

## Evaluation of Pre and Post Artificial Insemination effect of GnRH Hormone on conception of repeat breeder Deoni Cows

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### Abstract

Twenty four Deoni repeat breeder cows were randomly allocated into 4 groups of six each. The animals of groups I, II and III were injected with 250 µg of buserelin acetate (Receptal®) on two occasions i.e. once on day of estrus and second dose on days 10 or 12 or 14 respectively in I, II and III groups following breeding, while the animals of group IV served as control. Among the physical characters of estrual cervico-vaginal mucus, typical arborization pattern (80.95 % in pregnant vs. 55.56 % in non-pregnant cows) and marginally high spinnbarkeit readings (24.67±2.7cms in pregnant and 22.21±1.32 cms in non-pregnant cows) favored better fertility, although the differences between the groups were statistically insignificant. However, the pH of estrual cervico-vaginal mucus did not indicate any effect on fertility and it ranged between 8.00 to 9.00. The cows of treatment groups I, II and III registered a considerably higher conception rate of 83.33 percent each, while in control group cows had only 33.33 percent. To conclude GnRH therapy irrespective of days of administration resulted in an overall enhancement in conception rate of 83.33 as against 33.33 percent in control groups of cows.

**Key Words:** Repeat breeding, GnRH, Conception Rate, Cervical mucus and Deoni Cows.