Short-Term Progestagen Treatment in Ewes during the Breeding Season

JC Almeida¹, J Simões¹, R Valentim², R Mascarenhas³, P Fontes¹ and J Azevedo¹

¹CECAV-UTAD, Vila Real, Portugal, ²IPB, Bragança, Portugal.
³INIAI, Santarém, Portugal

To characterize the efficiency of oestrus synchronization with short-term progestagen treatment (stFGA), 20 Ile de France (IF) and 19 Churra da Terra Quente (CTQ) ewes were used during the mid-breeding season. At day 0 (D₀), a 40 mg FGA sponge was injected in all animals and 120 µg cloprostenol was injected. Five days later (D₅), all sponges were removed and ewes were divided into two groups: group A (10 IF and 10 CTQ), treated with eCG (250 IU) at sponge withdrawal and group B (10 IF and nine CTQ), without eCG. Blood samples were taken biweekly for progesterone (P₄) determination and four intact rams with harness markers identified the onset of oestrus (first mount). All ewes were cyclic at D₀ but oestrus was detected only in 32 (82%), with no difference (p > 0.05) between group or breed. The remaining seven ewes had lower P₄ (<0.5 ng/ml) between D₂ and D₀. The interval between sponge withdrawal and onset of oestrus was 40.5 ± 9.6 h, with no difference between treatment or breed. However, for IF ewes, this interval tended to be shorter (P = 0.10) than CTQ ewes (37.8 ± 10.1 h vs 43.3 ± 8.6 h). The pregnancy rate (75%) and prolificacy (1.38) were also similar between treatments and breeds. The stFGA was a good method to synchronize the oestrus in sheep during breeding season; pregnancy rate and prolificacy were not affected by eCG administration.