PERFORMANCE AND INGESTIVE BEHAVIOR OF HOLSTEN AND HOLSTEIN × GYR CROSSBRED DAIRY HEIFERS

Marcelo de Barros ABREU†1, Valber Carlos Lima MORAIS1, Thiago Ramalho MOREIRA1, Thamires Alquides SILVA1, Andreia Ferreira MACHADO1, Leonardo José JUNIOR1, Vitor Duarte OLIVEIRA1, Marcos Inácio MARCONDES1

*corresponding author: marceloabreuzootecnista@gmail.com
1Universidade Federal de Viçosa, Viçosa, Minas Gerais, Brasil

The use of pastures is commonly employed in herd replacement feeding programs by reducing production costs. However, providing adequate conditions for achieve genetic potential and adequate growth is critical for correct age at first calving. Thus, this aim study was assess performance and ingestive behavior of heifers Holstein (H) and Holstein × Gyr (HG) feeding pasture and partial total mixed ration (TMR) is necessary maximizing the management. This study was conducted at University Federal of Viçosa, Viçosa, Minas Gerais between the period July 15 to September 8. The experiment was carried out in a completely randomized design, with 3 period, each with 25 days. Five heifers H and five HG crossbred with mean body weight of 241 ± 31.6 kg were used as two treatments. The animals had access an area of 1.5ha of mixture pasture black oats (Avena strigosa Schreb) and ryegrass (Lolium multiflorum Lam) subdivided into 26 paddocks of 577 m². The managed pasture was under intermittent stocking, using a high 30 and 10 cm management target pre and posgrazing, respectively. Daily at 12 o’clock the animals received partial TMR composed of corn silage (5 kg day⁻¹) and maize corn (0.33% of body weight). The amounts of concentrate were corrected according to the average weight of the animal s in each period. Water and minerals were supplied ad libitum. The evaluation of ingestive behavior was realized over three days from the 13th day of each period. Activities grazing time, rumination, idle time, intake partial TMR and other activities (water intake, socialization, mineral intake and walking) were recorded at a ten-minute interval and expressed as total time per day (min day⁻¹). The heifer’s weight evaluation of the were performed in 23 days intervals. The mean daily gain was given in (kg day⁻¹). The parameters were analysis using PROC MIXED procedure of SAS Institute (version 9.3, SAS Institute Inc., Cary, NC). Values of P <0.10 were considered significantly different. The average daily gain (1.1 vs. 1.0) was not different P>0.10 for treatments. The parameters grazing time (376 vs. 356), idling time (527 vs. 510) and others (121 vs. 131) did not differ P>0.10 between H and HG. Ruminant time (366 vs 405) and intake partial TMR (37.3 vs. 40.4) differed P<0.10. Although the two treatments presented the same average daily gain differences in ingestive behavior were identified.

Keywords: black oats, grazing, ryegrass