



Gynaecological Status of Cattle and Buffaloes in the Hot and Humid Field Conditions of West Godavari District of Andhra Pradesh.

KEYWORDS

Anoestrus, Silent heat, Endometritis, Pregnancy

Dr D.Suresh Babu

Principal i/c, Animal Husbandry Polytechnic, Venkataramannagudem, West Godavari District, PIN -534101

ABSTRACT Data from health camp records were collected and analysed for various Gynaecological parameters. A total of 213 cases were examined which were obtained from 6 health camps conducted in six villages from January 2012 to march 2012. under the jurisdiction of Buffalo Research Station, VR Gudem in West Godavari District. The mean and per cent of various Gynaecological cases examined were: Anoestrus: 12.5 ± 1.47 and 35.21% ; Silent heats 2.33 ± 0.61 and 6.57% ; Endometritis 2.33 ± 0.61 and 5.16% ; Under developed genitalia, 3.83 ± 1.01 and 10.79% ; In Oestrus cases 2.83 ± 0.60 and 7.98% ; While, Pregnancy cases were 11.33 ± 2.27 and 31.9% and suspected for pregnancy cases were 0.83 ± 0.4 and 2.34% . Analysis of variance showed that except anoestrus and pregnancy case which showed highly significant ($P < 0.01$) difference with other cases but not with each other where as all other cases in the study were not significant among themselves.

Introduction:

Production and Reproduction were interlinked in large animal livestock production as milk production occurred after calving only. Sound reproductive rhythm is essential for ensuring regularity in calving with narrow dry period to have a profitable dairy farming especially in buffalo farming (3). Poor reproductive performance of the animals leads to economic losses due to reduced production and additional cost on management (4). It was observed that milk yield was reduced by 98kg due to Metritis alone (7). Sub fertility, infertility and sterility was the outcome of impaired normal reproductive function all of which result in economic losses due to Anoestrus, extended dry period, late maturity, decreased calving per cent age and lifetime productivity of the animal, increased cost of management and intense culling of the animals (1). Reproduction was depending on environment, feeding and management. High and low temperatures, relative humidity, Precipitation, Solar radiation will affect the conception rate in large ruminants. However, balanced diet coupled with careful management improves conception. Deficiency of nutrients and ignorance of small holders about reproductive aspects leads to fertility problems resulting in economic loss to the animal keepers more so to the small holders who generally maintain one or two milch animals and contribute bulk of the milk production in our country but illiterate. Anoestrus, Uterine infections, Congenital defects of reproductive tract and Sub-Oestrus or Silent heats and Unobserved heats were major causes for female infertility. The present study was concerned with the occurrence of various Gynaecological cases and their analysis in cattle and buffaloes being maintained under field conditions in hot semi-arid and humid climatic conditions existing in the villages under the jurisdiction of Buffalo Research Station of West Godavari District of Andhra Pradesh.

Materials and Methods:

The data were collected from the animal health camp records maintained by Buffalo Research Station, VR Gudem. Six fertility camps were conducted in six villages from January, 2012 to March, 2012. A total of 213 animals were examined and the reproductive parameters included in the study were Anoestrus, Sub-Oestrus or Silent heats, Endometritis,

Under Developed Genitalia (UDG), in heat cases. Pregnant and suspected for pregnancy cases were also examined. The data were analysed statistically (10) and Anova single factor was calculated by using MS Office Excel, 2003 version to find out the significance of variation among various reproductive parameters.

Results and Discussion:

