

## GOAT ESTRUS INDUCTION AND SYNCHRONIZATION PROTOCOLS DURING ANESTROUS SEASON

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Goat estrus induction and synchronization can be gotten through the use of artificial photoperiod, male effect, exogenous application of melatonin and others hormones combinations. The ovarian response to estrus synchronization protocols varies with the type device used, progestagen agent, body condition score, environment and reproductive season. The aim of this study was to evaluate the efficiency of two protocols of goat estrus induction and synchronization during the anoestrous season. Sixty Toggenburg goats (18 lactating, 21 dry and 21 nulliparous goats) were randomly assigned into to two treatments, in accordance with lactation status and body condition score. All treatments consisted inserting intravaginal sponges (60 µg Acetate of Medroxiprogesterona, Progespon<sup>®</sup>, Day 0) by the period of six days, in administration intravulvo-submucosal of 37.5 µg dose of D-cloprostenol (Prolise<sup>®</sup>), and intramuscularly of 200 UI dose of eCG (day 4). The animals of T 1 (10 lactating, 10 dry and 12 nulliparous) had the sponge removed and the administration of hormones every morning (10-11 hrs) while T2 (08 lactating, 11 dry and 09 nulliparous) the animals had it removed and the administration of hormones every afternoon (14-15 hrs). Four goats (01 nullíparous and 02 dry of T1, and 01 nulliparous of T2) lost their sponges and were remove of the experiment. The estrus detection started 12 hours after the sponge removal with the aid of vasectomised bucks at 12h of intervals. Initiation of estrus and estrus duration were analyzed by one-way analysis of variance for equal number of treatments, and the percentage of animals estrus with X<sup>2</sup>. The percentage of animals detected in estrus was higher (P<0.05) for T1 animals (92.3%) than to T2 (66.7%). The interval from sponge removal to estrus detection (45.60 ± 18.33 h e 43.46 ± 25.14 h) and the duration of estrus (31.20 ± 18.97 e 27.65 ± 20.92) did not differ (P>0.05) between the treatments 1 and 2, respectively. Although it has not occurred difference within the interval device removal to estrus and duration of estrus between the treatments, the T1 had been more efficient in the induction of estrus in Toggenburg goats in the anestrous season, can be used of mating or insemination artificial with estrus detection.