

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

AGRONOMICAL CHARACTERISTICS AND PRODUCTIVITY OF PEARL MILLET (*Pennisetum glaucum*) BR-1503 HARVESTED IN DIFFERENT AGES

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Pearl millet is a fodder with good potential for the production of quality silages and has a high resistance factor to nutrient poor soils, water stress and high temperatures, conditions found in much of Brazil. However, studies of cultivars adapted to Brazilian soil and climate conditions are lacking. This study aimed to evaluate the number of plants, height, botanical composition and yield of pearl millet BRS-1503 genotypes (*Pennisetum glaucum*) harvested at 63, 67, 71 and 74 days after planting. The material used was grown at Embrapa Milho e Sorgo, in SeteLagoas/MG (latitude 19° 28'S, longitude 44° 15'W and altitude of 732m), planted on february 9, 2014, with spacing of 0,35m between rows, in an irrigated and previously corrected and fertilized field, according to the needs of the crop. A randomized block design consisting of four treatments (61, 63, 71 and 74 days of the plant's cutting age) and five blocks (portions) were used. Statistical analysis was performed using MIXED from SAS (SAS Institute Inc, Cary, NC), utilizing orthogonal polynomial contrasts to determine if the cutting age resulted in a linear or quadratic effect, in addition to the F test for the averages compared ($P < 0,05$). For the pearl millet harvested at 61, 63, 71 and 74 days, grains were obtained respectively in the milky, milky/soft dough, soft dough and soft dough/floury stages. The plant cutting age had no influence over the height (2.12 m) or the number of plants per hectare (883), and these data are in agreement with field observations, regarding the heterogeneity of crops of this pearl millet cultivar. The stem proportion in the plants composition increased linearly ($P < 0,05$) along cutting age ($P < 0,01$), while leaves and panicles proportion remained constant. The increase of stem participation in the plant dry matter can occur during the stage of grains formation, by the main stem tillers elongation, or by the reduction of the grains participation in the panicles, after the attack of birds (fact that occurred in this experiment). Plants harvested at 71 days of age presented higher dry matter content (22.01%). However, there was no influence of cutting age on the yield of plant green weight/ hectare (78.2 tGM ha⁻¹) or dry matter/ hectare (14.9 tDM ha⁻¹) ($P > 0,05$). The data obtained in this experiment demonstrate that pearl millet BRS-1503 genotypes (*Pennisetum glaucum*) can be harvested between 61 and 74 days without any loss of productivity.

Keywords: bromatologic, pearl millet, plant fractions, *stand*

Promoção e Realização:



Apoio Institucional:



Organização:

