ANALYSIS OF LONGEVITY IN HOLSTEIN AND MONTBELIARDE CATTLE BREEDS

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Abstract

This study aimed at estimating the heritability and breeding values for the productive herd life in Holstein and Montbeliarde cows using a survival model. Data was analysed by means proportional hazard model. The experiment was done inside the experimental herd of the institute. The average productive longevity was 854 days for Holstein (125 cows), and 1434 days for Montbeliarde (36 cows), respectively. The heritability values for longevity in cattle populations were 0.099 for Holstein, and 0.097 for Montbeliarde, respectively. Similarly, the breeding values for productive longevity of the studied cattle ranged from -0.319 to 0.127 months for Holstein, and from -0.140 to 0.130 months for Montbeliarde, respectively. Even though this trait is difficult to improve, longevity is recommended to be included in cattle breeding programs in Romania from its utility point of view.

Key words: *breeding value, heritability, cattle, survival model*