

Forage production and quality evaluation of four sorghum forage hybrids. Yield potential

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Abstract

Studies were conducted to determine the comparative yield potential of "Piper" sudangrass, "Sudax" sorgho - sudangrass and two pearl millet, "Mil-HY-100" and "3-Mil-X" hybrids for emergency and/or supplemental forage production. Each hybrid was evaluated at four nitrogen levels and two stages of growth. Total dry matter yields ranged from 4 to 13 Kg/ha depending upon hybrid and stage of growth at harvest. Yield production for the hybrids was, Mil-HY-100 > 3-Mil-X > Sudax > Piper. At the full flower stage, yield range was Sudax > Mil HY-100 > 3-Mil-X > Piper. The Crude Protein yields were significantly influenced by the nitrogen treatments and ranged from 510 to 1.686 Kg./ha. Crude Protein yield at the mid boot stage was Mil-HY-100 > 3-Mil-X > Piper > Sudax. At the full blooming stage was 3-Mil-X >Sudax > Mil-HY-100 > Piper. The results showed that the pearl millet hybrids should be harvested at the mid-boot stage. Sudax and Piper hybrids should be harvested at the full blooming stage. In order to get yield potentials the hybrids should be fertilized with high nitrogen levels (100-150 Kg N/ha).

Key Words: Sorghum forage hybrids, Pearl Millets, Sudangrass, Sorghum x sudan Hybrids, Dry Matter and Crude Protein yields.