The data on Gynaecological parameters were presented in table 1. The overall mean number of Anoestrus, Sub-Oestrus or Silent heats, Endometritis, Under Developed Genitalia (UDG), In heat cases, Pregnancy and suspected for pregnancy cases were 12.5 ± 1.47 , 2.33 ± 0.61 , 2.33 ± 0.61 , 3.83 ± 1.01 , 2.83 ± 0.60 , 11.33 ± 2.27 and 0.83 ± 0.4 respectively. Anoestrus cases were highest 35.21% followed by Pregnancies 31.9% . Next comes was Under developed Genitalia (UDG) with 10.79% cases, In Oestrus cases 7.98% ; Silent heats 6.57% , Endometritis 5.16% and Suspected for Pregnancies were 2.34% . The climate is somewhat hot and humid and it might be the reason for the occurrence of more number of anoestrus cases reported in the study area and buffalo population predominates. These results were similar to the findings of earlier workers (2, 5, 8, 6). The Analysis of Variance for the significant difference among various Gynaecological cases showed that there was a significant difference ($P < 0.01$) between Anoestrus and other cases except with Pregnant cases whereas Pregnancies showed significant ($P < 0.01$) difference with other cases except with Anoestrus cases. While Silent heats, Under Developed Genitalia (UDG), Endometritis, In Oestrus cases and Suspected for Pregnancies were not significant among themselves but significant ($P < 0.01$) with both Anoestrus and Pregnant cases. The more number of pregnant cases might be due to approaching of calving season and the breeding season closes by October in buffaloes.

Acknowledgements

The author acknowledges the authorities of Sri Venkateswara Veterinary University, Tirupati for utilizing the data. This research article may be included under the subject : Animal Husbandry & Veterinary Science category.

Table 1 : Gynaecological profile of the animals in the study area.

Sl. No	Name of the village	Date of the camp	Type of Gynaecological Cases Examined							total
			Anoestrus	Under Developed Genitalia	Silent heats	Endometritis	In oestrus	Prgenancies	Suspected for pregnancy	

1.	Ravulaparru	28-1-12	18	6	4	3	2	16	2	51
2.	Pedda vel-lamilli	30-1-12	13	0	3	1	4	17	0	38
3.	Chinna vel-lamilli	10-2-12	12	3	3	0	2	12	0	32
4.	Badampudi	24-2-12	11	3	3	1	1	4	1	24
5.	Dontavaram	7-3-12	14	7	1	2	3	14	0	41
6.	Chinna tade-palli	22-3-12	7	4	0	4	5	5	2	27
7.	Total		75	23	14	11	17	68	5	213
8.	Mean±SE		12.5±1.47	3.83±1.01	2.33±0.61	2.33±0.61	2.83±0.60	11.33±2.27	0.83±0.40	
	Per cent		35.21	10.79	6.57	5.16	7.98	31.9	2.34	

REFERENCE

- [1].Agarwal SK & Tomer OS. Reproductive technologies in buffalo 2nd edition, A monograph published by communication centre, Indian Veterinary Research Institute, Izatnagar, India, 2003. [2].Basu S. Seasonal variation of fertility in Murrah buffaloes, Indian Vet.J, 1962,39:433-437. [3]. Khan H M, Bharat M, Mohanthy TK, Gupta AK, Raina NS, & Mir, MS, Peri-partum reproductive disorders in buffaloes-An Overview, Vet Scan,4(2), 2009. [4].Mulligan FJO, Grady L, Rice DA & Doherty ML, A herd health approach to dairy cow nutrition and production diseases of the transition cow, Anim. Reprod. Sci ,2006,96:331-353. [5].Rao BR, Patel UG & Tabman SS, Seasonal trend in reproductive behavior of Surti buffaloes service period and post partum oestrus interval, Indian Vet J,1973,50:413-417. [6].Shah SNH, Comparative studies of seasonal influence on breeding behavior and conception rate of dairy buffalo and zebu cattle In: Proc. 11th Int. Congr. on Anim. Reprod. and Artificial Insemination, 1988,Vol.3 P.538 [7].Simerl NA, Wilcox, CJ & Thatcher WW, Post partum performance of dairy heifers freshening at young ages. J Dairy: Sci,1972.75:590-595 [8].Singh G, Singh GB, Bains GS, Studies on incidence of Anoestrus in village buffaloes, Indian J Anim. Res 1985,19,57-60. [9].Singh G, Singh GB, Dhaliwal GS, Studies on reproductive status of rural buffaloes in summer, Indian J Anim. Reprod. 1989, 10:151-153. [10]. Snedocor G W & Cochran WG, Statistical Methods, 8th Edn., Iowa State University Press Ames, Iowa, 1994]