**Study on Phenotypic and Morphometric Characteristics of Dairy Cattle in Sooriyawewa Veterinary Division**

R.K.K.H Randeniya1, D.D.Wickramanayake1\*

*1Department of Livestock Production, Faculty of Agricultural Sciences, Sabaragamuwa University of Sri Lanka*

*\*@dimuthu@agri.sab.ac.lk*

The goal of the study was to discover the morphological and phenotypic traits of dairy breeds in the Sooriyawewa veterinary division. 171 cattle from the Sooriywewa veterinary region—128 females and 45 males—were measured morphometrically and phenotypically. Through visual examination, the breed traits and color pattern of each animal were noted for their coat, face, horns, tail switch, foot, and legs. A measuring tape was used to take morphometric measures of the body, face, ear, horn, tail, and rump. The outcome demonstrated breed-specific individual variance in both qualitative and quantitative features.

Overall Brown was the predominant coat color in the population (63.9%) while the most prominent coat color pattern of the cattle was uniformly multicolored (72.51%). 68% of the cattle were standing with flat faces while 73.68% were absent with the hump. Of the population, 61.23% were horned with curved patterns (42.15%) and 70.17% were having hollow back. The ear edge of the majority of cattle (53.80%) was rounded -edge while others were having straight edges (46.19%). Overall, 65% of the population were having medium size udder with medium (37%) to larger (36%) teats. Furthermore, 74% of animals in the population were docile with light muscular structures (86%) showing a tendency for dairy phenotypes. The overall means of head length, head width, ear length, horn length, wither height, the perimeter of the thorax (PT), and rump length were 31.57cm, 21.15cm, 21.06cm, 10.81cm, 109.81cm, 139.25cm, and 31.05cm respectively. The cephalic index, and Saddling index of the population were 67.02, 57.90respectively.

Overall, in this study, an attempt was made to assess the Morphometrical and phenotype traits of the locally available dairy breeds in the Sooriyawewa veterinary region which need to be complemented by genetic characterization to fully exploit the potential of the breed*.*

**Key words***: phenotypic, morphometrical, structural indices, characteristics, cattle mapping*