

# Induction and synchronization of estrus during anestrous season in North Moroccan goats using FGA vaginal sponges/eCG/cloprostenol or IMA-PRO2® protocols





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## **Introduction and methodology**

- The aim is to induce and synchronize estrus and ovulation during the anestrous season of North Moroccan goats.
- Two treatments are compared :
  - FGA/eCG/PGF: 10 days of 45 mg FGA sponges + 75 μg cloprostenol 48h before sponge removal + 450 UI eCG at sponge withdrawal (n=6)
  - > IMA-PRO2®: Male effect + IM injection of 25 mg Progesterone at buck introduction + 75  $\mu$ g cloprostenol 9 days after (n=6)
- Estrus is checked every 4 hours and blood sampled every 2 hours for plasma LH assays

### Results

	FGA/eCG/PGF	IMA-PRO2
Estrus		
Exhibition (%)	100	83
Time (h after treatment)	18.0 ± 7.5	$32.4 \pm 7.4$
LH peak		
Exhibition (%)	100	63
Time (h after treatment)	$30.0 \pm 5.5$	$48.0 \pm 3.3$

- 6/6 goats exhibited estrus in the FGA/eCG/PGF group, and 5/6 in the IMA-PRO2 group;
- 6/6 goats produced LH peak in the first group and only 4/6 in the second one;
- Estrus and LH peak occurred sooner in the FGA/eCG/PGF group
- The interval between estrus and LH peak is similar in the 2 groups;
- These protocols allow the same level of synchronization for estrus and ovulation

### **Conclusion**

The FGA/eCG/PGF treatment is more effective than IMA-PRO2® protocol in our conditions

# Aknowledgments

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