

Effect of Different Sets of Housing Management on the Physiological Parameters in Buffaloes of Konkan Region

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Abstract—The study was carried out at department of Animal Husbandry and Dairy Science on nine lactating buffaloes. These buffaloes were allotted randomly into three comparable shelters in switch over design. Three different types of shelters were, 1- Thatched asbestos roof shed. 2- Green shed net below the asbestos roofing. 3- 'Khanawata' made from naturally available wooden logs, bamboo, straw and tree leaves. From the results of the present investigation it was observed that water consumption and physiological responses of buffaloes were significantly ($P < 0.05$) higher in the buffaloes under khanawata. Paddy straw thatched roof shed had incremental effect on the dry matter intake and physiological parameters in buffaloes than the buffaloes in khanawata and green shed net during experimental period. The average respiration rate of buffaloes was found significantly higher ($P < 0.05$) in the khanawata (26.27 ± 0.402) in comparison to thatched roof shed (20.33 ± 0.402) and green shed net (23.33 ± 0.402). The average rectal temperature ($^{\circ}\text{C}$) was observed as 37.80 ± 0.065 , 38.17 ± 0.065 and 38.56 ± 0.065 in T_1 , T_2 and T_3 respectively. The average pulse rate/min. was observed as 56.58 ± 0.253 in T_1 , 57.94 ± 0.253 in T_2 and 59.05 ± 0.253 in T_3 group. The overall average temperature humidity index at evening in macro-environment, thatched roof shed, green shed net and khanawata were 83.43 ± 0.29 , 81.13 ± 0.23 , 81.30 ± 0.23 , 81.54 ± 0.23 , respectively. Overall paddy straw thatched asbestos roofed shed is the most effective to ameliorate temperature, humidity and THI than green shed net and khanawata during summer season in the Konkan region.