RESEARCH REGARDING THE INFLUENCE OF SOWING DENSITY ON SILAGE PRODUCTION AT *Sorghum bicolor* L., UNDER CENTER OF MOLDAVIA PEDOClimATIC CONDITIONS

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Abstract

The present configuration in Romania agricultural structures and the lack of functional infrastructure, including drought phenomenon appearance that has created major problems in recent years in restructuring and managing the feed obtaining systems, requires the adoption and definition of a field that agricultural research must approach to identify and testing new nutritional solutions using the animal rations of basic components, which will be provided by fodder crops less dependent on the amount of water during the growing season. Silage sorghum (*Sorghum bicolor* L.) respond to the current needs of Romanian livestock being a fodder with excellent quality and an increased resistance to drought. Improving technology is imperative in this species because from it depends largely the crop yield. Thus, between 2013 - 2014, at the Agricultural Research – Development Station, has been studied the influence of sowing density on the silage production at some hybrids showing adaptability to the Center of Moldavia pedoclimatic conditions. The results obtained in the conducted experiments revealed that silage sorghum prefer higher sowing densities (greater than 200000 bg/ha) and the maximum level of production was recorded in the variants sown with 250000 bg/ha. Sowing sorghum over this sowing density increases the risk of lowering plant resistance to lodging before harvest.

Key words: density, nutrition, production, sorghum, silage