The effect of provenance of bulls on milking performance of their daughters

Summary

The aim of the study was to analyze the effect of country of origin of sires on milking performance of their daughters in a large commercial farm. Experimental material for the study comprised primiparous cows (923 heads) of the Polish Holstein-Friesian Black-and-White breed (with a mean share of HF genes in their genotype of 96.28%). Experimental animals were sired by bulls coming from the following countries: the USA, France and Canada. The study comprised an analysis of the effect of country of origin of the bull on milking performance traits of primiparous cows in the 100- and 305-day lactations. Productivity of experimental cows in the 100- and 305-day lactations was determined by yields of milk, FCM (milk with 4% fat content), fat, protein, total solids as well as the contents of fat, protein and solids in milk, and protein to fat ratio. Conducted statistical analysis showed highly significant and significant dependencies between the country of origin of the bull and the levels of analyzed milking performance traits of their daughters. The highest milk yield was recorded for daughters sired by a bull from the USA. In terms of contents of fat, protein and solids in milk, the highest values of these milking performance traits were recorded for milk coming from daughters of French bulls.