



## **A STUDY ON FACTORS AFFECTING THE GROWTH PERFORMANCE OF CALVES IN THREE VETERINARY RANGES IN GALLE DISTRICT, SRI LANKA**

P.G.M. Kalpani 1, K.A.M. Sudarshani 2, H.C.E. Wegiriya 2

*1Department of Botany, Open University of Sri Lanka, Nawala*

*2Department of Zoology, University of Ruhuna, Sri Lanka*

[\*hemantha@zoo.ruh.ac.lk\*](mailto:hemantha@zoo.ruh.ac.lk)

Growth measurements of dairy cattle are important in determining their future performances especially in milk production. Different factors such as the breed of calf, management system, diseases etc. affect the growth of dairy calves. The present study was carried out to compare the growth performance of dairy calves born under artificial and natural breeding methods and rearing under semi intensive and free - range management system in Labuduwa, Rathgama and Yakkalamulla veterinary ranges in Galle district, Sri Lanka. The study was started with three months old male and female calves. The studied calves belonged to cross breeds of Jersey, Friesian, Sahiwal and AFS. Jersey was the most common breed among studied breeds. During the study period, there was no significant difference in the growth increment among studied breed types. However, AFS breed has the highest growth performance among the studied breeds. The growth performance of calves and the milk production of mother cows reared under semi intensive management system was higher than that of free range management system ( $p < 0.05$ ). In addition, results revealed that the milk production of artificially inseminated mother cows was higher than that of the naturally bred mother cows ( $p < 0.05$ ). According to the findings of the present study, the effect of the cattle management system has considerable impacts on growth and milk production of dairy cattle breeds in studied veterinary ranges in Galle district.

**Keywords:** *Calves' Growth, Cattle breeds, Cattle management system, Milk production*