

PLASMA PROGESTERONE CONCENTRATIONS IN TOGGENBURG GOATS SUBMITTED TO ESTROUS INDUCTION REUSING INTRAVAGINAL AUTOCLAVED PROGESTERONE DEVICES
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Abstract / Resumo:

The aim of this study was to evaluate plasma progesterone (P4) concentrations in 30 Toggenburg goats receiving autoclaved progesterone devices during the seasonal anestrus period at the City of Piau-MG, Brazil (latitude 21°35' S and longitude 43°15' W). Goats received new intravaginal progesterone devices (CN, CIDR-G®), autoclaved devices (121°C, 1 atm, 15 min) used previously during six days (C6) or 12 days (C12). Dinoprost (5 mg; Lutalyse®) latero-vulvar was administered on the day of device insertion and eCG (200 UI; Novormon 5000®) latero-vulvar was done 24 h before its removal. Devices remained for six days in all treatments. The small initial P4 concentrations (ng/mL) in all treatments seven days before (0.12 ± 0.21) or immediately before device insertion (0.23 ± 0.20) may be interpreted as a consequence of reproductive seasonality. Six hours after its insertion, goats from CN showed higher ($P < 0.05$) P4 concentrations (7.16 ± 3.64) when compared to C6 (4.66 ± 2.13) or to C12 (4.34 ± 1.85) and these values remained greater in size up to four days. All goats had concentrations superior to 1 ng/mL at the moment of device removal. On the following day, P4 concentrations fell sharply to subluteal levels in all treatments (0.13 ± 0.12). There was a category effect ($P < 0.05$) with nulliparous presenting higher P4 concentrations when compared to lactating goats. It can be concluded that the autoclaving process maintains sufficient P4 at the time of device removal, being able to efficiently induce estrus. Financial Support: Pfizer Animal Health, CNPq, Embrapa Dairy Cattle, Embrapa Goats and Sheep. Keywords: Caprine, CIDR, Reproductive Efficiency, Steroid Hormone.