

EFFECT OF FEEDING ON AGE OF FIRST ESTROUS AND AGE OF FIRST CALVING IN GIR COW

***BLOCH, R. K.; CHAVDA, M. R.; KADAM, S. J.; GOHIL, B. C.;
BORADIYA, P. C. AND TRIVEDI, S. P.**

**DEPARTMENT OF ANIMAL NUTRITION
COLLEGE OF VETERINARY SCIENCE AND ANIMAL HUSBANDRY
JUNAGADH AGRICULTURAL UNIVERSITY
JUNAGADH - 362 001, GUJARAT, INDIA**

***EMAIL: rameez18989@gmail.com**

ABSTRACT

The study was carried out to evaluate the age of first estrous and age of first calving in Gir cow at the Cattle Breeding Farm, Junagadh Agricultural University, Junagadh, during last seven years from 2010 to 2016. It was found that average age of first estrous (AFE) and age of first calving (AFC) were 1124.33 ± 21.39 days and 1446.67 ± 26.86 days, respectively.

KEY WORDS: *Calving, Estrous, Gir cow*

INTRODUCTION

Gir cow is one of the best milch breed among indigenous cattle. The breed is also known as Bhodali, Kathiawari. The breed probably originated in the Gir forest of South Kathiawar. They are mainly found in Junagadh, Amreli and Jamnagar districts of Gujarat. Cattle breeding farm of Junagadh Agricultural University, Junagadh is one of the largest and oldest organized farm maintaining pure bred of Gir cows and Jaffrabadi buffaloes through conservation, improvement and advancement of purebred genome of both Gir cow and Jaffrabadi buffalo breeds by conducting scientific research programmes such as progeny testing programme, establishment of elite herds of Gir cow and Jaffrabadi buffalo, network project and all India coordinated research projects.

MATERIALS AND METHODS

This study was carried out at the Cattle Breeding Farm of Junagadh

Agricultural University, Junagadh for a period of last seven years from 2010 to 2016 and the data on the age of first estrous and age of first calving in Gir cow were collected and analyzed.

RESULTS AND DISCUSSION

It was found that average age of first estrous (AFE) and age of first calving (AFC) were 1124.33 ± 21.39 days and 1446.67 ± 26.86 days, respectively. Similar studies were conducted earlier by Gaur *et al.*, (2003) and Singh *et al.*, (2016). Gaur *et al.* (2003) reported that average value of AFE and AFE in Gir cow were 1149 days and 1534 days, respectively. Singh *et al.*, (2016) reported average value of AFC 1709.04 ± 51.92 days at Kasturba gram dairy farm, Indore. The average AFE and SFC recorded at CBF, JAU, Junagadh is lower as compared to earlier reports may be due to proper feeding practices and availability of feed at CBF. Total of green fodder (16,48,390 to 54,00,700 kg), dry fodder

(6,34,090 to 8,85,800 kg) and concentrate (5,93,500 to 8,50,500 kg) were available during that period at CBF..

CONCLUSION

Average age of first estrous (AFE) and age of first calving (AFC) were 1124.33 ± 21.39 days and 1446.67 ± 26.86 days, respectively were recorded at CBF.

REFERENCES

Gaur, G. K.; Kaushik, S. N. and Garg, R. C. 2003. The Gir Cattle Breed of India

– Characteristics and Present Status. Animal Genetic Resources Information, *Cambridge Journals Online*, **33**: 21-29.

Singh, B.; Sawant, P.; Sawant, D.; Todkar, S. and Jain, R. 2016. Factors affecting weight and age at first calving, first lactation milk yield in Gir cows. *Indian J. Anim. Res.*, **50**(5): 804-807.

Table 1: Schedule of AFE and AFC

Years	Age of First Estrous			Age of First Calving		
	Number of Animals	Mean (Days)	SE (Days)	N Number of Animals	Mean (Days)	SE (Days)
2010	37	1221.46	26.72	37	1516.78	38.94
2011	19	1147.40	12.42	19	1422.3	36.04
2012	48	1181.30	04.87	48	1461.25	04.87
2013	36	1137.00	26.46	36	1414.00	47.13
2014	16	1137.00	23.25	44	1381.00	23.30
2015	58	965.00	28.10	15	1468.00	14.10
2016	46	1081.21	27.91	46	1463.40	23.67
Average		1124.33	21.39		1446.67	26.86

[MS received : January 31, 2018]

[MS accepted : January 07, 2018]