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SHORT COMMUNICATION

Controlled breeding with norgestomet ear implant for induction of post partum oestrus in Deoni cows

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ABSTRACT

Deoni cows were treated for induction of oestrus with norgestomet ear implants. All (100%) animals responded to the treatment. The induced oestrus was found to be ovulatory in 90.00 per cent animals and 70.00 per cent cows conceived with 1.85 services per conception.

Key words : Deoni, oestrus, Norgestomet implant

Many of the Indian cattle breeds are on the verge of extension. It is imperative to suggest appropriate reproductive technologies for conservation and development of native breeds. Present study was undertaken to record response for controlled breeding technique with Norgestomet ear implant in native, elite cattle breed Deoni.

Healthy, Brucella free Deoni cows maintained with balanced ration and having post partum period more than sixty days were selected from cattle breeding farm of Veterinary College, Udgir for the present study during winter season. After carrying out deworming and clinical examination of 15 cows, per rectal palpations were attempted thrice at 8 days interval. All the animals were confirmed for normalcy of genitalia and ovarian inactivity. Cows (n=10) from treatment group were injected with 2 ml injection containing 5 mg Oestradial Valerate and 3 mg Norgestome intramuscularly on day 1 and also a siliastic ear implant containing 3 mg Norgestomet was placed on outer surface of ear pinnae. The implants were maintained upto day 10. On removal of implants on day 10th, fixed time breeding were arranged after 72 and 96 hours in all the treated cows. Five cows were kept as untreated control. Responded and non responded cows were monitored for ovarian events.

All the treated cows (100.00%) exhibited intermediate type of oestrus within 3.9 days of treatment. Seven cows (70.00%) animals conceived with 1.85 services per conception. Two cows continued cyclicity with non-breeding tendency. One cow failed to ovulate during induced exhibitory oestrus and hence remained acyclic. No response was recorded during the trial period in control group. Agarwal *et al.* (1999) recorded reasonable degree of induction of oestrus (71.42%) and fertility without impairment of luteal function with the use of Norgestomet treatment in anoestrus cows. Khurana (1999) reported a single pregnancy out of 105 poor conditioned cows with the same treatment and hence concluded that good body condition is a prerequisite for induction of oestrus with Norgestomet treatment. Norgestomet along with PMSG has been reported to be effective (62.50%) than Norgestomet alone (25.00%) in post partum anoestrus Jersey crossbred cows by Selvaraju and Rajsunderam (1999). Madhumeet Singh *et al.* (2001) reported 60.00 per cent conception rate with first AI in Norgstomet treated Jersey cows.

Selvaraju and Rajsundaram (2001) reported cent per cent ovulatory response in Norgestomet alone and Norgestomet along with GnRH treatment. However, only 25.00 per cent conceptions have been reported in Norgestomet treated cows as against 50.00 per cent conceptions in Norgestomet plus GnRH therapy.

Better response in terms of ovulatory oestrus induction rate was recorded in the present trial may be due to sufficient dietary status and precised timings of inseminations with double dose. Norgestomet was found to be effective in Deoni cows in induction and synchronization of estrus in Deoni cows.

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