

## Induction of Fertile estrus in true anoestrus by re-utilization of Crestar implants in She buffales

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### Abstract

The effect and economy of re-utilization of Crestar implant alone and in combination with PMSG for induction of fertile estrus in 30 true anoestrus she buffaloes was conducted in and around Bidar district of Karnataka state. The animals were randomly divided into three groups of ten animals each. The animals in Group 1 and 2 were injected with 500 mg progesterone intramuscularly followed by implantation of used Crestar on day 4 of progesterone administration and removed on day 9, whereas animals in Group 2 were injected with 500 IU PMSG on day 9 (the day of implant removal). whereas Group 3 served as control group. On removal of the implant, 70.00 % she buffaloes from Group 1 and 2 exhibited estrus ( $2.60 \pm 0.80$  and  $2.47 \pm 0.73$  days) respectively. The animals were artificially inseminated twice with 12hrs interval and conception rate was 70% from animals of Group 1 and 2. No extra beneficial effect of PMSG was observed either on estrus response or conception rate. None of the animals from Group 3 (control) showed estrus. The animals of Group 1 and 2 exhibited 25 and 45 % and 50 and 20% intense and intermediate estrus respectively with absolute conception, while 30 % of the animals in both the treated groups exhibited weak symptoms of estrus and failed to conceive. 70 % of the animals from both the groups had satisfactory arborization patterns with 66.67 percent conception. Whereas only 20 percent of the animals in both the groups showed good arborization patterns of cervico- vaginal mucus with absolute conception. None of the animals conceived expressing weak symptoms of estrus and missing arborization pattern in both the treated groups. It was concluded that utilized Crestar implant (for 7 days) can also be re-utilized to reduce the cost of treatment for induction of fertile estrus even with out PMSG in field conditions.

Keywords: Crestar re-utilization, estrus induction, arborization, fertility, she buffalo