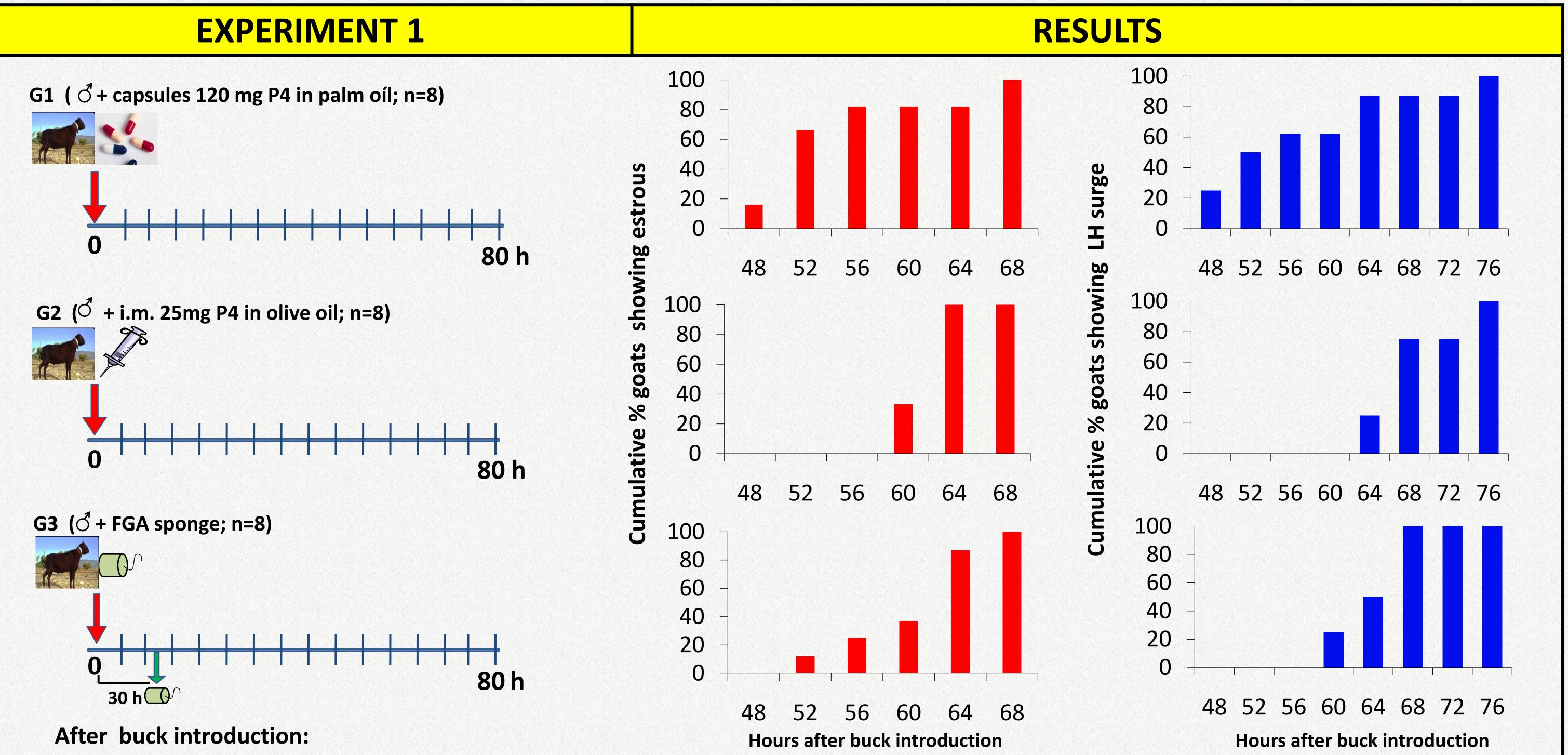
Induction and synchronization of ovulation by combining the male effect, intravaginal progesterone capsules and **Coprostenol in goats, during the non-breeding season** A. Gómez-Brunet¹, A. Toledano¹, M.A Coloma¹, R. Velazquez¹, C. Castaño¹, J.A Carrizosa², B. Urrutia², J. Santiago,¹ A .López¹ ¹ Dpto Reproducción Animal, INIA, Madrid, Spain; ²IMIDA, La Alberca, Murcia, Spain

Looking for alternative methodologies focusing on limiting the use of progestagens to estrous synchronization in small ruminants, we have developed an effective method, the IMA-PRO2[®], based on male exposure, i.m progesterone (P4) injection at male introduction and cloprostenol administration 9 days later. This method, induces and synchronizes ovulation in goats during the nonbreeding season, allowing artificial insemination (A.I) at a fixed time-point without the need to prior estrous detection. Because the EU legislation forbidding i.m P4, this work was conducted to examine the potential value of using intravaginal (P4) gelatine capsules to replace i.m P4 injection at buck introduction.



. Estrous detection: 24 to 72 h at 4 h intervals

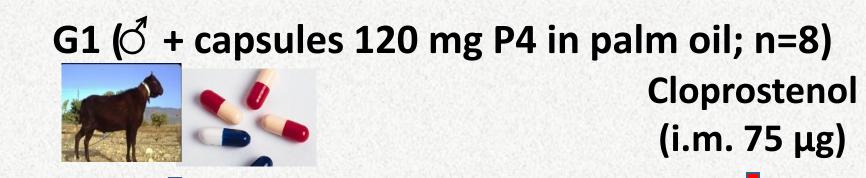
. LH in plasma: 24 to 80 h at 4 h intervals

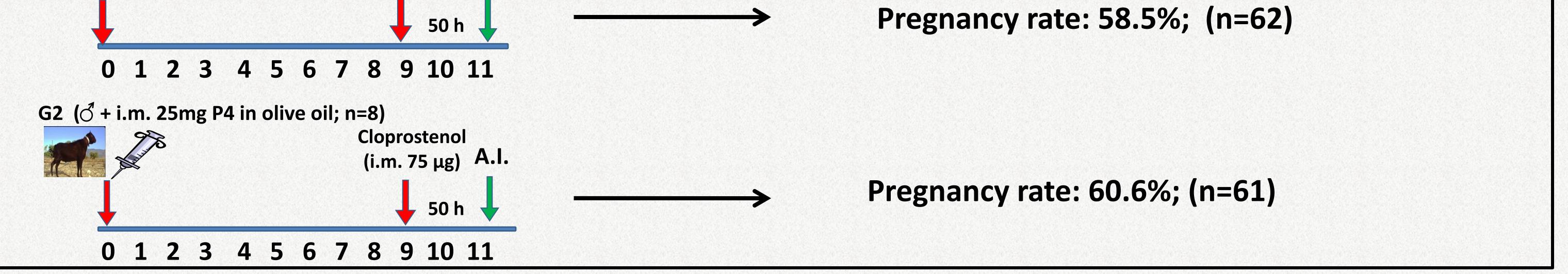
Estrous behaviour (mean ± S.E.M): LH surge (mean ± S.E.M): 58.0 53.5 \pm 3.0 h in G1, 63.3 \pm 1.7 h in \pm 3.9 h in G1, 69.0 \pm 2.5 h in G2 and 61.5 ± 1.8 h in G3. G2 and 65.0 \pm 1.3 h in G3.

EXPERIMENT 2

A.I.

RESULTS





CONCLUSION The use of intravaginal gelatin capsules (120 mg of progesterone in palm oil) at the time of buck introduction followed by an i.m cloprostenol injection, 9 days later, constitutes an effective method to synchronizes estrous and ovulations during the non-breeding season, with subsequent acceptable fertility rates after A.I at 50 h after cloprostenol injection