Grasses of the genus Cynodon have been widely used in dairy farms and also for the production of conserved forage in Brazil. Jiggs (Cynodon dactylon) is a tropical grass recently spread in the country, the knowledge about it is scarce, evidencing the importance of its study under different managements. In this way, the aim of this work is to evaluate the productivity of the Jiggs variety in a grazing system by dairy cattle under a climatic condition of a region in high altitude and temperate climate in the South of Brazil.

The study was carried out from January to May 2017, in a farm on Curitibanos, at Santa Catarina Mountain Plateau (27°21’14"S), at 900 meters altitude. Were used an area on rotational grazing system by dairy cattle, under an irrigation system. A paddock where the forage had been established three years ago was subdivided into plots, in a completely randomized design with three replicates. Available forage mass (Kg DM/ha), total forage production, leaf:stem ratio and canopy height (cm) were evaluated. The forage samples were measured before grazing on the paddock. The samples were cut five centimeters from the ground height. The samples were manually separated into leaf and stem components to estimate leaf:stem ratio. The canopy height was measured before and after each grazing cycle. The data were submitted to Student’s t-test compared to a significance level of 5% on R Studio software. Six grazing cycles were obtained, with 25 days of interval between them. In the grazing system, the variables responses measured in pasture it was differed between the evaluation dates. The available forage mass was higher in the fourth grazing cycle (March) and smaller in the fifth cycle (April), with values of 3,392.92 kg DM/ha and 779.23 kg DM/ha respectively. The higher canopy height was observed second (February) and third (March) cycle, with 52 and 45 cm, respectively. Only in the second (January) and fifth (April) cycle the leaf:stem ratio it was higher than one. The total forage production was 14,128.24 kg DM/ha in the grazing system. Therefore, the Jiggs can be used than an alternative in grazing dairy system in Southern of Brazil.

Keywords: Cynodon dactylon, canopy height, dry matter production, grazing management

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