



RESEARCH
ARTICLE

Study of linear body measurement and body weight of Marathwadi buffalo

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Abstract : The study was conducted in Hingoli districts of Marathwada region in Maharashtra. Data was collected on 1008 Marathwadi buffalo animals of different age groups, where 990 were female buffalo and 18 were breeding bull. The linear body measurement and body weight of buffalo in five age groups (0-3, 4-12, 12-24, 24-36 and above 36 months) were recorded. The LSM of chest girth of five age groups of female buffalo were 76.06 ± 0.60 , 96.52 ± 0.88 , 119.07 ± 0.94 , 141.51 ± 1.46 and 171.64 ± 0.56 and that of breeding bull were noted as 175.27 ± 0.56 cm. The LSM of body length of five age groups of female buffalo were 64.72 ± 0.42 , 76.09 ± 0.65 , 98.56 ± 0.44 , 107.67 ± 0.84 and 126.07 ± 0.29 and that of breeding bull were noted as 129.83 ± 0.71 cm. The LSM of height at wither of five age groups of female buffalo were 71.04 ± 0.54 , 85.26 ± 0.72 , 104.24 ± 0.59 , 113.35 ± 0.82 and 122.93 ± 0.26 and that of breeding bull were noted as 126.43 ± 0.60 cm. The LSM of body weight of five age groups of female buffalo were as 34.43 ± 0.78 , 67.07 ± 1.63 , 130.10 ± 2.52 , 202.03 ± 5.58 and 345.15 ± 2.73 and that of breeding bull were noted as 367.19 ± 3.72 cm.

Key words : Marathwadi , Buffalo, Measurement and body weight

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INTRODUCTION

The Marathwadi buffalo breed has been located in the valley of the rivers Purna, Dudhna and North banks of Godavari. It is located in the districts of Beed, Parbhani, Jalna, parts of Nanded, Latur, Hingoli and Osmanabad districts of Marathwada region. The animals of Marathwadi buffalo breed are reared by virtue of its potentialities, consistency and adaptabilities to varied circumstances prevailing. This peculiar animal dominates the small sized herds in rural area being a regular breeder and is mainly reared for milk production. Characterization of any breed is important for its development and improvement which will benefit the farming community. In India the recognized breeds constitute only 35% of the total buffaloes, while test non-descript or regarded once. So far no efforts have been made to characterize the breeds taking into account the population variability in morphological, reproductive and prevailing management practices and utilities (Kalyankar, 2001). An attempt was made to study the

phenotypic characteristics of Marathwadi buffaloes in their breeding tract. The animals belonging to this breed were commonly bred in the area comprising Marathwada region of Maharashtra state. The body measurement traits play an important role in judging the animals. The chest girth was indicative of development of various body cavities, thus giving sufficient areas for development of vital organs. Body measurements was as per the age of animals. They have bearing on the sexual maturity and draught ability of the animal. For estimating the balanced ration one has to consider the body weight of the animal, but under farmer's condition it was not possible to have weighing facility. In absence of valid records external body measurements was considered *viz.*, chest girth and body length for predicting body weights by mathematical formula. Therefore, an attempt was made to study the phenotypic characterization of Marathwadi buffalo on field scale in the Hingoli District. This study was taken up at College of Agriculture, Latur, Marathwada Krishi Vidyapeeth, Parbhani (M.S.).