

## INFLUENCE OF AGE AT FIRST CALVING ON PRODUCTION TRAITS IN LITHUANIAN BLACK-AND-WHITE CATTLE POPULATION

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**Summary.** The objective of performed study was to analyze influence of age at first calving in first and subsequent lactations on milk yield, fat yield, protein yield, fat content, protein content in Lithuanian Black-and-White cattle population. The data of productivity of cows born at year 1990 and later with three full lactations were used. Majority of heifers at first calving had 24–29 month of age (55 %). Phenotypic correlations between age at first calving and productivity in different age groups were variable. Small positive coefficients of phenotypic correlation in Group 1 showed that the increase of age until 24 month at first calving only slightly increased productivity of the first three lactations. Negative coefficients of phenotypic correlation in Group 3 (29.5–42.0 month) showed that the increase of age at first calving until 42 month statistically significantly decreased productivity of the first three lactations. Furthermore, the decreased age at first calving in heifers younger than 22 month decreased milk yield, fat content and protein content of the first and subsequent lactations; and the increased age at the first calving to than 32 month significantly decreased those parameters.

**Key words:** age at first calving, productivity, cows.