

## عنوان مقاله:

Seasonal variation in seminal characteristics, testicular measurements and plasma testosterone concentration in Iranian Khalkhali bucks

## محل انتشار:

دوفصلنامه علوم و فناوری دامداری، دوره 6، شماره 2 (سال: 1397)

تعداد صفحات اصل مقاله: 7

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## خلاصه مقاله:

The aim of the present study was to determine seasonal variations in semen characteristics, testicular size, and plasma testosterone concentration in Iranian Khalkhali goats. An artificial vagina was used to collect semen from 10 bucks (2–4 years of age), from November 2013 to October 2014. Testicular circumference was higher ( $P<0.05$ ) from September to October. Ejaculate volume, sperm concentration, and percentage of normal sperm were higher ( $P<0.05$ ) during September and October and lower during December and January ( $P<0.05$ ). Plasma testosterone concentration was higher during October ( $P<0.05$ ) than other months. Testicular circumference was positively correlated with serum testosterone concentration, percentage of live and normal sperm and semen volume. The lowest level of lactate dehydrogenase (LDH) in the seminal fluid (1.92 U per mL) was recorded during early October (autumn) and the highest level in early spring (2.80 U per mL). The lowest levels of  $K^+$  and  $Na^+$  in the seminal fluid were recorded in spring (59 and 72.3 mg per dL, respectively). The correlation coefficients of live and normal sperm percentage and sperm motility with seminal fluid  $K^+$  level ( $r = 0.60$  and  $0.46$ , respectively) and  $Na^+$  level ( $r = 0.48$  and  $0.35$ , respectively) were positive, and with LDH ( $r = -0.50$  and  $-0.42$ , respectively) were negative ( $P<0.01$ ). Despite monthly variations, semen quality was within the range regarded as satisfactory for normal fertility; however, the highest quality semen was collected during September and October.

## کلمات کلیدی:

Khalkhali goats, semen, testicular circumference, testosterone

## لینک ثابت مقاله در پایگاه سیویلیکا:

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