

ABSTRACT

Risk factors for stillbirth and dystocia in Japanese Black cattle.

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Stillbirth and dystocia are major factors reducing the productivity of beef cattle. The objective of this study was to determine the effect of season, parity and gestation length on the rates of stillbirth and dystocia in Japanese Black cattle. Calving records were obtained from 905 farms in Miyazaki Prefecture, Japan. Data were collected from 41,116 calvings in 15,378 (14.42% primiparous). There were 1013 stillbirths (2.46%) and 3514 dystocias (8.55%). The stillbirth rate in winter (December to February) (3.18%) was higher (odds ratio (OR) [95% confidence interval]: 1.008 [1.004-1.012]) than that in summer (June to August). Similarly, the dystocia rates in winter (OR: 1.011 [1.004-1.019]) and spring (March to May) (OR: 1.020 [1.013-1.027]) were significantly higher than in summer. For primiparous cows, the rates of stillbirth (OR: 1.010 [1.004-1.015]) and dystocia (OR: 1.053 [1.042-1.064]) were higher than in cows with fifth parity (reference parity). Stillbirth rates were higher in cows at ≥ 301 days of pregnancy (OR: 1.049 [1.035-1.062]) and those at ≤ 270 days of pregnancy (OR: 2.072 [2.044-2.101]) than those at between 281 and 290 days of pregnancy. Likewise, dystocia rates were higher in cows at ≥ 301 days of pregnancy (OR: 1.033 [1.008-1.059]) and those at ≤ 270 days of pregnancy (OR: 1.124 [1.095-1.154]) than those at between 281 and 290 days of pregnancy. Winter, primiparity, and long and short gestation lengths were risk factors for stillbirth and dystocia in this cohort of Japanese Black cattle.

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