

THE EFFECT OF DIFFERENT LEVELS OF SILYMARINOM INDICUM EXTRACT IN THE EXTENDER ON SPERM MOTILITY AFSHARI RAMS

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INTRODUCTION

Today, one of the most important ways to successfully in sheep farming industry is manage reproduction in sheep. Nowadays the measurement of sperm concentration is possible using the software (CASA) and now using this software can be evaluation kinetic of sperm motility. The aim of this study was to investigate the effect of Silymarianom indicum extract in extender on sperm motility of Afshari ram and determine the most desirable levels of the extracts were in the Afshari ram sperm extender that resulted to better management sheep reproduction in order to overcome the problems of infertility at country and other countries in the world.

MATERIALS and METHODS

In this study, 4 Afshari rams with a mean of 5 ± 50 kg weight and 3 to 4 years, sperm was collected by electrical ejaculation. With initial approval sperm in order to ensure the quality of sperm samples at laboratory of Khorasgan University, samples were transported immediately to Royan Institute into a water bath at 37°C. After extraction of the Silymarianom indicum at a concentration of 1%, 3% and 5%, each concentration was added to the sperm extender as separately and one group were considered as a control. Sperm motility was evaluated at zero time (immediately post ejaculation) and 24 hours post ejaculation by CASA software.

RESULTS AND DISCUSSION

The results of this study shows that total motility in the levels of 5% was significantly increased ($p < 0.05$) compare to levels of 1% and control group at zero time. Progressive motility in the levels of 5% was significantly increased ($p < 0.05$) than to levels of 1% and 3% at 24 time. Studies have shown when quality of sperm is good that to be maintained by good diluent and in the return time, not broken. Sperm requires energy for motility and it takes the energy of adenosine triphosphate as the basic energy source for cell function and survival uses and sperm to meet the energy needs of the material outside the cell (2). Silymarine contains flavonoids, for these reason flavonoids during its steps to minimize oxidative damage, prevent Diabetes and damage to the sperm membrane (1).

Keywords: Ram Sperm, *Silymarianom indicum*, Extender, Motility.

REFERENCES:

1. Soto CP, Perez BL, Favari LP. 1998. Prevetion of alloxan-induced diabetes mellitus in the rat by silymarin. *Comp. Biochem. Physiol. C Pharmacol Toxicol Endocrinol*, 119 (2): 125-9.
2. Zamiri M. 1385. Reproductive physiology, Publications hagh shenas. Pp: 280-283.



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