PW1546 - Emergence day of synchronized follicular wave in ewes subjected to different doses of 17β-estradiol given at beginning of the progesterone protocol

Authors and co-authors:
Oliveira Maria Emilia (1), Nociti Ricardo (1), Camela Efígénia (1), Padilha-Nakaghi Luciana (1), Maciel Giovanna (1), Rodriguez Mariana (1), Fonseca Jefferson (2), Vicente Wilter (1)

(1) College of Agricultural and Veterinary Sciences, São Paulo State University, Department of Preventative Veterinary Medicine and Animal Reproduction, 14884-900, Jaboticabal, Brazil
(2) Brazilian Agricultural Research Corporation, Embrapa Goats and Sheep, 36.155-000, Coronel Pacheco, Brazil

This study was designed to evaluate the effect of different doses of 17β-estradiol injection at the beginning of the progesterone (P4) protocol on follicular wave emergence in ewes. In a random day of the estrous cycle (D0), twenty-four Santa Ines ewes received a P4 device (CIDR®) and a injection of 17β-estradiol (Sincrodiol®, Ourofino, Brazil) in different doses (350µg, 500µg e 1000µg) for G-350E2, G-500E2 e G-1000E2, respectively (n=8 per group). The ultrasounds examinations were performed daily during the CIDR permanence (10 days) using MyLab 30Vet equipment (Esaote, Italy) connected to transretal linear transducer (frequency of 7.5 MHz). Follicular wave was defined as a follicle or a group of follicles 2 to 3 mm in diameter that grew to 4.5 mm in size before regression or ovulation. The day of wave emergence was regarded as the day on which the largest follicle of a wave was first detected at 2 or 3 mm (retrospective analysis). Data were analyzed by ANOVA with Tukey test (mean±SEM; p<0.05) using SAS software. All ewes had emergence of a new follicular wave after the protocols. There was difference (abp = 0.04) for follicular wave emergence day (3.00±0.32b, 4.00±0.45ab and 5.20±0.73a) for G-350E2, G-500E2 e G-1000E2, respectively. In conclusion, the 17β-estradiol injection at the beginning of the progesterone (P4) protocol is able to synchronize the emergence of a new follicular wave, which occurred earlier in females treated with the lowest dose of the drug (ie. 350µg of the 17β-estradiol). Financial support: CNPq and FAPESP.

PW1547 - Short-term protein supplementation during a 15 days prostaglandin-based protocol for timed AI improves reproductive performance of ewes

Authors and co-authors:
OLIVERA-MUZANTE Julio Mario (1), ERRANDONEA Nicolás (2), FIERRO Sergio (3), VIÑOLES Carolina (4), BANCHERO Georgget (5)

(1) Facultad de Veterinaria. Universidad de la República, Laboratorio de Reproducción Animal. Dpto. de Salud en los Sistemas Pecuarios, 60000, Paysandú, Uruguay
(2) Facultad de Veterinaria. Universidad de la República, Laboratorio de Reproducción Animal. Dpto. de Salud en los Sistemas Pecuarios, 60000, Paysandú, Uruguay
(3) Secretariado Uruguayo de la Lana. (S.U.L.), Área de Transferencia de Tecnología, 50000, Salto, Uruguay
(4) Instituto Nacional de Investigación Agropecuaria (INIA), Programa Nacional de Carne y Lana, 45000, Tacuarembó, Uruguay
(5) Instituto Nacional de Investigación Agropecuaria (INIA), Programa Nacional de Carne y Lana, 70000, Colonia, Uruguay

Focus feeding in the late luteal phase previous a spontaneous oestrus results in a significant improvement of ovulation rate (OR) and prolificacy in sheep [1]. The aim of this experiment was to test if a 5 days nutritional treatment applied at the end of a 15 days -interval prostaglandin F2 (PG)-based protocol for timed artificial insemination (TAI) would improve the reproductive outcome of ewes. During the breeding season (April - June; “El Recuerdo” farm, Artigas Uruguay, 30°S - 57°W), 218 multiparous Merino ewes grazing native pastures (forage allowance of 6.8 kg of dry matter/100 kg live weight, 11.1% CP, 38.3% ADF, and water ad libitum) were selected. Ewes were allocated to two groups based on their body condition (3.2 ± 0.2 points, score 1-5) and body weight (39.4 ± 6.2 kg); Group 1, PG15 (n=109, Control): ewes synchronised with two PG