

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## COMPARISON OF CORN HYBRIDS FOR SILAGE PRODUCTION

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Corn silage is applied by many cattle farmers in season of forage restriction, however, there are a wide variety of corn hybrids on the market for this purpose, which requires studies for the morphological and productive characterization. Thus, the aim of this study was to compare the morphogenetics characteristics and corn hybrids production for silage. The treatments consisted of three hybrids (AS1540; BM709 PRO2; and SHS7990 PRO2) in a completely randomized design with six replications. Evaluations were performed at 100 days after sowing (DAS) in three subplots of 45 m<sup>2</sup> per treatment. Were evaluated the plant height (PH - meter), fresh matter production (FMP – t ha<sup>-1</sup>) with harvesting and weighing of all plants in two linear meters in one of the lines of each subplot. It was calculated the dry matter content (DM - %) and the proportions of straw (ST - %) and corn ear (CE - %) in relation to the whole plant. The data were submitted to analysis of variance and the means were compared by Tukey's test at 5% probability using SAS® software. The PH, FMP, DM and CE differed between hybrids (P<0.05). The hybrid SHS7990 provided the highest PH (1.63 ± 0.11 m) and the highest DM content (35.06 ± 1.05%) but provided the lowest FMP (27.14 ± 2.23 t ha<sup>-1</sup>), while the hybrid HL1540 provided the lowest PH (1.38 ± 0.09 m), the highest CE (38.57 ± 1.87 %), and the highest FMP (34.89 ± 2.90 t ha<sup>-1</sup>) that can be explained by the lowest DM content (30.31 ± 1.37 %). The proportions of straw did not differ (P>0.05) between the three hybrids with average value of 14.32 ± 2.11 %. The hybrid BM709 showed intermediate responses for all others variables compared to the other two hybrids. The three hybrids showed at 100 days DM content between 30 and 35% which are considered suitable for ensiling process. Hybrid HL1540 is the most suitable for silage production than the other evaluated hybrids.

**Keywords:** corn ear, dry matter, plant height

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