





CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## Dry matter intake and milk yield comparison between Holstein and crossbreds Holstein x Simental cows

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Crossbreed Holstein x Simmental cows present positive results for improve milk quality, body condition score, fertility and longevity of Holstein dairy herds, but there are not investigation to compare dry matter intake (DMI) of booth genetic groups in Brazilians conditions. So, the aim was to compare DMI and milk yield of Holstein and crossbreeds Holstein x Simental cows. The research was carried out in a dairy farm located in Santa Catarina/Brazil. Cows were maintained in a compost barn confinement system. There were used 48 cows, 25 Holstein and 23 crossbreeds Holstein x Simmental cows. The research was performed in 2 periods, winter (26 cows) and summer (22 cows), each one of them with 25 days, 4 for adaptation (to the experimental routine, and the new group) and 21 for data collection. To standardize the groups the experimental cows were selected from the same farm management group, composed of cows with higher milk yield (average days in milk of 123.4 for Holstein and 133.2 for crossbreeds Holstein x Simental cows). Cows received the same diet offered to the other cows of the same group at the farm, which was a total mixed ration (TMR) based on the use of corn silage, ryegrass (fresh and silage) and concentrates. Cows where milked 3 times a day and the individual milk yield was daily recorded. After been milked, cows had access to feed parlor for about 2 hours and 30 minutes. The total TMR offered to each cow as well as the residual where weighted. Samples of the TMR offered and the residual where collected to determine dry matter content and after the DMI. Data were analyzed with MIXED procedure of SAS. There was no difference for DMI between Holstein and crossbreeds Holstein x Simmental cows (24.52 x 24.10 Kg/day, respectively; P=44.19). There was difference between summer and winter with a higher DMI on winter (25.48 x 23.14, respectively; P 0.0004), there was no interaction between genetic group and period (P=0.7719). Booth genetic groups present high milk yield with no difference between them P=0.7490 (44.42 I/Holstein, 44.02 I/crossbreeds Holstein x Simental cows). There was also a difference between periods, with higher milk yield on winter (50.1 x 38.3 liters; P<0.0001), with no interaction between genetic group and period P=0.8673. We concluded that there is no difference, in high milk yielding cows, for DMI and milk yield between Holstein and crossbreeds Holstein x Simmental cows.

**Keywords:** feed efficiency, genetic group, milk yield, summer, winter

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