



Successful induction of oestrus, ovulation and pregnancy with Avikesil-S-PMSG protocol in anoestrus Sirohi goats



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Genesis of the work

Prevalence of anoestrus in Sirohi goats in farm condition

Year	No. of Breedable doe	No. of non-cyclic does	Prevalence of non-cyclicity for the season
2015-16	317	42	13.24%
2016-17	306	25	8.16%
2017-18	265	33	12.45%

Avikesil-S; Intra-vaginal sponges for oestrous synchronization in sheep & Goat





1. To study the potential of Avikesil-S-PMSG protocol on estrus induction response and kidding in non-cyclic/anoestrus Sirohi goat

2. To study the fertility of induced estrus in Sirohi goat

Methodology

Heat detection using teaser buck for complete breeding season



Identified anoestrus doe (n=33)



Oestrus Induction with AVIKESIL-S sponge

Oestrus Induction protocol (N=33)

Inject
PMSG 200 IU



Avikesil-S sponge for 14 days

Detect heat & breed

Day 0

14

15

16

17



Record the heat induction, Kidding and fertility in non-cyclic does

Results

Estrus induction response in non-cyclic Sirohi does (N=33)	
Heat induction %	87.87% (29/33)
Kidding % (available basis)	58.06% (18/31)
Fertility of induced oestrus	66.66%
Twin %	33.33 %
Triplet %	11.11 %
Quintuplets %	3.03%
Multiple births %	50
Still birth	01
Kid crop	31



Economic benefits kids born to induced estrus in 2017-18

Extra kid produced from non-cyclic does	
kids produced	31
Expected loss due to mortality (5%)	1.55
Total kids produced	29.45
Rate per kid	Rs. 4000
Expected Earning	Rs. 1,17,800

Cost of estrus induction (N=33)

Cost of 33 Avikesil-S sponges (@ Rs 25/sponge)	Rs 825
Cost of PMSG	Rs 4125
Total cost	Rs 4950

Conclusions



Avikesil-s (Progesterone sponge-PMSG protocol) is an effective practise to induce fertile estrus in anoestrus does



Multiple births were higher



This practice of estrus induction is profitable as it would give extra kids from problematic does

Future research directions

- ❖ In Rajasthan **high breeding season** for goats is **May- June**
- ❖ Breeding period at ICAR-CSWRI is 3 cycles (**2 months**) of high breeding season
- ❖ Again breeding of non-cyclic does through sponge intervention will increase the breeding period in turn resulting **spread out kidding**
- ❖ Spread out kidding more than 2 months period will make **difficult in management of health calendar** 
- ❖ Efforts on reproductive interventions **on short term oestrus induction protocol is under pipeline**

Acknowledgement

The Director, ICAR-CSWRI

Thank you all



Thank you

