81 s, 2,06, 299,93 s, 674,74 s, 0,19 respectively, for mature Karya rams; 17,17, 35,50 s, 59,85 s, 6,25, 35,63 s, 386,62 s, 0,31, In Çine Çaparı; 26,08, 45,75 s, 52,14 s, 3,33, 93,67 s, 775,50 s and 0,14 respectively.

Results indicated that testis and sperma characteristics of young and mature Karya and Çine Çaparı rams showed seasonal changes and sperma production of Karya and Çine Çaparı rams continued during the year. Moreover, testis characteristics, sperm quality and sexual performance of Karya rams is the better than Çine Çaparı.

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Key Words: Karya, Çine Çaparı, testis, sperma, mating behaviour.