The Indian Journal of Animal Reproduction, 24(1): 51, June 2003

SHORT COMMUNICATION

Reproduction in Punganur cattle

K. VEERA BRAMHAIAH[1†], S.T. VIROJI RAO[2] AND Y RAVINDRA REDDY[3]

Acharya N. G. Ranga Agricultural University
Livestock Research Station, Palamaner, Chittoor (AP)

Received: January 24, 2001
Accepted: September 21, 2002

ABSTRACT

Reproductive performance over a period of 5 years of Punganur cattle was analysed. The data revealed that the performance of Punganur cattle is as good as other dual purpose cattle and is comparable with the other Indian breeds. The parameters recorded were age at puberty 827.86 ± 48.15 days, body weight at puberty 109.00 ± 3.51 Kgs, age at first calving 1240.14 ± 89.87 days, post – partum service period 152.00 ± 14.50 days, number of services per conception 1.57 ± 0.07, gestation period 284.04 ± 0.83 days and inter calving period 473.46 ± 18.13 days, respectively.

Key words: Punganur cattle, puberty, age at first calving, calving interval

Punganur cattle is world's shortest endangered humped cattle (Bos. *Indicus*) with long tail and switch touching the ground. It is a dual purpose breed with good adaptability to different climatic conditions and disease resistance. Reproductive traits play an important role in improvement of livestock productivity. The present study was undertaken to report the reproductive performance of the Punganur cattle. The data during the period from 1995–2000 was collected from the records of the Livestock Research Station, Palamaner. The data of animals with reproductive problems were excluded while calculating the service period and calving interval. The data was subjected to the statistical analysis as per Snedecor & Cochran (1967).

In the present study, the average age at puberty was 827.86±48.15 days, which is closer to the local dual purpose Ongole breed (Babu Rao and Sadasiva Rao, 1999) and lower than the other Indian breeds (Joshi and Phillips, 1953). The average body weight at puberty was 109.00±3.51 Kgs. Similar observations were reported by Rao *et al*, (1999). The average age at first calving observed was 1240.14 ± 89.87 days and allied to that reported by Madava Rao *et al.* (1995) and closer to the findings of Narasimha Rao *et al.* (1981) in Kerry (K) x Punganur (P) crosses at different levels of exotic inheritance. The average post-partum service period was 152.00±14.50 days with 1.57±0.07 services per conception indicating the better reproductive efficiency. The average gestation period was 284.03± 0.83 days with 473.46 ± 18.13 days calving interval. These findings are lower than the Kerry x Punganur (F2) crosses and slightly higher than ½KxP (F1) and ¼KxP crosses (Narasimha Rao *et al*, 1981) but similar to the findings of Rao *et al*, (1999). The present study indicates that the reproductive efficiency of the endangered Punganur cattle is at par with the other dual purpose Indian breeds.

[1]Scientist (A&G), [2]Sr. Scientist (AB), [3]Scientist (LPM)

†Corresponding author

ACKNOWLEDGMENTS

The authors are thankful to Acharya N. G. Ranga Agricultural University, Hyderabad for according permission to analyse the data and to publish the paper.

REFERENCES

Babu Rao K and Sadasiva Rao (1999). Reproductive performance of Ongole cattle, Indian J. Anim. Reprod., **20**(2): 120–122.

Joshi H B and Phillips B W (1953) Zebu cattle of India and Pakistan F.A.O. Agricultural Studies No. 19 Rome, Italy.

Madava Rao, T Prasad D D, Charyulu E K and Muniratnam D (1993) Note on calving interval in Punganur and Kerry x Punganur crossbred cattle. The Indian Vet. J., **70**: 176–177.

Narasimha Rao G, Venkayya D and Rao C V (1981) Performance of Kerry x Punganur and Jersey x Non descript zebu crosses as compared with that of Indigenous cows . The Indian Vet. J., **58**: 388 – 391.

Rao S T V, Suresh J, Reddy Y R and Veera bramhaiah K (1999) Punganur –world's shortest endangered cattle breed. Text book on Domestic Animal Diversity, Sl Publications, Karnal.

Snedecor G W and Cochran W G (1967) Statistical Methods, Oxford and IBM Publishing Co, Bombay.