



E-ISSN: 2320-7078

P-ISSN: 2349-6800

JEZS 2018; 6(4): 326-327

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Received: 17-05-2018

Accepted: 18-06-2018

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## Semen evaluation in local rams of Jaipur area, India

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**Abstract**

A study was carried out on semen evaluation in local rams at Jaipur area. Fifty two (52 No.) mature rams of 2.8-4.4 years old and 32-40 Kg live body weight were used in this study. Semen collection was performed by using artificial vagina. Semen samples were evaluated immediately after collection. Semen volume and color, mass and individual sperms motility, live and abnormal sperms as well as sperms concentration were estimated in this study were; Volume (ml)  $1.88 \pm 0.8$ , Mass motility (%)  $85.05 \pm 3.4$ , Individual motility (%)  $87.10 \pm 4.1$ , Live sperm (%)  $92.80 \pm 3.2$ , Sperm concentration ( $\times 10^9$ )  $3.70 \pm 1.2$ , Abnormal sperm (%)  $11.00 \pm 0.8$ .

**Keywords:** Evaluation, ram, semen quality

**Introduction**

The sperm morphology assessment has been regarded as one of the most important factors for determining sperm quality [1]. Morphologic assessment of spermatozoa is an integral component in the analysis of semen [2, 3].

**Material and Methods**

Fifty two (52 No.) mature rams of 2.8-4.4 years old and 32-40 kg live body weight were used in this study. Animals were housed in the animal house, Jaipur farm.

**Semen Collection and Evaluation**

Semen collection was performed by using artificial vagina. All semen samples were analyzed immediately after collection, Semen volume and color, mass activity, sperm individual motility, percentage of live and abnormal sperms percentages and sperms concentration were estimated [4].

**Results and Discussion**

Semen parameters of local rams were summarized in table 1. Semen volume was  $1.80 \pm 0.9$  ml, Sperms mass were  $85.0 \pm 3.6\%$  while sperms individual motility was  $89.20 \pm 4.2\%$ .

**Table 1:** Semen characteristics of local ram

Semen parameters	Means $\pm$ SE
Volume (ml)	$1.88 \pm 0.8$
Mass motility (%)	$85.05 \pm 3.4$
Individual motility (%)	$87.10 \pm 4.1$
Live sperm (%)	$92.80 \pm 3.2$
Sperm concentration $\times 10^9$	$3.70 \pm 1.2$
Abnormal sperm (%)	$11.00 \pm 0.8$

The semen parameters of local rams at Jaipur area which was recorded in the present study were within the physiological values for fertile rams and similar to data estimated by previous researchers [6, 7]. This can be used for complete sperm evaluation and breeding soundness test of male rams.

**Conclusion**

The present study was important in sperm evaluation of local rams' index which can be used

for assessment sperm integrity and fertility.<sup>[5]</sup>

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