

RELATIONSHIP BETWEEN STILLBIRTH, CALVING DIFFICULTY AND AGE OF LITHUANIAN BLACK AND WHITE DAIRY COWS

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Abstract. The objective of the present study was to evaluate stillbirth and calving difficulty of Black and White cows in order to expand knowledge of dependence of these traits as a way to reduce mortality of calves. The research was carried out at the Laboratory of Establishment of Animal Breeding Value and Selection of Lithuanian University of Health Sciences. Records of stillbirth (SB) and calving ease (CE) were obtained from the Centre of State Rural Business Development. In the analysis, stillbirth was defined as a dead born calf or a calf that died within 24 hours after birth. Calving ease was measured on a scale from 0 (no difficulty) to 4 (difficult birth). The calving scores and stillbirths of Black and White cattle recorded since 1981 were used in the evaluation. The dataset had 872,565 records.

The SB was estimated to be 5.3% (first-lactation heifer stillbirth rates are higher 0.5–2% than multiparous cows). Analysis of CE showed that 41.6% of cows calving were evaluated without difficulty and 0.3% of cows as difficult births. Difficult calvings are much more common in the first-calf heifers than in older cows. The data of the investigation highlight the dependence of SB on CE of cows, ($P < 0.0001$): the majority (89.6%) of SB were observed in cows with evaluated CE score from 3 to 4.

Keywords: Black and White cattle, stillbirth, calving ease, lactation