

EVALUATION OF SELECTED TRAITS OF LITHUANIAN DAIRY COWS BEFORE AND STARTING THE TRANSITION PROCESS AND BECOME AN ORGANIC FARM

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Abstract. The aim of this study was to compare production, somatic cell count (SCC) and milkability traits of Lithuanian dairy cows' in one farm during different periods of the change from conventional to organic farming: before and starting the transition process and then the farm became an organic farm. The research was carried out on Lithuanian dairy cows (n=100) from first to fifth lactation in one dairy farm in 2013-2018 years. The research was carried out with the same dairy cows during the whole study period. During lactation the highest milk, milk fat and protein yield were estimated in 2015, when the transitional period was started. The highest percent of milk protein was estimated in 2015-2016 and the highest percent of milk fat was estimated in 2014. The lowest productivity traits and the highest SCC were in 2018, when the farm was organic. The highest milk yield, milking speed, the highest milk flow and the lowest milking time were estimated in 2014, when the farm was conventionally managed. The lowest milk yield and high milk flow were in 2015, when transitional period was started, milking speed - in 2015-2016, when the farm was at transitional period and the highest milking time was estimated in 2016. The cows, which produced higher milk yield, had the faster milking speed. The performance of organically managed dairy cows differs from conventionally managed cows. Cows in organic herds have lower production and higher SCC than cows in conventional herds. However, the performance of cows in organic production depended to a large extent on the lower milk production level.

Key words: cows, milk yield, lactation, milkability, reproduction traits.