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THE INFLUENCE OF LIVE BIRTH WEIGHT ON MILK PRODUCTION **IN SLOVAK DAIRY COWS AT FIRST LACTATIONS** Jozef BUJKO^{*}, Juraj CANDRÁK, Radovan KASARDA Institute of Nutrition and Genomics, Faculty of Agrobiology and Food Resources, Slovak University of Agricultural in Nitra,

Abstract:. The aim of this study was to evaluate the effect of birth weight of calves and other environmental influences on milk production of 1st and

2nd lactation cows in a breeding herd of the Slovak Spotted dairy cows.

Introduction

The economic efficiency of dairy farms depends mainly on factors such as BW. Differences in BW are also used as an indicator of the overall weight of calves, their health status, developmental potential and also subsequent milk production.

Material and method

The data set consisted of records from 339 heifers born between the birth years 2020 and 2022 at a breeding farm in the East Slovakia.

been entered into reproduction, 170 dairy cows have calved so far between 2023 and 2024. In the final evaluation set, the mean BW was 38 kg and ranged 25 to 51kg. The average first lactation in the evaluated herd was 7,772kg and second lactation in the evaluated herd was 9,311kg. When evaluating the effect of season of BW, the highest average milk production in kg for cows was in the A and the

Results and discussions

The average of birth weight was 37.6±5.8 kg and ranged over the study period from 17 to 53 kg, where the highest average weight was in the year 2022 (39.7kg). After all heifer selection criteria

lowest in the C.

•Conclusions

In conclusion, our results did not reach statistical significance due to the lower number of observations but may indicate some relationship between environment and birth weight of heifers as an important trait for their possible higher milk production.

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