123. Hormonal induction of lactation in non-pregnant Saanen and Toggenburg goats

Joanna M.G.Souza[1], Rafael G. Cordeiro[2], Jeferson F. Fonseca[3], Felipe Z. Brandão[4] José H. Bruschi[2]

Universidade Federal de Viçosa (UFV/DZO) – Av PH Rolphs, s/n, 36570-000, Viçosa, MG, Brasil, 55-21-2275-9184, joannavet@gmail.com. Embrapa Gado de Leite, Rod. MG, 133, Km 42, 36155-000, Coronel Pacheco – MG, Brasil, 55-32-3249-4900, henrique@cnpgl.embrapa.br. Embrapa Caprinos – CP D10, 62011-970, Sobral – CE, Brasil, 55-21-3249-4900, jeferson@cnpc.embrapa.br. Universidade Federal Fluminense (UFF/FV) – Niterói – RJ, Brasil, 55-21-9355-0838, fzbr@vm.uff.br

The objective of this study was to induce lactation in dairy goats by means of hormonal administration. Twenty-two nulliparous (NUL, n=5) or pluriparous (PLU, n=17) Saanen (n=8) and Toggenburg (n=14) goats, ageing 2.5 to 10 years, not pregnant for at least two subsequent breeding seasons were equally assigned according to parity, weight and body condition score (1 to 5) to two treatments: T1 (n=11; 51.3±9.6 kg ;3.4±0.4) and T2: (n=11; 50.7±8.4 kg; 3.5±0.5). In T1, animals received 0.25 mg/Kg l.w. of estradiol benzoate and 0.75 mg/Kg l.w. of progesterone on days 0, 2, 4, 6, 8, 10 and 12. In T2, estradiol was administered at the same days but progesterone administration was done on the first seven days (D0 to D6). Milking started twice daily eight days (D20) after the end of treatment. Milk samples were collected on D25, D27, D34 and D43. Transretal ultrasound evaluation (5 MHz probe) was done before, during and after the hormonal treatment. Statistical analysis was performed using a significance at the 95% interval. Parametric variables were done by chi-square test. Non-parametric variables were submitted to one-way analysis of variance and compared by SNK-test using a SAEG program. The efficacy of induced-lactation was similar (P>0.05) between T1 (81.8%) and T2 (90.9%) or between nulliparous (90.9%) and pluriparous (81.8%). Daily milk production in responsive females in the first month was similar between T1 (923 ± 362g) and T2 (1239 ±588g) or between NUL (791 ± 546g) and PLU (668 ± 637g) (P>0.05). Qualitative milk analysis were in the normal range for goats, being for T1 and T2, respectively, 4.1 ± 0.2 and 4.0 ± 0.2 fat, 3.7 ± 0.1 and 3.7 ± 0.3 protein, 4.3 ± 0.1 and 4.2 ± 0.3 lactose, 13.1 ± 0.3 and 13.2 ± 0.4 total milk solids and 1,904 ± 430 and 2,567 ± 613 somatic cell count (P>0.05). The ultrasound exams showed no alteration of uterus or ovaries. Lactation can be quickly induced by hormonal administration, which can be a valuable tool to meet market demands.