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Synchronization of Estrus in Sub Estrus Murrah Buffaloes by Single Injection of PGF2 α Analog in Low Breeding Season

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Synchroniztion of Estrus in Sub Estrus Murrah Buffaloes by Single Injection of PGF2 α Analog in Low Breeding Season

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I. INTRODUCTION

About 40 percent buffaloes are usually sub estrous in summer season even in well arranged dairy farm. Prostaglandin F2 α and its analog are effective in causing luteolysis leading to estrus with acceptable fertility. The present experiment was conducted to evaluate efficacy of single injection of Prostaglandin analog in induction, Synchroniztion of estrous and conception during summer in an organized farm.

II. MATERIAL AND METHODS

120 buffaloes are examined per rectly to determined the reproductive status during april-june

Response of Sub estrus murrah buffaloes to single injection of PGF2 α analog

No. of animals treated	Interval between induction of estrus	Induction percent	Conception percent
a)24 experiment murrah buffaloes	77.66 \pm 0.003	100	75
b)6 control animals	-	-	-

All the sub estrus buffaloes treated with a single injection of Clostenol responded to treatment on an average interval of 77.66 \pm 88 hrs with maximum responding at 72 hrs. post injection (66.6) with fertility rate of 75 percent.

The result obtained in this study are higher than 90 percent induction report by PGF2 α (Jha , 2011) in 72 – 96 hrs., however , the percent findings are close to induction interval of 85 \pm 4.4 hrs in breeding season with 500 mg inj. Clostenol in buffaloes (Chohor,1998) but are higher in conception rate. The high induction and synchronization rate obtained in present study may be due to good nutrition and managerial practices at

2012, at Choubey Dairy Farm, having a herd strength of 700 breeding murrah buffaloes the dairy farm had water sprinklers on asbestos roof to keep the dairy farm cool , besides this all animals were bathed in morning and evening after milking.

The Experiment was conducted on 24 murrah buffaloes in a group of six animals having palpable corpus luteum (Supposed to be sub estrus) were injected 2ml Clostenol (500mg) l/m in a group of six animal murrah buffaloes during the period. Estrus detection was done from 2nd day of injection – 5th day in morning and evening in farm. Animals detected in estrus were served naturally by difficult bulls of known fertility. One group of 6 animals as control groups

III. RESULT AND DISCUSSIONS

The result obtained with single injection of prostaglandin F2 α analog in sub estrus buffaloes which is tabulated below.

the farm particularly provision of water sprinkle at roof of shed might have saved buffaloes from heat stress which resulted in excellent response in form of synchronization of estrus and high fertility more over selection of animals with corpus luteum, who were in susceptible prone and rigorous heat detection by the bull from 2nd – 5th day appear to be main factor in obtaining high induction and fertility in treated buffaloes.

IV. CONCLUSION

It is concluded that the Inj. Clostenol in dose of 500 mg is fully effective in synchronization of estrus in low breeding season, sub estrus murrah buffaloes with 75% fertility, however detection of corpus luteum in susceptible phase of prostaglandin is required for best result.

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REFERENCES RÉFÉRENCES REFERENCIAS

1. Brito L.F., R. Satrepa, E.P. Marson and J. P. Kastelic (2002). Efficacy of PGF₂ α to synchronize estrus in water buffalo cows (*Bubalus bubalis*) is dependent upon plasma progesterone concentration, corpus luteum size and ovaries follicular status before treatment. *Anim. Repro. Sci.*, **73**(1) : 23-35.
2. Jha S. S. (2011). Respond of PGF₂ α to synchronize in buffaloes. *Asian J. Biochem.. and Pharma.*,**3**(1) : 346-349.

