

Milk performance of Jersey cattle imported from Denmark to Poland

S u m m a r y

The aim of this study was to determine the milk yield and reproductive performance of Jersey cows imported from Denmark as in-calf heifers in 1995 and since then kept in the Warmia and Mazury Region. Sixty high-yielding heifers were allocated to three farms, and after one year the cows were divided into two herds, A and B. All cows were culled over the following 12 years. At the moment of culling, the oldest cows were in their tenth lactation. Four to seven cows were culled in each lactation. The average herd life was 5.8 years (approximately 5 lactations). The average milk yield in 305-day lactations and in full lactations, calculated as the mean value for the entire herd life, was 4364 kg and 4789 kg, respectively. The average lifetime milk yield oscillated around 24 921 kg. Age at first calving varied within a wide range of 624-942 days, which indicates that some heifers were mated for the first time as early as at 12 months of age. Cows calving for the first time at the age of over 800 days were characterized by the highest milk yield. However, in view of economic conditions, an increase in milk yield in successive lactations and the fact that the Jersey is an early maturing breed, the optimum age at first calving is 701 to 800 days, i.e. 23-26 months. The highest average yield of milk, ECM, fat and protein was noted in herd A in the fifth lactation (5405 kg, 7127 kg, 336 kg and 219 kg, respectively). The ninth lactation was found to be longest, reaching 426 days in herd A and 497 days in herd B. The length of this lactation had no effect on total milk yield which was highest in the fifth lactation in herd A (6025 kg), followed by the sixth lactation in herd B (5822 kg). An average of 1.75 and 1.91 semen doses was required per successful conception in herd A and herd B, respectively. The reproductive performance of cows was good. Fertility was maintained on a satisfactory level, and it decreased after the fifth calving. Differences in the reproductive performance of cows between farms were statistically non-significant.