

**PARTIAL RESULTS ON THE INFLUENCE OF FERTILIZATION
ON GRAIN PRODUCTION OF *Sorghum bicolor* L.,
IN THE CLIMATIC CONDITIONS OF CENTRAL MOLDAVIA**

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Abstract

Sorghum is the species that has the same uses varied as the corn. Hundreds of millions of people in Africa, China and India consume sorghum bread. Also used as the feed for poultry and focused mainly raw material for spirits and beer. Climate evolution for heating and aridity of Romania, forcing a reconsideration of sorghum as: food grains, fodder plants and Technical plant. Improvement of technological sequences cultivation of sorghum, is a thing of great importance to our country the purpose of obtaining high yields, to ensure the necessary human food, animal feed raw material in the production of bioethanol - considered a fuel of the future. For this purpose, in the specific conditions of ARDS Secuieni (Center of Moldova) has placed a bifactorial experience in which followed the influence of the fertilization on grain production at Sorghum bicolor L. The biological material used were the hybrids F32, Armida, Alize, Quebec and KSH2G06. The results showed that the applied mineral fertilization has positively influenced sorghum crop production. Variation of the production obtained at sorghum hybrid varied depending on the dose of mineral fertilizers applied (N0P0, N40P40, N80P80, N120P120) and ranged from 2910 kg / ha (KSH 2G06 - unfertilized) of the 10279 kg / ha (Armida - N120P120). At the interaction genotype x fertilizer, the highest level of production was recorded in variants fertilized with N120P120 dose variation yields being from 7043 kg / ha (KSH 2G06) of the 10279 kg / ha (Armida).

Key words: grain sorghum, grain production, fertilization, hybrids, sowing density