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Success of Artificial Insemination (A.I.) in District Rohtak (Haryana)

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Abstract

A Survey was carried out in three main and seven sub A.I. centres of District Rohtak (Haryana) to study the conception rate in cows and buffaloes inseminated artificially. The highest conception rate found in cows was 68.19% and in buffaloes 59.74%.It was concluded that locality has no significant influence on conception rate in both species. It is suggested that villagers should be educated about A.I. and well qualified staff should be posted in A.I. centres.

Keywords: Cows, buffaloes, A.I. centres and conception rate.

Introduction

Artificial insemination is a scientific application of the mating behaviour that a breeding male contributes its gametes at a time to a large and widely spread female population in their recipient stage. In India A.I. has been adopted as practical way of improving the fertility of village animals to meet the increasing demand of milk.

Aim of the Study

The present study was conducted to determine the success rate in conception rate (C.R.) of A.I. in cows and buffaloes in district Rohtak of Haryana state at different main and sub A.I.centres.

Material and Methods

Haryana state is very well known for its milch animals. The state has 22 District in which Rohtak is very well know as marketing centre for dairy cows and buffaloes. Keeping in view the importance of Rohtak as a leading marketing centre for milch animals, this districts of Haryana was selected for this purpose. Three main A.I.(Rohtak,Maham and Kalanaur) and seven sub A.I. centres (Kharawar, Khanaur, Sampla, Hasangarh, Kiloi, Madina and Sanghi) were selected to know the success of A.I..All the A.I. centres were using frozen and liquid semen of Jersey bull and Murrah buffalo bulls.Data were collected monthly basis showing total no. of cow and buffaloes inseminated, total no. of conceived animals and total no. of animal repeated. The percentage of success was calculated as per following formula-

Conception rate %=Total no. of animal pregnantx100/Total no. of animal inseminated

Data were statistical analyzed as described by Snedcor and Cochran (1980).

Results and Discussion

Results obtained during survey has been presented in Table No-01-

It is clearly indicated in table no-1 that the higher conception rate was in cows as compared to buffaloes in all A.I. centres except Khanaur and Hassan garh sub A.I. centres, where buffaloes have slightly higher rate of conception but at Sanghi A.I. centre results were quite similar.

The highest conception rate among the cows was recorded in Kharawar centre (68.19%), while the lowest was at Khanaur. In buffaloes, the highest conception rate 59.74% was found at Sanghi sub A.I. centre and lowest at Khanaur centre.Among all the main A.I. centres and sub A.I. centre studied in this survey at Khanaur centre lowest conception rate was observed both in cows and buffaloes. The main cause at this centre is general tendency of the farmers to get their animals served naturally by bull left in the area. In main A.I. centre highest conception rate in both cows and buffaloes was found in Maham centre but in sub A.I. centre highest conception rate in cows was found in Kharawar 68.19% and in buffaloes it was Sanghi A.I centre 59.74%.

It is clearly indicated that the above data does not affect the percentage of conception rate. The statistical analysis reveals that there

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was significant influence on conception at 5% level of significance in T test. Anzar, et.al (2003), Razi, et.al (2010) and Gupta (2019) also studied on the conception rate.

Conclusion

It can be concluded that artificial insemination is only the way for the genetical development of live stock, specially cows and buffaloes in rural areas as well as in the urban area.So, this technique provided ample chances of maximum utilization of superior germ plasma.

Suggestion

In spite of favourable attitude towards the A.I., the villagers are still somewhat reluctant in using A.I methods. Many of them still prefer natural service, The following suggestion will be worthwhile to be incorporated herein –

1. Establishment of natural grid of A.I.
2. Greater emphasis on the merit of bull.
3. Villagers should be educated about A.I.
4. Only trained and qualified staff should be posted.

References

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	Name of A.I. centres	Success of A.I.(Artificial Insemination)							
		Cows				Buffaloes			
		Total No. of Insemination	Total No. of pregnant	Total No. of repeated	Conception rate (C.R.)	Total No. of Insemination	Total No. of pregnant	Total No. of repeated	Conception rate (C.R.)
A	**Main A.I.Centre**								
1	Rohtak	1116	610	506	**54.65**	1004	436	568	**43.42**
2	Maham	388	227	161	**58.50**	364	172	192	**47.25**
3	Kalanaur	605	271	334	**44.79**	515	199	316	**38.64**
B	**Sub A.I. Centre**								
1	Kharawar	481	328	153	**68.19**	421	238	183	**56.53**
2	Khanaur	414	126	288	**30.43**	383	119	264	**31.07**
3	Sampla	583	238	345	**40.82**	467	163	304	**34.90**
4	Hasan garh	598	329	269	**55.01**	444	257	187	**57.88**
5	Kiloi	472	225	247	**47.67**	526	212	314	**40.30**
6	Madina	503	230	273	**45.72**	413	173	240	**41.88**
7	Sanghi	484	286	198	**59.09**	308	184	124	**59.74**

Table no-1Showing the success of A.I. in cows and buffaloes in Rohtak District of Haryana