Oestrus and ovarian activity in Serrana goats and their response to cloprostenol during the breeding season

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Oestrus behaviour, ovarian cyclicity and response to cloprostenol treatment were studied in 42 Serrana goats during the breeding season, at a latitude of 41º N. From 1st September to 30th November, blood samples were taken biweekly and analysed for plasma progesterone (P4) concentration. Oestrus synchronization was performed by two intramuscular injections of 50 µg of cloprostenol, given 10 days apart (the 26th September and 5th October). The oestrus was detected every 4 hours during the 72 hours after the 2nd cloprostenol application and daily during two consecutive oestrous cycles, using two vasectomized bucks. From 3rd to 20th Sep only 23.8% (10/42) of goats were cyclic and 14.3% (6/42) of them have short oestrous cycles. The percentage of cyclic goats increased to 71.4 % (30/42) the 24th Sep, 85.7 % (36/42) the 4th Oct and 100 % (42/42) from 11th Oct to 30th Nov. Thirty-six to seventy-two hours after the 2nd prostaglandin injection, 85.7 % (36/42) of the goats were in heat (42.9 ± 6.1 hours; mean ± SD; n = 36). The normal inter-oestrus interval was 21.2 ± 1.0 days with a range between 19 and 24 days. The length of observed short oestrous cycles was approximately 7 days. These results indicate that the breeding season of Serrana goats will begin in September, a significant percentage of females presenting short cycles. Percentage of cyclic goats quickly increased to 100% in early October and oestrus synchronization after two injections of 50 µg of cloprostenol was acceptable.