

PERFORMANCE OF CROSSBRED CALVES RAISED ON DIFFERENT DIETARY TREATMENTS USING WHEAT SILAGE

DESEMPENHO DE BEZERROS MESTIÇOS CRIADOS EM DIFERENTES TRATAMENTOS ALIMENTARES UTILIZANDO SILAGEM DE TRIGO

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Abstract

The Agricultural Research Company of Minas Gerais (EPAMIG) has developed a wheat cultivar, MGS Brilhante, which does not have a canopy, and has become an interesting alternative for animal production. Thus, the objective of this study was to evaluate the weight gain of crossbred bull calves kept in confinement and fed with different proportions of wheat and corn silage in the diet. The research was conducted in the Experimental Center of Sertãozinho of EPAMIG, in the municipality of Patos de Minas, Minas Gerais. The tested diets had different levels of wheat silage addition: 0% (T1), 33% (T2), 67% (T3) and 100% (T4). During 105 days, 20 calves with average age of 18 were evaluated. The weight gain was measured on five dates, with average intervals of 21 days. Four treatments and five animals per treatment were utilized, totaling 20 experimental plots, in randomized blocks. All data were submitted to analysis of, with significance of 5%, and were compared by the Tukey test. All statistical analyses were performed using the SISVAR 5.6 software. The results showed significant difference ($P < 0.05$) between all measures of weight gain and the treatments tested. In the first weighing, T3 presented the highest average weight gain ($1.545 \text{ kg day}^{-1}$), followed by T2, T4 and T1. In the second weighing, T3 also had the greatest average weight gain ($1.330 \text{ kg day}^{-1}$), followed by T4, T2 and T1. In the third weighing, T3 again presented the highest average weight gain ($1.287 \text{ kg day}^{-1}$), followed by T1, T2 and T4. In the fourth weighing, T1 presented the highest average weight gain ($1.400 \text{ kg day}^{-1}$), followed by T3, T2 and T4. In the last weighing, T1 presented the highest average weight gain ($1.219 \text{ kg day}^{-1}$), followed by T3, T2 and T4. In the first weighing, the animals that received a diet containing high percentage of wheat silage (67% - T3) had the highest weight gains. Even though not having the biggest gain in the last to weighings, T3 still had the second largest weight gain. These results confirm that wheat silage, when well prepared and stored, can be offered as a good source of nutrients in animal diets, with lower production cost than that of corn silage in the offseason.

Keywords

Animal production, corn silage, weight gain.

Acknowledgments

Fapemig, INCT-Ciência Animal, Finep.