

The study of Incidence of Reproductive Disorders in Non-descriptive Cows in Rewa District

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How to cite this article:

M K Ahirwar, J S Rajoriya, A K Singh, et al./The study of Incidence of Reproductive Disorders in Non-descriptive Cows in Rewa District/Journal of Animal Feed Science and Technology/2021;9(2):57-59.

Abstract

A field study was carried out in the Rewa district; Incidence of reproductive disorders studied in seventeen villages of potential dairy pocket of Rewa district includes peri-urban and rural areas. After conducting survey on 409 animals of 193 farmers the total percentage of true anoestrus cows was 35.45 per cent followed by 15.54 per cent sub-oestrus animals, 8.31 per cent repeat breeders, 3.91 per cent retention of placenta (ROP) and 3.17 per cent of prolapse cases. So the total percentage of reproductive disorders was 66.38 per cent. Reproductive disorders may be due to anoestrus and other problems related to mineral and other deficiencies in feeds and fodders in field conditions.

Keywords: Anoestrus; Incidence; Prolapse; Repeat breeders; Retention of placenta.

Introduction

In rural areas animals were suffering from anoestrus and other problems related to reproduction associated with mineral deficiencies in feeds and fodders in field conditions. Under nutrition is one of the most limiting factors in livestock in rural areas. The imbalances or deficiencies or toxicities of certain minerals severely affected reproduction, growth and health in animals. In field practices

crossbred animals are fed less feed or low nutritive feed leading to negative energy balance condition. Insufficient intake of energy, protein, vitamins, and macro and/or micro minerals are associated with suboptimal reproductive performance such as delayed puberty, reduced ovulation, lower conception rate, lengthened post-partum anestrus and reduced perinatal survival as well as performance (Robinson, 1990). Deficiency of energy for an extended period leads to anovulation,

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postpartum anestrus, as well as infertility (Staples *et al.*, 1990).

Reproductive disorders have been found to be a major reason for decreased reproductive efficiency in cattle and consequently reproductive efficiency is the major determinant of lifetime productivity of cows (Lobago *et al.*, 2006). In the last few decades, as the major epidemic disease, were brought under control, emphasis have increasingly shifted to economically important diseases to the dairy producers and animal health problem stands out as the most prominent. (Msangi *et al.*, 2005). Regular breeding depends upon the normal function of the reproductive system.

Material and methods

Technical survey regarding farmer's status, animal status, feeding practices adopted by farmers, productive and reproductive status of potential dairy pockets of Rewa district. Animals were selected randomly on the basis of history, interview schedule, farming status (existing housing and managerial condition) and animal status. Record the data of reproductive disorders like anoestrus, repeat breeding, retention of placenta and prolapsed of breedable population of dairy cattle was done. Definitions of recorded diseases are mostly from Sarder *et al.*(2010).

Anoestrus and subestrus: Lack of expression of the oestrus at an expected time is called anoestrus. Clinically if a heifer is 18 or more months old or a cow has passed 40 days post-partum but did not

show oestrus the condition is referred as anoestrus.

Retained placenta: A cow was considered to have RP when the foetal membranes were visible at the vulva or were identified in the uterus or vagina by vaginal examination more than 24 h after calving.

Repeat breeders: Cows failing to conceive after a defined number of inseminations (generally three or more) with fertile semen, have been classified as repeat breeders (Zemjanis, 1980; Gunther, 1981; Levine, 1999).

Results and discussion

Incidence of reproductive disorders studied in seventeen villages of potential dairy pocket of Rewa district includes peri-urban and rural areas (table 1). After conducting survey on 409 animals of 193 farmers the total percentage of true anoestrus cows was 35.45 per cent followed by 15.54 per cent sub-oestrus animals, 8.31 per cent repeat breeders, 3.91 per cent retention of placenta (ROP) and 3.17 per cent of prolapse cases. So the total percentage of reproductive disorders was 66.38 per cent. Present findings are close to the findings of Shukla *et al.* (2007), Tiwari *et al.* (2007) and Devasena *et al.* (2010). In rural areas animals were suffering from anoestrus and other problems related to reproduction associated with mineral deficiencies in feeds and fodders in field conditions. Under nutrition is one of the most limiting factors in livestock in rural areas. The imbalances or deficiencies or toxicities of certain minerals severely affected reproduction, growth and health in animals.

Table 1: Incidence of different reproductive disorders in Rewa district.

Name of village	No. of farmers	Total animals	Reproductive Disorders				
			True anoestrus	Sub-oestrus	Repeat breeder	ROP	Prolapse
Bichhiya (Rewa)	Lakshman bagh Goshala	37	19	9	6	4	2
Kuthulia	10	25	9	3	2	1	0
Baisa	12	28	11	5	3	1	0
Padokhar	8	21	8	4	3	2	1
Hardi	11	23	4	2	1	0	0
Silpara	12	18	8	3	2	1	1
Udki	10	19	6	4	1	0	0
Bhatlo	7	12	5	2	1	1	2
Dihiya	6	10	3	1	1	0	1
Amiliki	24	38	18	6	3	2	1
Bela	14	36	10	4	1	1	0
Raura	11	18	6	1	4	2	2
Ajgara	10	20	4	2	3	1	1

Table Cont....

Bela	17	39	14	4	3	2	1
Nipaniya	12	21	8	3	1	0	0
Raipur kerchurian	15	42	17	7	4	2	1
Chorhata	14	39	14	4	1	0	2
Total	193	409	145	64	34	16	13
% Disorders			35.45	15.64	8.31	3.91	3.17

The total percentage of reproductive disorders are 66.38 per cent in which 51.09 per cent is due to true anoestrus and suboestrus, this findings are close to the findings of Lall et al. (2000), Shukla et al. (2007), Tiwari *et al.* (2007) and Devasena *et al.* (2010). Reproductive disorders may be due to anoestrus and other problems related to mineral and other deficiencies in feeds and fodders in field conditions.

Conclusion

According to our study anoestrus, repeat breeders, retention of placenta and prolapse are important reproductive diseases. Mitigation strategies about these diseases are already available should be extended to farmers to control them.

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