

## DYNAMICS OF DAIRY COW MILKING PERFORMANCE AND PRODUCTIVITY BEFORE AND AFTER INSEMINATION

Vidmantas Marčiulynas<sup>1</sup>, Renata Japertienė<sup>2</sup>, Sigitas Japertas<sup>3</sup>

<sup>1</sup>*Veterinary Academy, Lithuanian University of Health Sciences  
Tilžės 18, LT-47181, Kaunas, e-mail: vidas@lva.lt*

<sup>2</sup>*Veterinary Academy, Lithuanian University of Health Sciences  
Tilžės 18, LT-47181, Kaunas, e-mail: japertiene@lva.lt.*

<sup>3</sup>*AB „Agrowill Group“, Kaunas, e-mail: s.japertas@agrowill.lt*

**Abstract.** The scientific research work was carried out at the Lithuanian dairy farm from April to October, 2012. The results did not show a significant decrease of milk yield, but on the day of insemination dairy cows milk yield was 6.59 % ( $P>0.05$ ) less than on a day before insemination ( $P>0.05$ ). Before and on insemination day, the milk production decreased in all studied breeds of dairy cows, with the exception of Lithuanian Black and White. Cows' milking time in the morning was 4.96 % ( $P>0.05$ ) shorter than a day before insemination. On the insemination day, milking time in the evening was 12.18 % ( $P<0.05$ ) shorter than three days before insemination. The milking speed in the morning declined one day prior to insemination and was 4.94 % ( $P>0.05$ ) less on the day of insemination; milking speed further decreased by 9 % ( $P>0.05$ ) on the 1<sup>st</sup> day after insemination. The milking speed in the evening dropped by 3.92 % ( $P>0.05$ ) 3 days before insemination of cows, and decreased by 8.67 % ( $P>0.05$ ) until the 3<sup>rd</sup> day after insemination. The high milk flow increased significantly two days before insemination, on the insemination day and the day after insemination ( $P<0.05$ ). The study has indicated the relationship between the assessed values of milkability traits, which may help in observing the hazy cow oestrus. However, further investigation of the relationship between these indicators is necessary.

**Keywords:** milk yield, milking time, milking speed.