## Egyptian J. of Sheep and Goat Sciences (Special Issue, 2<sup>nd</sup> Inter. Sci. Conf. on SR Production, 2008) Vol. 3(1): 27 - 32

## USE OF FLUOROGESTONE ACETATE TO SYNCHRONIZE ESTRUS EITHER DURING BREEDING OR OUT BREEDING SEASON IN DAMASCUS GOATS

## SAIFELNASR, E.O.H.<sup>1</sup>, ASHMAWY, T.A.M<sup>1</sup>, SALLAM, A.A.<sup>1</sup> AND SOLOUMA, G.M<sup>2</sup>

- 1. Animal Production Research Institute, Agriculture Research Center Ministry of Agriculture, Egypt.
- 2. Animal Production Department, Faculty of Agriculture, Sohag University, Egypt.

## **ABSTRACT**

One hundred clinically healthy non-lactating Damascus goats (2.5 - 6 years old) were used in this study; 52 treated (T) and 48 control (C). In group T, does were treated with intra vaginal sponges inserted for 17 days. At sponges withdrawal, the does were treated with 400 IU PMSG inter muscular (im) followed by 0.7 ml PGF2 $\alpha$  during the breeding season or 700 IU PMSG 48 h before sponge withdrawal (Day 15) and 0.7 ml PGF2 $\alpha$  on the day of sponge withdrawal (Day 17) during out breeding season according to the manufacturer procedure. All treated does were artificially inseminated with fresh or frozen semen at 52 h after sponge withdrawal. Expressed estrus %, time at onset of estrus and kidding rate were recorded.

Does in group C were allowed for natural mating or were exposed to fertile bucks for a period of 35 days (2 estrus cycles) during the breeding or out breeding seasons contemporary to that of treated does.

Expressed estrous came to 70% in May 2005 and 60% in May 2006 (out breeding seasons), while was 86.4% in September 2004 and was 90% in September 2005 (in the breeding season). Time post-treatment to onset of estrus was earlier during out of season treatments compared with during season treatments Kidding percentage of the treated does in the breeding seasons was 81.8% in September 2004 and 70.0 in September 2005 while being 40% in out breeding seasons. Does of group C conceived only in the breeding seasons.

Use of Fluorogestone Acetate was effective to synchronize estrus either during breeding or out breeding season with acceptable kidding rate in Damascus goats.

**Keywords**: Damascus Goats, Fluorogestone Acetate, estrus synchronization, breeding season, out breeding season.