THE EFFECT OF STRESSFUL TREATMENT BEFORE AND DURING MILKING ON MILKABILITY OF DAIRY EWES

Katarína Kulinová[2], Lucia Mačuhová[1], Michal Uhrinčať[1], Vladimír Tančin[1,2]
[1]*Animal Production Research Centre Nitra, Hlohovecká 2, 951 41 Lužianky, Slovak Republic*
[2]*Slovak University of Agricultural in Nitra, Trieda A. Hlinku 2, 949 01 Nitra, Slovak Republic*

Corresponding author: Vladimír Tančin, E-mail: tancin@cvzv.sk, Tel.: +421 903 546 401

Summary. The objective of this study was to evaluate the reaction of ewes (Improved Valachian, Tsigai and Lacaune breed) to some breeding interventions during machine milking through their milking characteristics. Two treatments were tested. Both treatments were done during two consecutive morning milking in cross over design. First one represented the testing of presence of an unknown person in front of the ewes heads. Second treatment represented omitting of the concentrate food during milking. Control milking in both treatments represented the usual milking process. Ewes were milked twice per day at the milking parlour designed for 24 animals and equipped with 12 standard milking units. The equipment for graduated electronic milk recording in jar was used and the computer was recording the level of milk in jar in the one second intervals. There were evaluated in total of 164 milk flow curves. These curves were divided into four groups: 1 peak (1P), 2 peaks - bimodal curves (2P), plateau I (PLI, peak flow over 0.4 l/min) and plateau II (PLII, peak flow under 0.4 l/min). There was observed higher total milk yield, machine milk yield, milk yield in 30 s and in 60 s in control treatment as compared to presence of an unknown person. This corresponded to higher machine stripping yield and percentage of machine stripping in the group of ewes treated by the presence of an unknown person. No differences in milking characteristics were found in the treatment with omitting of concentrates during milking. Obtained results indicated that milking characteristics in ewes were more affected by presence of unknown person than by omitting of concentrates during milking.

Keywords: ewes, milk flow, stress.