B N Thorat et al., J Veterinar Sci Technolo 2014, 5:3
http://dx.doi.org/10.4172/2157-7579.S1.007

OMICS Group Conferences
Accelerating Scientific Discovery

2nd International Conference on
Animal & Dairy Sciences
September 15-17, 2014 Hyderabad International Convention Centre, India

Studies on effect of climatic parameters on milk yield in Deoni cattle in Maharashtra

B N Thorat, B M Thombre, A T Shinde and S S Bhutkar
Vasantrao Naik Marathwada Krishi Vidyapeeth, India

Improvement in production performance traits of indigenous breeds becomes essential to make them economically viable. Due to increased environmental temperature animal undergo heat stress. Milk production is also affected as animal bodies undergo heat stress and production of animal also drops. In the present study systematic record in respect to birth, date of calving and monthly milk yield is maintained at Cattle Cross Breeding Project. Milk yield data of cattle for the period of 1995-2010 is utilized for study. The data in respect to climatic parameters like minimum and maximum temperature, relative humidity (RH), wind velocity and sunshine hours were recorded. The sixteen years data on lactation milk yield of cows calved during cold, hot, south-west monsoon and post monsoon season each for twelve month in year was considered correlation and multiple regression analysis were used to investigate various sources of variation for monthly milk yield. Monthly milk yield data were analyzed statistically to see the effect of climatic attributes and to know their association with lactation milk yield. The higher milk production during post monsoon season was consideration of cows calved during that season whose milk production for favored by post monsoon season climate. Seasonal climate be the factor to influence the production level in animal. The average milk production (359.18 ± 25.85) kg was more during post monsoon season. Sunshine hours and wind velocity shows positive significant association with lactation milk yield. The maximum temperature, minimum temperature, maximum humidity, minimum humidity and Temperature Humidity Index shows negative non-significant association with lactation milk yield. This trend does support the necessity of cold climate for more production from the Deoni cattle. It is concluded that in the Deoni cattle, the October-November calves had higher lactation milk yield as compared to another seasons.

badam.thorat2010@gmail.com