

Poster

ANALYSIS OF CONFORMATION TRAITS IN CIKA COWS IN SLOVENIA

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Cika is the only autochthonous cattle breed in Slovenia. Part of population varies substantially due to historical admixture with Pinzgauer breed. In order to select against atypical phenotypes a new breeding program was accepted in the year 2005 which includes conformation scoring of sires and first-parity cows. Scoring system is adapted to Cika breed and includes 4 measured traits, 12 scored “autochthonous” traits, 6 scored body traits, 4 scored udder traits, 2 breeder statements, and 4 total scores. All scored animals are also assigned into three types (Cika type, Semi-Cika type, and Pinzgauer type) on the basis of total score for “autochthonous traits” and measured traits without the consideration of environmental effects. The aim of this study was to analyse sources of variation for conformation traits of first-parity cows of all three types. Additionally, we attempted to show that assignment of scored cows into three types without the consideration of environmental effects is not optimal. Data for the analysis (1217 first-parity cows) were collected during the routine scoring processes in years 2006 to 2012 by one expert. Obtained phenotypic records were analysed with the GLM procedure of statistical package SAS/STAT considering scoring year as fixed effect as well as age at scoring and days after calving as linear regressions. Descriptive statistics showed large differences in mean values of measured and scored traits among Cika, Semi-Cika, and Pinzgauer type of cows. The effect of scoring year and age at scoring was significant for all measured and scored “autochthonous traits” as well as total scores. Likewise age at scoring had significant effect on all measured; almost all scored “autochthonous traits” and total scores, while days after calving had significant effects on the majority of measured traits and total scores. Therefore, in future environmental effects need to be considered when type classification is determined.